COMPARATIVE STUDY OF THE BEL CANTO
TEACHING STYLES AND THEIR
EFFECTS ON VOCAL AGILITY

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

Portia Harper, B.A.
Denton, Texas
August, 1996
COMPARATIVE STUDY OF THE BEL CANTO
TEACHING STYLES AND THEIR
EFFECTS ON VOCAL AGILITY

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

Portia Harper, B.A.
Denton, Texas
August, 1996

This thesis examines the historical significance of the vocal methods employed from the middle of the seventeenth century to the beginning of the nineteenth century in what became known as the bel canto era. It provides further exploration into the pedagogical procedures of the bel canto technique through a study of the premier instructors and singers from this period. The resurgence of interest in this tradition is addressed along with its impact on current vocal pedagogy. The vital role that vocal agility played as one of its most distinguishing traits is the primary factor under investigation. A discussion of the bel canto teaching styles in relation to their approach to agility is a major point of inquiry. By maintaining a link between present artists and pedagogues and the old Italian school, it helps the singer understand the historical implications of vocal agility as an integral part of healthy vocal development.
I wish to express my thanks to all those who helped me: Mrs. Virginia Botkin for her insight and encouragement during the initial stages of research; my major professor, Dr. Edward Baird, who proofread the manuscript and offered suggestions throughout the writing process; my committee members, Dr. George Larson and Dr. Pattye Johnstone, who provided assistance and advice within their areas of specialization.

I express sincere gratitude to my family, friends, and colleagues for their constant words of encouragement and support during the writing of this thesis.

But most of all, I wish to thank God along with the wisdom and foresight of my parents who believed in me and directed my efforts to see this project to its conclusion. Their generous support and love have made my graduate work possible. This study is dedicated to them.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF EXAMPLES</td>
<td>v</td>
</tr>
<tr>
<td>I. DEFINITION OF BEL CANTO STYLE</td>
<td>1</td>
</tr>
<tr>
<td>Teachers of the Bel Canto Technique</td>
<td></td>
</tr>
<tr>
<td>Singers</td>
<td></td>
</tr>
<tr>
<td>Its Influence in Other Countries</td>
<td></td>
</tr>
<tr>
<td>II. RESURGENCE OF BEL CANTO</td>
<td>23</td>
</tr>
<tr>
<td>III. REVIVAL OF PEDAGOGICAL APPROACHES TO BEL CANTO</td>
<td>37</td>
</tr>
<tr>
<td>IV. VOCAL AGILITY AS A COMPONENT OF BEL CANTO TECHNIQUE</td>
<td>63</td>
</tr>
<tr>
<td>Musical Determinants</td>
<td></td>
</tr>
<tr>
<td>Physiological Factors</td>
<td></td>
</tr>
<tr>
<td>V. PEDAGOGICAL VIEWS ON VOCAL AGILITY</td>
<td>82</td>
</tr>
<tr>
<td>Bel Canto Teaching Styles and Their Approach to Agility</td>
<td></td>
</tr>
<tr>
<td>Current Views on Agility</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>117</td>
</tr>
</tbody>
</table>
# LIST OF EXAMPLES

<table>
<thead>
<tr>
<th>Example</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nicola Porpora, Vocalise incorporating complex patterns</td>
<td>95</td>
</tr>
<tr>
<td>2. Francesco Lamperti, Vocalise for scale and intervallic practice</td>
<td>96</td>
</tr>
<tr>
<td>3. Manuel Garcia, Vocalise demonstrating marked vocalization</td>
<td>97</td>
</tr>
<tr>
<td>4. M. Garcia, Vocalise showing scale passagework</td>
<td>99</td>
</tr>
<tr>
<td>5. M. Garcia, Vocalise pattern with two and three note motives</td>
<td>100</td>
</tr>
<tr>
<td>6. M. Garcia, Eight note motivic pattern</td>
<td>101</td>
</tr>
<tr>
<td>7. M. Garcia, Exercise for the measured trill</td>
<td>102</td>
</tr>
<tr>
<td>8. M. Garcia, Exercise for the chromatic trill</td>
<td>103</td>
</tr>
<tr>
<td>9. M. Garcia, Pattern for practicing the half-breath</td>
<td>104</td>
</tr>
<tr>
<td>10. Mathilde Marchesi, Vocalise for scale practice</td>
<td>106</td>
</tr>
<tr>
<td>11. Mathilde Marchesi, Exercise in preparation for the trill</td>
<td>108</td>
</tr>
<tr>
<td>12. Mathilde Marchesi, Vocalise for the trill on a diatonic scale</td>
<td>109</td>
</tr>
<tr>
<td>13. Mathilde Marchesi, A pattern to introduce the mordent</td>
<td>110</td>
</tr>
</tbody>
</table>
CHAPTER I

DEFINITION OF BEL CANTO STYLE

The style of singing that emerged from the old Italian school during the mid-seventeenth century to the early nineteenth century is commonly referred to as bel canto. This term literally means "beautiful singing" and is characterized by purity of tone, register equalization, legato phrasing, and effortless virtuosity displayed by agility in florid passages. Bel canto is also associated with a particular era of vocal history, a pedagogical technique for training singers, and a compositional style. Although the term was not in active use until the mid-nineteenth century, the style and technique were already established in many voice studios and treatises on singing. Therefore, an in-depth exploration will be conducted into the bel canto style and the techniques employed, with special emphasis on one of its most distinguishing characteristics: vocal agility.

The bel canto style was primarily taught through imitation; however, some singers and teachers left written documents concerning this Italian tradition. Yet for the most part, many pedagogical techniques were orally transmitted. During the time of its inception, concepts
were passed down from teacher to teacher in direct succession. Consequently, some of the premier teachers of this singing technique wrote a limited number of complete treatises and methods for future generations to follow. But fortunately, numerous students became notable singers and teachers who chose to continue the tradition by publishing books and manuals discussing the technique that they were taught, or they expanded upon their own individual experiences to produce treatises. As a result, much of our knowledge of the bel canto technique stems from the performers and teachers who studied under the Italian masters.

The technique is the foundation for which the style is created, and it is essential in acquiring this method of singing. The primary objectives were perhaps best described by Giovanni Battista Lamperti in The Technics of Bel Canto, as he emphasized "placing, developing, and equalizing the voice" (Lamperti 1905, 28). Direct reference to voice "placing" was infrequent among the pioneer teachers, but it was understood that proper tone quality, resonance, and focus resulted in precise voice placement. The Italian school taught a more forward placement in order to achieve a specific sound quality. The position of the mouth was important, the consensus being that it should be moderately opened and relaxed, showing part of the upper row of teeth.
The tongue should lie flat toward the front bottom row of teeth, with most of the movement occurring at the tip to avoid possible obstruction. In order to establish a solid technique, there needs to be proper alignment in the oral cavity along with other organs, which will be discussed subsequently in greater detail.

Proper voice placement effects the entire voice and produces a distinct quality associated with the bel canto style. Resonance is maximized when tones are placed correctly and the sound is balanced and pleasing to the ear. The resonators also influence the timbre and quality of the instrument. A bright or a dark tone quality may be used depending on the demands of the repertoire. The bright voice or voce chiara was common, but it was used with great care in order to avoid a strident and broad tone. The covered or dark voice, voce coperta, was usually employed for dramatic effect within the context of the song. A combination of both qualities was considered most desirable, and it resulted in a brilliant and highly resonant timbre referred to by the Italian term chiaroscuro timbre (Miller 1977, 82). This contributed greatly to the carrying power of the singer, regardless of the voice type or gender. Voice placing is an integral part of an Italian singer's training because it establishes the framework for mastering other facets of the bel canto style.
The vocal music during the bel canto period was highly virtuosoic and melodious, frequently for the purpose of displaying the skills of the singer. Numerous types of ornamentation and music devices were commonplace, and the singer was expected to freely execute these passages in a smooth and flawless manner. This required a well-developed voice which was characteristic of a solid technique. A singer was encouraged to develop the range to facilitate the requirements of the music, which may span several octaves or linger in a high tessitura. There was also an abundance of florid passages that demanded a high degree of agility within the vocal mechanism. This was one of the distinct characteristics of the bel canto style, and vocal agility will serve as a primary focal point in subsequent chapters.

The power that develops and sustains this technique is proper breath support and management. Although breathing was not discussed in great detail, the early singing masters clearly acknowledged the importance of breath support in mastering the various aspects of this expressive singing style. Their approach to breath support was largely from an empirical standpoint, because not much was known about the physiology of breathing. For the most part, their observations and experiences placed them in agreement in regard to the general principles of breath support. It was generally believed that diaphragmatic breathing would
provide consistency, proper vocal support, and an increase in a singer's longevity. This type of breathing can only be accomplished by first establishing good posture, which means standing erect with the entire body in alignment. The chest should be slightly elevated and the ribs expanded so that the muscles can function correctly and avoid obstruction of the airway. Breathing was never forced, and it should be as natural, relaxed, and inaudible as possible. The ability to effectively manage the breath was also associated with this vocal technique. The Italian term appoggio may be translated as "to lean upon" or "support." This concept encompasses both the muscular activity and the resonatory system. The term is used to refer to a total system of support which every tone must have, and it is created by a "balance of inspiratory and expiratory forces" (Timberlake 1995, 35). This system of breath management maintains, for as long as possible, the posture at the beginning of the inspiratory phase of breathing. The posture ensures muscle coordination in the pectoral, epigastric, and umbilical regions and assists in controlling diaphragmatic activity. Whether a half or complete breath is taken, the same coordination should occur. The goal of this technique was to promote efficient use of the muscles of inhalation and exhalation. The implications of this system of breath support and management will be discussed at a later point,
with particular reference to the physiological determinants of vocal agility.

The Italian masters believed that a well-trained voice should be equalized throughout the registers in order to produce a uniform quality. Except for interpretative purposes, there should be a smooth transition between registers so that the singer appears to have just one register. Prior to achieving register equalization, several factors must already be accomplished. A singer was taught to strengthen and develop each register as part of a whole unit. Depending on the gender of the singer, there was often more emphasis placed on developing a specific register of the voice. For instance, Mathilde Marchesi, who trained only female voices, thought that "more time should be spent developing the head voice since it is not used in speech" (Coffin 1989, 35). Yet none of the registers should be neglected, because the objective is to combine them into a pure, uninterrupted scale. Vowel formation and vowel modification are significant in register equalization, and they also "represented some of the procedures of the early masters" (Reid 1950, 165). When vowels are properly formed, the sound is more resonant and the words are intelligible throughout the range. Vowel modification, or its Italian equivalent *aggiustamento*, is an adjustment of the vowel in the higher part of the range to avoid a sharp contrast in
the tonal color of the entire musical line and to ease vocal production. In addition to this concept, adjustments are made in the vocal tract to aid in register equalization, and some pedagogues believe that it "automatically occurs when the acoustical laws of modification are employed" (Miller 1986, 155). This will be a subject of further exploration when register equalization and its role in agility is addressed.

The bel canto technique was successfully taught by some of the greatest singing teachers, many of whom were also accomplished performers and composers. One teacher in particular was Nicolò Porpora of the Neapolitan school of singing in Italy. He was born on August 19, 1686, in Naples; and as a young boy he was sent to the Neapolitan School where he studied under Gaetano Greco, Francesco Mancini, and others. Porpora later spent the majority of his time giving private singing lessons and composing while serving as "Maestro" to numerous ambassadors and theatres in Italy. Some of Porpora's students include the famous castrati Caffarelli and Farinelli, along with the sopranos Regina Mingotti and Caterina Gabrielli and a great bass, Antonio Montagnana (White 1989, 285).

Since Porpora never wrote his own account of the techniques employed, very little is known about his teaching methods, with the exception of some vocalises and solfeggi
in manuscript in Naples. However, the British Museum has a copy of exercises entitled "Porpora's Elements of Singing," which was published in London with no date specified (Walker 1951, 6:35). From this copy, along with other vocalises, it was assumed that Porpora rarely vocalized students beyond an octave and a half (Walker 1951, 6:35). Despite the lack of written material by Porpora, some information regarding technique, style, or approach may be ascertained by selected writers, students, and teachers of his time. In Elster Kay's *Bel Canto and the Sixth Sense*, she states that Porpora, along with other teachers, believed that the students should allow their ear to direct their voice and to use their keen sense of hearing for the purpose of imitating the teacher's vocal examples. Then as the student progresses, the focus should be "shifted to physical sensation which is more accurate and renders the singer independent of the acoustics of various rooms, halls, etc. that they may be called upon to sing" (Kay 1963, 79). This method builds the singer's confidence and supplies him with reliable and immediate feedback. Since there was a greater emphasis on aural guidance and sensation, the masters used a more empirical approach based upon the unique qualities of each individual voice.

Porpora felt that a student instructed in this technique reached a level of vocal maturity after five to
seven years of constant study. During these years, Porpora spent most of his time teaching students from one page of vocal exercises designed to equip the singer with the necessary skills (Walker 1951, 35). His approach produced a measurable degree of success which was evident as the students became famous singers, teachers, and writers. Domenico Corri and Isaac Nathan were students of Porpora each of whom wrote a treatise, perhaps as a tribute to their teacher and a medium for sharing their own experiences. There are two books that comprise this volume. The first one is Corri's The Singer's Preceptor, a facsimile that contains historical information on singing and suggestions on how to approach various facets of singing. It is quite comprehensive in discussing the tools that are needed and the challenges that face the singer. Once the reader adjusts to the manner in which it was written, some valuable information can be learned. The second book is Isaac Nathan's The Porpora Tradition, which is solely a collection of musical scores written for the voice in the style and technique of Porpora. This volume may include what could be considered Porpora's requisites for a good singer. First, a singer must have a good ear which will serve many purposes as an artist. There should be proper and skillful management of the voice, and the singer should be able to execute a messa di voce commonly used as an artistic device.
Distinct articulation and quick perception are significant to a singer, not excluding the physical requirements such as spacious lungs, muscular larynx, pleasant resonating chamber, and other traits. These, along with additional characteristics, still apply today and may be one of the reasons why Porpora is viewed as a premier singing master of the bel canto technique.

Corri and Nathan followed in their teacher’s footsteps by becoming composers. During this era, many teachers like Porpora were equally proficient in composing and provided vocal music for their students. Porpora was established as a composer in Italy, and in his later life he was invited to compose in England. He studied under Alessandro Scarlatti, and Porpora’s style was highly virtuosic because he wanted to display the vocal agility of his students. Porpora employed all forms of embellishment and codified the use of the *messa di voce*, a prolonged crescendo and decrescendo on a sustained tone, at the beginning of an aria. On several occasions in England, he was advised to reduce the use of “trills and ornaments in accordance with the Imperial taste” (Walker 1951, 51). He followed his wishes but still continued to write numerous operas, cantatas, oratorios, and instrumental music in this style. Porpora was a fairly prolific composer, and he greatly influenced Haydn, who was an accompanist and composer at the time. Haydn was quoted
as saying "From Porpora I gained a great deal of knowledge about singing, composition, and the Italian language" (Walker 1951, 58). He clearly made an impact on many artists and was influenced by several of his predecessors such as A. Scarlatti, Mancini, and Tosi. After returning to Naples, Porpora continued to compose and teach, and he died around the age of eighty with the reported date of his death ranging from 1766-1768. Porpora was instrumental in leaving a legacy as a teacher and composer of the bel canto technique.

On March 15, 1790, Nicola Vaccaj was born in Tolentino, Italy. He began musical training in Pesaro under Giuseppe Janacconi. He later received a diploma in composition in 1811 and left for Naples, where he studied with Paisiello. In hopes of securing more opera commissions, Vaccaj went to Venice, where he found himself in greater demand as a singer and teacher. Due to financial difficulties, he visited England, a move which unexpectedly helped his career as a teacher and composer. Vaccaj published his singing manual in London in 1832. This practical vocal method offers a systematic approach to singing in the bel canto tradition. Each lesson is aimed at a specific technique, beginning with a thorough study of singing all types of intervals and progressing from simple to more complex tasks such as mastering the various ornaments representative of that
period. Vaccaj believed that students of all levels can benefit from this method, and it is still used in many vocal studios today.

During the latter years of his life, Vaccaj returned to Italy and taught singing at the Milan Conservatory, where he "accomplished notable reforms by reorganizing the study of singing, employed the Neapolitan model for opera performances, introduced German classics to the repertoire and initiated numerous other changes" (Budden 1980, 481). Subsequently, Vaccaj retired in Pesaro, where he died on August 6, 1848. Similar to Porpora, Vaccaj was also a talented composer, but his most significant contribution was teaching the art of bel canto singing.

Another Italian singing teacher, Francesco Lamperti, was establishing himself around the 1850s as a reputable instructor of the Italian method of singing. He studied and later taught singing at the Milan Conservatory for twenty-five years. Albani, Campanini, Lagrange, and Artôt were some of his pupils at the Conservatory during his tenure at the school. As a result of Lamperti's experiences, he published vocal studies containing some of the exercises that proved successful with his students. Lamperti also published the method *A Treatise on the Art of Singing* in 1877, "not as a new method but for the purpose of counsel to prevent further ruin of voices" (Lamperti 1877, 8). In this
document, he was very concerned with what he called the "decadence" of singing, so he constructed a manual from what he considered most beneficial for training a singer. The book consists of thirteen articles arranged in a question-and-answer format covering ideas on topics including respiration, agility, pronunciation, and others.

Lamperti emphasized that the breathing must be firmly established in order to sing correctly. The body and the vocal apparatus should be positioned to avoid any tension and possible obstructions to vocal emission. He believed that breathing involved a combination of abdominal, lateral, and clavicular movement and that balancing the muscles of expiration and inspiration was of utmost importance. This was what Lamperti referred to as the **appoggio** of the voice, and through this controlled cycle of respiration the "pupil will learn the true character and capabilities of his voice and he will know what to sing, how to sing more elegantly and how to correct defects of intonation" (Lamperti 1877, 14). Then the student will be able to effectively sing portamento and legato, which is most common in singing.

After a student had shown a certain degree of proficiency, then agility was taught. He recommended that it be taught in "moderation because the voice can become tremulous and weak from singing too many exercises" (Lamperti 1877, 15). Lamperti included at the end of the
treatise many of his exercises which were thought to produce the best results without injuring the voice. Lamperti promoted vocal cultivation and studying the music of the old singing masters, regardless of the student’s natural talent and abilities. On the other hand, he believed that "not all voices are suitable for cultivation, only those that possess extension, equality, force and flexibility" (Lamperti 1877, 9). Nevertheless, through his studies and experiences, Lamperti continued this legacy of vocal excellence.

Francesco Lamperti’s younger son, Giovanni Battista (1839-1910), studied at the Milan Conservatory and later taught there for twenty years, in Dresden for twenty years, and then in Berlin. He paid tribute to the old singing masters and believed that the method had already been proven, but in an effort to focus on vocal "individualization," he wrote The Technics of Bel Canto. Giovanni expressed that the teacher must be aware of the physical framework of each student because it has a direct correlation to vocal potential. Generally, Giovanni was in agreement with his father’s pedagogical views regarding vocal registers, his approach to agility and breath management. As for breath support, he employed diaphragmatic breathing because he believed that it was the most efficient way to handle the expiration and inspiration of air without unnecessary pressure on the vocal organs.
From his teaching experiences in Germany, he also offered suggestions on singing the numerous consonants of the language simply by stressing the vowels and the entire phrase instead of each consonant. Giovanni also encouraged vocal hygiene by instructing students to "avoid loud speaking, singing immediately after eating and too much song-singing can be harmful" (Lamperti 1905, 35). Giovanni believed that a healthy and well-trained voice should last for many years. Both father and son left singers and teachers with greater insight into this tradition.

A Spanish singer, composer, and teacher, Manuel Garcia I was born in Seville on January 21, 1775. He was the patriarch of a family of musicians that profoundly influenced the history of singing, more specifically the bel canto technique. Garcia I received musical training in Seville and rapidly became a well-respected tenor in Spain and France. He went to Naples in 1812 to study the Porpora method under Ansani. Later, around 1820 following an extensive career, he retired in order to teach full-time. Already having taught the famous Adolphe Nourrit along with his own wife and children, the groundwork was laid for the next generation, namely his son Manuel Garcia II, who was born on March 17, 1805.

Garcia studied singing under his father and sang some of his opera roles with his baritone voice in addition to
imitating Lablache, a famous singer of the time who had an enormous bass voice, all of which proved detrimental to Garcia's voice. Then, after receiving negative reviews, he decided to embark on a teaching career in Paris. Instead, he joined the French army, where he worked at a military hospital studying the physiology of the voice and possibly searching for answers to his own vocal problems. This led to the publishing of Mémoire sur la voix humaine (Mémoire on the human voice), which explained his theory on vocal registers of male and female voices. In 1841, Garcia produced his largest work, Traité complet de l'art du chant (A complete treatise on the art of singing), eventually in two parts. Both are quite comprehensive in outlining his method, but each part serves its own purpose. The first part "describes his procedure for developing technique and building the voice," whereas part two "generally assumes a workable technique and describes the application of that technique to the interpretation of vocal literature" (Paschke 1986, 55). Therefore, they both provide a connection between the old bel canto technique and the new scientific research being introduced.

Garcia's most notable accomplishment was the invention of the laryngoscope in 1854. This was the first instrument of its kind that allowed the living larynx to be observed during phonation. This invention sparked an interest in the
physiological aspect of the voice, whether it was providing possible insight into the singing mechanism or examining its function from a medical perspective. In the following years, Garcia submitted several articles expounding theories based upon his observations. Due to the findings, he modified some of his claims concerning the registers of the voice and their respective ranges. Garcia's theories and method for singing have always, for some, remained a source of much discussion and debate with respect to certain techniques employed before and after the laryngoscope. This method will be the subject of further investigation in the chapter discussing the various pedagogical approaches to the bel canto technique. Despite efforts to respond to some of his critics by publishing Hints on Singing and another entitled Garcia's Treatise on the Art of Singing written by his grandson, Garcia has remained in the forefront as a brilliant teacher who made an immense impact on the field of vocal science and pedagogy. After this prolific period, Garcia continued to teach at home in London until his death on July 1, 1906 at 101 years of age.

Garcia succeeded in maintaining and refining his father's teachings and the work he had already begun. With his life spanning more than a century, he was able to see some of the results of the decades of teaching. His students included the famous Jenny Lind, Julius Stockhausen,
Mathilde Marchesi, Charles Santley, and many others. Garcia's link to Porpora through Isaac Nathan and Domenico Corri represents the long line of singers and teachers in the history of singing. The pedagogical lineage continued for many generations with connections to musicians all over the world.

The bel canto technique created many distinguished and highly skilled singers ranging from the early castrati to all voice types. After achieving a certain degree of success, these singers often imitated their predecessors by teaching and publishing treatises. There were several female sopranos who followed the model and became very influential singers throughout this era.

Mathilde Marchesi, a German soprano, was born in Frankfurt in 1821 from a family of Italian singers. She studied in Frankfurt under Ronconi then later studied in Vienna under Vaccaj. Following her début in Frankfurt, Marchesi studied in Paris with Garcia. She frequently accompanied Garcia on trips to gain exposure and later performed in Germany and Holland. Marchesi also performed with her husband Salvatore, an Italian baritone and teacher. While serving as a singing professor at the Vienna Conservatory, she continued to perform on a regular basis. Then Marchesi started her own singing school in Paris and taught only female voices. Marchesi attributed most of her
success to the technique and the proper "formation" of the voice. In 1886, she wrote her own method entitled *Bel Canto: A Theoretical and Practical Vocal Method*. Marchesi's vocal style and method displayed the traits of the bel canto technique.

Another German soprano, Lili Lehmann, was making appearances around 1860 on concert stages throughout the world. She studied with her mother, Marie Loewe, and made her first début as Pamina in *Die Zauberflöte* on October 20, 1865. Following brief opera engagements, she received a permanent position in Berlin and performed in Wagner's *Ring* cycle, being very pleased with the performance. In 1885, Lehmann terminated her position in Berlin and made her début at the Metropolitan Opera in New York. There she sang numerous roles and later returned to Germany to sing at the Salzburg Festival. Her long list of performances is evidence that her voice was in demand, and she continued to perform until 1920; she died at the age of eighty in 1929.

As a singer, one of Lili Lehmann's greatest attributes was her ability to sing diverse roles with skill and ease. Lehmann's dramatic interpretation of roles was quite captivating. She was equally gifted in technical proficiency and expression, which signified the true essence of the bel canto style. She wrote a book, *How to Sing*, which explained the sensations of tone that the singer must
be aware of while singing. Above all, she believed that "without a thorough knowledge of technique, the art is an impossibility or it is insufficient" (Lehmann 1921, 6). Lehmann was true to her vocal art in word and deed.

Perhaps one of the most famous Italian coloratura sopranos around the late 1800s and into the first half of the 1900s was Luisa Tetrazzini. She studied at the Instituto Musicale with Professor Coccherani. Her first appearance was with the Florentine Opera as Inez in L'Africaine, where she was successfully engaged at an astounding $100 per month. Tetrazzini became famous quite rapidly throughout Europe and Latin America in the late 1800s before she made a successful début in New York in 1907 as Violetta. Afterwards, she sang in London and Chicago and returned to New York for an appearance in 1931.

Tetrazzini captured audiences with phenomenal agility, especially in chromatic scales. She had a brilliant high range with a flexible and free-flowing style as a result of excellent breath management. In speaking of her breathing technique, she said "I always hold some breath in reserve for the crescendos, employing what is absolutely necessary, and I renew the breath wherever it is easiest" (Tetrazzini 1975, 9). She obviously found what works most efficiently for her individual voice. Tetrazzini returned to Milan to teach and in 1909 wrote The Art of Singing. She also made
recordings in her later years as examples of her mastery of
the bel canto style.

The bel canto style and technique began originally in
Florence and quickly spread to other musical centers in
Italy such as Venice, Rome, and Milan. But the influence of
bel canto was also evident in other countries like Germany,
France, and England through the success of singers
previously mentioned and others who introduced it to various
countries. In Germany, Stockhausen, Goldschmidt, and Sieber
were singers and teachers who readily accepted this Italian
singing method. Yet some tension existed between the German
style Sprechgesang (speech-song) and the Italian style due
to several nationalistic tendencies or preferences. The
German style of singing usually incorporated more dramatic
and declamatory elements while struggling to keep the
beautiful tone of the Italian style. The German methods
satisfied "both the technical curiosity and the urge toward
romantic communication" (Miller 1977, 192). The Germans
also translated various Italian manuals such as Tosi's
Observations, which showed their debt to the Italians
without forsaking their own uniqueness.

In the nineteenth century, the French accepted this
style. Authors like Rameau, Mengozzi, and Blanchet wrote
about the French school's version of the Italian style. The
French were more concerned with enunciation and correct
tongue placement while singing. The overall style was more
controlled and "moderation was always maintained" in the
French style (Miller 1977, 192).

England was also influenced by the Italian model. For
instance, in Bayly's treatise on singing, he "admits that he
made considerable use of Tosi's Observations on the Florid
Song" (Duey 1951, 87). Tenducci, Corri, and Lanza were
instrumental in introducing this style to England. The
English tended to emphasize the skill and the art of
singing, and they believed that the "beauty of sound was
best represented by musical and technical control and less
emotional content" (Miller 1977, 193). Therefore, each
country had its own cultural preferences in singing, in
addition to its respect for the Italian bel canto style.
CHAPTER II

RESURGENCE OF BEL CANTO

The bel canto era, commonly referred to as the "Golden Age of Singing," clearly made an indelible impression on the art of solo singing. Within the last half of the twentieth century, there has been a renewed sense of curiosity and exploration that has sparked a resurgence of interest in the bel canto repertoire and technique. Several factors existed at the advent of this restoration which suggest the ever-changing musical and stylistic preferences dictated by each particular period. One important element is the return of virtuosity and expression, which were characteristic of the bel canto style. There was also a revival of cantabile singing, which emphasized a pure legato, proper intonation, and dramatic intensity. These traits in particular played a significant role in the restoration of the bel canto singing style.

Similar to the revival of various types of early music and its performance practices, the world of singing was also rediscovering the music of composers like Bellini, Rossini, and Donizetti. Unfortunately, their music was often left out of the mainstream, perhaps due to the virtuosic demands placed on the singer, since many of their compositions were
originally written for specific singers. However, their brilliant works are currently being displayed on many concert stages and recordings. The listening audience has increased to such an extent that the recording companies are supplying more recordings of music from this period. Numerous contemporary artists are paying tribute to this style by dedicating entire albums to bel canto repertoire. As a result, this music is more accessible to the general public who may be discovering it for the first time.

In addition to recapturing the music of the old Italian school, there has been a resurgence in acquiring the proper vocal technique in order to successfully revive the music. Many of the qualities associated with "good" singing of the past are still considered an essential part of a singer's training. But due to the variety of techniques that are used today, there are varying opinions as to whether, and to what extent, the bel canto technique can be revived. Yet it is generally agreed that without the proper technique, the music does not reach its full potential. It is possible that this singing technique may be beneficial in performing modern music. While it may be a challenge to recapture its true essence, it "would be desirable to restore such qualities to present-day singing" (Duey 1951, 7). This could involve a merging of the old singing technique with contemporary vocal practices. This compromise "would result
in a somewhat leaner and mellow sound, with a vibrato barely noticeable and a floating tone that would never be pressed for greater volume; it would be a technique capable of achieving the agility necessary to make the music expressive" (Newton 1984, 132). Nevertheless, there were many who believed that the success of such singers as Callas, Sutherland, Berganza, Horne, and others demonstrated the return of the true bel canto technique.

At the forefront of this resurgence was a dramatic soprano by the name of Maria Callas. She was born in New York in December 1923 to Greek parents who had just recently moved to the United States. As a child, she studied piano and showed great vocal talent by singing arias and accompanying herself at the age of ten. Since Callas was very shy, her mother made her sing on many occasions, and she supported her vocal training and was encouraged to pursue a singing career. After her début in Chicago in the mid-1930s, Callas and her mother returned to Greece with hopes of gaining admission into the Conservatory of Athens. Instead, in September 1937, she was accepted into the National Conservatory on scholarship and studied with Maria Trivella for two years. Then, after another audition, she gained entrance into the Conservatory of Athens, where she studied with a famous Spanish coloratura, Elvira de Hidalgo. Callas discovered the art of bel canto singing under her
instruction and decided that this style was where she felt most comfortable. As she prepared Callas for an operatic career, de Hidalgo told her that "once her fame was established in Italy it would spread all over the world" (Galatopoulos 1966, 24). Soon Callas embarked on what would become one of the most phenomenal careers.

Callas began her performing career in student productions and in a few understudy roles before making her début at the Athens Opera on July 4, 1941 as Tosca. For several years, she sang quite heavy roles from composers like Verdi, Beethoven, Haydn, and others; but under the conductor Serafin, she was in even greater demand in the works of the old Italian school. Callas was engaged for La Gioconda, which marked her Italian début on August 3, 1947. This notable performance was "destined to change the operatic world and bring a renaissance of Italian opera" (Galatopoulos 1966, 25). Callas was getting closer to reaching her goal of obtaining a leading role at La Scala but she refused to accept any understudy roles. A year following her marriage to friend and manager G. B. Meneghini, Callas finally landed leading roles at La Scala and made her début in Aida on April 12, 1950. In many subsequent performances in London and New York, she became well-known as the "Norma" of her time. Throughout her career, she achieved great success in Anna Bolena, La
Traviata, and Lucia di Lammermoor among others.
Unfortunately, she was plagued with vocal problems that
casted her to sing below her potential or to cancel
performances and eventually resign from the stage. Callas
returned to give a world tour in 1973 and once again proved
that she was a consummate musician and performer.

Her voice demonstrated many of the qualities that were
unique to the singers of the bel canto generation. It had a
distinct quality, impressive agility and versatility, an
enormous range, and great expressiveness. Callas's voice
was classified as a dramatic soprano with agility which was
indicative of bel canto singers. Masterful agility can be
heard in numerous performances such as in Rossini's Armida,
Proch's Variations, and others "where her trills, staccati,
chromatic scales, and rapid passagework may be equalled by
other singers, but they could not better her" (Lowe 1986, 9).
An ability to incorporate expressiveness with
coloratura brought the composer's intentions to life and
captivated the audience. But her greatest criticism was
that she had an inequality throughout her range which may
have been a result of her vocal problems. Nevertheless,
Callas indisputably possessed a powerful instrument along
with an inherent musical intuition.

Studio and live recordings were also a successful venue
for Callas because they made her more accessible to all
levels of society. The first major contract was with the Italian recording company Cetra, which led to numerous studio recordings and a long-term contract with EMI, a British recording company that recorded her at La Scala. Callas also recorded in Berlin and Cologne; and as for many other opera singers, this was a powerful medium for Callas as an artist. Most importantly, these recordings helped to maintain the revival of a particular era and technique in singing.

Through her artistry, Maria Callas made a significant contribution to the resurgence of the bel canto repertoire and technique. She aided in reviving the operas of Bellini, Donizetti, Spontini, and others "by means of her own individual interpretations" (Galatopoulos 1966, 98). In an interview about her concept of bel canto, Callas says:

Bel canto means a schooling of the voice so as to develop it as an instrument. . . . When you have mastered it, you must go on and learn to interpret the music, what weight to give your words, the pace, the feeling, the intensity. Mastery of bel canto does not make a great singer, but there is no great singer who has not mastered bel canto (Lowe 1986, 160).

Her dedication to this music and its technique pioneered a movement for future singers who decided to follow in this tradition.

One singer in particular who was already continuing this tradition of excellence was Joan Sutherland. She was born in Sydney, Australia on November 7, 1926. Her mother,
also a singer, taught her piano and singing until she was nineteen years old. She later received professional training from a couple in Sydney after winning several singing competitions. In 1947, Sutherland sang the role of Dido in Purcell's *Dido and Aeneas* on the concert stage in Sydney. There, she also made her operatic début in 1951. Due to her competition successes, she was financially prepared to launch a musical career in London. Sutherland continued studies in London at the Royal Conservatory of Music and the Opera School and received a contract at the Covent Garden in 1952. This led to her début as First Lady in *Die Zauberflöte*. Soon afterward, she married her accompanist, Richard Bonynge, who began coaching her on the bel canto technique by introducing her to the repertory. Through the contract, she performed in *Aida*, the role of Gilda in *Rigoletto*, and the title role in *Lucia di Lammermoor* along with other roles.

Sutherland focused not only on nineteenth-century Italian opera but also on the “period which began with the eighteenth century Baroque and went to pre-Verdi romanticism” (Celletti 1991, 208). She could sing a variety of roles and was becoming increasingly popular all over the world. She also performed several duets with Marilyn Horne and others, then made appearances in Vancouver, Dallas, New York, Venice, Milan, and back home in Australia.
Sutherland's most notable roles were Norma, Cleopatra, and Lucia, which clearly established her mastery of bel canto. She was crowned La Stupenda, and her career reached great heights.

Sutherland's dramatic coloratura voice displays a high level of virtuosity in embellishments, cadenzas, and flawless trills. It has clarity in the upper register and a powerful yet aurally satisfying instrument. Following a performance, a journalist from the New York Times wrote, "Surely the youngest-sounding sixty-year-old soprano in modern operatic history responded with an astounding display of bel canto craft and staying power" (Eaton 1987, 307). On the other hand, her acting skills were not considered among her strengths; but her stage presence, personality, and voice compensated for any limitations. Despite recurring sinus infections, she maintained a certain degree of vocal longevity. Sutherland's voice was often compared to the great earlier singers from the era to which she pays tribute in much of her singing.

Sutherland had an equally satisfying recording career spanning more than twenty years. She and Bonynge have made many recordings separately and together. Since she has fully adapted to the recording environment, she likes to relate stage performances to the recordings because she "does not like making records of roles she has never sung on
stage” (Greenfield 1982, 1355). The new version of Bellini’s La Sonnambula, Il Trovatore, and some early Verdi works are a few examples. In 1958, she recorded pieces by Donizetti, Spohr, and Rossini with a company called Belcantodisc. This recording “displayed her brilliant scale work, the body that exists in her middle range, and her easy high notes” (Steane 1974, 384). And the albums entitled The Art of the Prima Donna and The Age of Bel Canto were a way of paying respect to the singers of the past. Sutherland’s recordings have made a large impact on her career as an artist, and they have kept the memory of bel canto alive.

While Joan Sutherland was still captivating audiences, the mezzo-soprano Marilyn Horne was undeniably making her presence known. She was a part of the American generation of virtuosi who was perhaps first heard by the general public as the voice of Dorothy Dandridge in the film Carmen Jones. Marilyn Horne was born in Bradford, Pennsylvania in 1929 and later moved to Los Angeles. Her father taught the fundamentals of voice which stayed with her throughout her career. Horne furthered studies at the University of Southern California under the guidance of William Vennard. In Los Angeles she made her first operatic début. Then, in 1960, she was asked to participate in the Venice Festival, where she met and married the conductor Henry Lewis. Horne also had the experience of singing in an opera company in
West Germany, then returned to the United States in the early 1960s to begin a performing tour.

Horne sang in San Francisco, Boston, New York, Houston, and numerous other cities in addition to appearing at La Scala as Neocles in *Le Siège de Corinthe* in 1969. She sang duets with Joan Sutherland on many occasions, and they became one of the best vocal duet teams. Their Norma-Adalgisa duets were to many "a revival of an art that was for so long moribund" (Scott 1967, 966). Horne performed a variety of roles and styles ranging from many lesser-known composers to Alban Berg. Some of the roles included Carmen, Laura in *La Gioconda*, Brünhilde, Marie in *Wozzeck*, and Handel's *Rinaldo*, which demonstrates her versatility as a singer. Despite being a mezzo-soprano, whose leading roles are not as plentiful as the higher soprano, she was still considered a world-class performer and was named in a *New York Times* list of great Metropolitan Opera singers.

Marilyn Horne has a fully developed, dramatic mezzo-soprano voice. She worked hard to establish a technique, which she says is "the first prerequisite to any singer and without this, complete expression is impossible" (Scott 1967, 967). She, along with the singers previously discussed, has a large range, agility, evenness in florid passages, a pure legato, and a ringing high register which closely associates her with the bel canto style, even though
she is capable in many other areas. Horne believes that proper breath support, musicianship, and concentration are very important tools for a singer. Also, she has seen the benefit of a good rapport with the public, because she says "it is not my style to be aloof and inaccessible" (Bryan 1985, 13). Consequently, she feels that it enhances the performances to be able to effectively communicate with the audience.

Horne has also recorded duets with Sutherland and several bel canto roles in Gluck's Orpheus, Laura in La Gioconda, Massenet's La navarraise, and others. She has proven that the voice is a powerfully expressive instrument, and as a result her singing has promoted the bel canto ideal.

Beverly Sills joined her colleagues as another member of opera's elite and an avid preserver of the bel canto style. Also an American soprano, she was born Belle Silverman in Brooklyn, New York in 1929. Dreams of becoming a famous opera singer caused her to change her name to Beverly Sills, which sounded more impressive to her (Sills 1981, 10). She began singing at the age of three on a radio program and later imitated Galli-Curci, because her mother often played her recordings. Sills started studying voice around the age of ten with Estelle Liebling, and also took piano and dance lessons to prepare herself for a career.
Sills made her operatic début with the Philadelphia Civic Opera as Micaela. In the years following, she toured the United States, then returned to New York as a new member of the New York City Opera. In 1966, she sang the role of Cleopatra in Handel's *Giulio Cesare*, which was the turning point in her career. This led to more bel canto roles that she loved to sing. The roles in Donizetti's *Trio of Tudor Queens* as Maria Stuarda and Anna Bolena and Elizabeth in *Roberto Devereux* were particularly successful. She also sang the Queen of the Night at Vienna and Rossini and Bellini at La Scala and the Covent Garden. Lucia, Elvira, and her role in *Manon* were some of the best ever. In 1975, Sills made her first appearance at the Metropolitan Opera, and by then she had already reached the plateau of her career. In addition to these performances, which are only highlights of her accomplishments, she performed on television, at the White House, and for numerous special occasions. Sills received many honors and honorary degrees throughout her lifetime. She loved performing, and her enthusiasm was evident.

Recording was not a favorite of Beverly Sills; however, she recorded the *Ballad of Baby Doe*, *Roberto Devereux*, *Manon*, Donizetti's *Trio of Queens*, and a Mozart-Strauss album. Sills liked the *Manon* recording the most because it sounded very close to a live performance. Unlike some of
her contemporaries, she "never really enjoyed recording because she missed the audience, but she did it simply to document her career" (Sills and Linderman 1987, 128). Fortunately, it provides the public with more examples of bel canto artistry.

Sills has a beautiful lyric coloratura voice with a very penetrating quality. She shows an excellent technique in florid singing, and she conveys a deep understanding of this style. This quality definitely stems from her training and an admiration for singers like Galli-Curci and Lily Pons. Her singing also encompasses great emotion, and she "uses her trills, runs and high notes to convey a variety of emotions" (Steane 1974, 401). Sills demonstrates this in Lucia di Lammermoor, Donizetti's Trio of Queens, Handel's Giulio Cesare, and other roles. She shows fear, sadness, joy, and other emotions by the way she executes embellishments. Sills skillfully uses her voice and stage presence to their maximum extent. She clearly enjoys being able to express her characters' feelings, which she considers an advantage of the bel canto style. It gives the "freedom to interpret sorrow, joy, despair... through trills, runs, interval jumps and so forth" (Sills and Linderman 1987, 125). She believes that it allows her to "color her voice for various parts" (Sills and Linderman 1987, 125).
Her training, her philosophy, and her interpretation of numerous roles have been consistent with the bel canto tradition. With Sills's farewell from the stage in 1980, she left a legacy that is being carried on by many highly skilled and talented virtuosi in the opera world. The singers previously discussed represent only a sampling of those who made a significant impact in the restoration of the old Italian school. Following in the American tradition alone, there has been, and currently is, a number of outstanding artists who have also achieved a high level of proficiency in this repertoire. To mention a few, singers like Leontyne Price, Teresa Berganza, Shirley Verrett, and Martina Arroyo have expanded and greatly enhanced this tradition by their recordings and performances in opera houses throughout the world. Their bel canto roles demonstrate that a solid technique and an expressive delivery are still in demand.

The performances and recordings of numerous artists have clearly advanced the resurgence of the bel canto repertoire and technique. It has been said that "people were rapidly discovering that, with the right singers, this music could still cast a spell" (Galatopoulos 1966, 32). The return of these qualities to present-day vocal practices can increase our appreciation for the music and the singers of the bel canto era, in addition to improving the quality of performance in modern music.
CHAPTER III

REVIVAL OF PEDAGOGICAL APPROACHES TO BEL CANTO

The renewed interest in the bel canto repertoire and technique has stimulated a deeper examination of the successful methods employed by the teachers of the old Italian school. This return to the pedagogical concepts of bel canto has had a significant impact on vocal pedagogy. In addition to the research that has been conducted into the physiology and anatomy of the voice, there is an increase in demand for the manuals and vocal methods of the early singing masters. Despite the constant influx of vocal trends and preferences, numerous teachers and singers are incorporating these earlier theories as integral parts of their vocal instruction. Due to the revival of interest in the bel canto technique, many original methods and treatises have been republished and reprinted for greater accessibility. Further research into the pedagogical approaches of this technique may serve as a basis for establishing a truer form of the bel canto method along with enhancing the performance of the repertoire.

The masters of the bel canto era demonstrated a high level of efficiency in developing the singing voice along
with issues such as form, interpretation, and aesthetics. In spite of the fact that some teachers had varying opinions regarding vocal quality and vocal registers or placed more emphasis on breathing or articulation, there was still "general agreement on the broad precepts of singing" (Duey 1951, 154). The teachers and the students had a clear understanding of the ultimate goal of vocal training, which may have contributed to a higher level of proficiency. As a result, they were successful in producing talented musicians to continue the legacy of the bel canto tradition.

Ever since the "Golden Age of Singing," new philosophies have been introduced and research has been done on the voice which has resulted in a variety of approaches used in vocal pedagogy today. These techniques tend to be associated with either the subjective or the scientific approach, often referred to as the psychological or physiological method. The subjective approach is based on training the voice through sensations, mental imagery, and/or other processes unique to each individual, with less emphasis on the activity of the vocal organs during singing. This method is more closely related to the empirical approach of the old Italian school. Some examples of teaching singing in a subjective manner are the natural, poetic, emotional, and interpretative methods. On the contrary, the scientific approach involves teaching the
elements of vocal anatomy and how the organs and muscles coordinate with each other to produce a freely functioning instrument. This method emphasizes more physical control over all systems such as the respiratory, the resonatory, the vibratory, and the articulatory. The ongoing debate over the validity of the psychological versus the physiological approach will be discussed in greater detail in the last chapter. In spite of the varying opinions concerning the efficacies of numerous approaches, each method or a combination thereof is employed by the majority of voice teachers today.

While studies are still being conducted on the voice, "investigations have shown that some singing techniques are superior to others with regard to promoting vocal health and longevity for the singer" (Gregg 1995, 59). Those involved in the revival of the pedagogical concepts of the bel canto era support the results of this investigation. By returning to such ideals as a fully developed voice, equalized throughout its range and capable of performing any repertoire with a high level of virtuosity, then the voice will remain healthier and more productive.

In an effort to recapture the principles of the old Italian school, many methods were revised and reissued. One in particular is the revised edition of Nicola Vaccaj's Practical Vocal Method, originally published in 1832, which
is still used by many voice teachers throughout the world. Whether it is used as a reference manual or a complete method for singing, Vaccaj's knowledge and experience as a teacher/singer in the bel canto tradition have been crucial to its success. This method is a systematic course for singing in the bel canto tradition, providing instruction for both amateur and professional singers. Vaccaj encouraged the singer to use his manual under the direction of a teacher, and only after mastering a particular technique may the singer proceed to the next exercise. He believed that technique and aesthetics are closely related, so he discussed style and expression with each new concept that was introduced, along with supplying the meaning of the poem. Similar to other teachers of the time, Vaccaj stressed the importance of establishing the proper technical mastery before addressing the expressive or interpretative demands of a song.

Vaccaj's method consists of fifteen lessons starting with singing scales and intervals, properly articulating consonants and vowels, intonation, different types of ornamentation, and the correct way of singing recitative. Each lesson contains an arietta with examples of a particular vocal task throughout the song. Instead of vocalizing on syllables, he used an Italian text because he believed that a student must learn the Italian language
first. The lessons on scales and intervals deal not only with pitch but also with being able to maintain a constant flow of air necessary to sing legato. To avoid interrupting the vocal line, the singer is advised to pronounce the consonants very quickly. As the intervals widen, he tells the student not to expand the oral cavity but to raise the soft palate in order to keep the same position throughout the registers. He also teaches the student to sing semitones and metrical variations such as the syncopated rhythms. Vaccaj structures the method so that each lesson builds upon the material previously learned. The exercises may appear to be simple, but it is quite challenging to achieve the desired level of technical skill.

The remaining eight lessons train the singer to produce a strong and flexible instrument capable of executing various types of ornamentation characteristic of the old Italian tradition. Regardless of one’s voice type or natural abilities, he believes that vocal agility can and must be acquired. Starting with the roulades, Vaccaj suggests that all embellishments should be practiced at a slower pace then gradually increased in speed. It is beneficial to practice the ornaments in different styles. For example, the legato style helps to maintain a steady line and accuracy of pitch. The martellato style, characteristic of Rossini’s florid style, helps strengthen
the breathing mechanism, which also pertains to the legato style. He continues with the appoggiatura, the acciaccatura, the mordent, the turn, the trill, and the portamento. Vaccaj informs the student to avoid abrupt movements of the larynx while practicing these ornaments so that the passage will flow smoothly. The subsequent lesson provides some background information on the recitative and how it should be performed. He believed that “clear articulation of syllables and words perfectly stressed” is an essential component of a recitative (Vaccaj 1990, 57). Once the recitative is mastered, the student has the necessary tools to learn and perform a complete aria.

Vaccaj summarizes his method with an extended arietta that includes examples of each item that has been covered in the book, along with notating it above where it appears in the music. This seems to be an efficient way of visually reinforcing what the student has learned, and the accompanying cassette can be profitable by aurally demonstrating the principles. In the epilogue, Vaccaj says “that if a singer can perform this long ending in a physiologically and artistically correct manner, then he is ready to approach Rossini’s difficult music” (Vaccaj 1990, 61). The final pages contain a note for listeners and a pronunciation guide for vowels and consonants which is very useful for those singers learning the Italian language.
Although during Vaccaj's lifetime the scientific research pertaining to the voice had not yet been conducted, through observations and experiences he was already aware of the role that physiology played in establishing the proper singing technique.

Manuel Garcia II (1805-1906) was the premier voice teacher and singer to integrate the bel canto technique with scientific research. His studies on the anatomy and physiology of the voice, in addition to many decades of teaching and observing, led him to propose theories relating to the singing voice along with the necessary resources to prove or sometimes disprove those theories. One very important resource which offered greater insight into the vocal mechanism was the invention of the laryngoscope in 1854. Yet prior to and following this major achievement, Garcia used many of his students to demonstrate theories and establish a method for singing. Throughout his teaching career, he consistently produced many famous singers with artistic talent and a high degree of technical skill. Therefore, these successes often contributed to a heightened interest in his method.

Garcia published the first part of the Complete Treatise on the Art of Singing in 1841. The work entitled Mémoire sur la voix humaine (Mémoire on the Human Voice), submitted to the French Academy of Sciences in 1840, served
as the foundation for the first half of this method. The primary focus of this section is to develop a vocal organ that can effectively perform the music of this era along with covering the basic elements of vocal instruction. The method is comprehensive, analytical, and clearly written for the benefit of both the student and the teacher.

Garcia uses a chapter format with musical examples and exercises to illustrate or develop proficiency in a particular skill. He prefers a more analytical approach, because the potential for learning and applying that knowledge in any situation is greater if a certain form is taught in isolation. For this reason, he attempts to fully treat each concept so that the student or teacher is adequately prepared. Before the first chapter, he provides some historical background, the purpose for producing this treatise, a report and extract from the Mémoire, and a description of the vocal mechanism and the terminology that will be used. Consequently, the reader feels more equipped to process the following information. The method contains seven chapters covering topics including voice classification, register equalization, vocal qualities, and vocalization. In chapter 1, Garcia outlines the intellectual, emotional, and physical qualities most essential to the singer who wishes to become a top-rank artist. The singer must possess love for the music and a
melodically and harmonically trained ear along with the emotional strength to handle the criticism that the singer will receive throughout a career. Physically, the instrument must be pleasant, strong, and free of permanent, undesirable qualities. Garcia stresses the importance of study in solfeggio, singing and harmony, and other subjects, regardless of the amount of talent that a student possesses.

To maintain a healthy instrument, Garcia advises the singer to do everything in moderation by avoiding excessive "diet, habits or conduct" (Garcia 1984, 5). The voice can be abused by singing too long in a high register, loud laughter, screaming, and any other forceful act, because the voice is a fragile instrument. The singer should also avoid extreme temperatures, practicing soon after meals, and singing with unnecessary movements of the face and body. It was believed that a student should practice the voice physically and mentally to prevent exhaustion. Beginners should practice several times a day in very short increments and gradually increase the length of time as they progress. The exercises should be sung with a full voice and in various ranges. An important yet often overlooked part of practicing is to make sure that the piano is properly tuned on a consistent basis. By establishing good vocal habits in the early stages of training, the voice will be preserved and the talent will be maximized.
When the voice reaches a certain level of maturity, it is classified primarily according to its range, color, power, and flexibility. Both the male and female voices are divided into four different categories. The woman's voice can be classified as a contralto, which spans the lowest part of the range, from "e³" below the staff to a high "f²" in the Helmholtz system of grand staff notation (Miller 1986, 9). A mezzo-soprano covers the middle and a third above the contralto, the soprano approximately a third higher than the mezzo-soprano, and the soprano sopri-acuti (very high soprano), which is not as common. The lower voices tend to have more volume and power, whereas the higher voices are usually more brilliant and flexible. But since each voice is unique, this general rule may vary. The men's voices are also classified into four categories. The basso-profundo is located at the lowest point in the range, from an "e²" below the bass clef to as high as middle "c" in some voices. Then the baritone, the tenor, and the counter-tenor, which is at the highest point in the scale. Similar to the women's voices, each voice type is separated by approximately a third. Even though all voices do not fall within these strict parameters, it provides the student or teacher with guidelines as to how voices are classified.

The third chapter, on the formation of tones and the different timbres, was interpolated by the editor and
translator who felt this information was significant to the body of the text. Following investigations with the laryngoscope, Garcia concluded that the voice is formed by...

periodic compressions and expansions due to the air exiting the glottis and exerting pressure to expand and contract the lips of the glottis. From this series of successive and regular contractions and expansions or explosions is born the emission of the voice (Garcia 1984, 23).

As the pitch ascends, the vibrations increase along with more cartilaginous contact. Furthermore, Garcia attributes register formation, nuances of the voice, and intensity of the tones, to the action of the glottis and the air that causes each explosion. He believed that the timbres are also formed by the glottal activity and the shape and length of the pharynx. The clear timbre, a term initiated primarily by Garcia, is a result of a "short and slightly curved form of the pharynx" which produces a brighter, penetrating quality (Garcia 1984, 29). On the other hand, the sombre timbre (dark timbre) is due to an "elongated and strongly curved form" which results in a fuller and more resonant vocal color (Garcia 1984, 29). Garcia's findings demonstrated that the glottis effects the surrounding muscles, organs, and tissues that assist in the process of phonation.

Garcia, along with the teachers of his time, instilled the fact that proper breathing propels and sustains the voice and that the singer must have total command of the
breath support in order to become an accomplished artist. It was believed that the breathing process involves control over the expiration and inspiration of air. In order to accurately balance and manage the breath, he advised a combination of thoracic and abdominal breathing. First, the student needs to develop good posture with the chest slightly lifted and the shoulders and arms back and relaxed. This allows the student to inhale naturally in a "slow, complete and noiseless manner," which is called respiro (Garcia 1984, 33). Although there are times when a singer can only take a quick breath or a mezzo-respiro, he wants the student to focus primarily on the full breath. During inhalation, the ribs should remain lifted and expanded and the diaphragm lowered as long as possible while the air enters the lungs. And as the air is depleting, the diaphragm ascends gradually and the ribs relax, resulting in a slow and constant expiration. To develop strong and resilient lungs, he suggests a step-by-step exercise for daily practice. Garcia believes "The breath, which holds the entire instrument under its subjection, exerts the greatest influence on the character of the performance and can make it calm or trembling, connected or detached, energetic or lifeless, expressive or devoid of expression" (Garcia 1984, 35). A mastery of breath support is clearly the foundation for a healthy singing technique.
The old Italian school focused its training on starting the note then bringing in the element of expression. Garcia expanded this approach by beginning with the attack of a tone which was called the coup de la glotte (stroke of the glottis). While assuming the singing position with the mouth formed similar to that of a smile and gradually inhaling, attack the tone with a glottal stroke. He believed that the tone would be more accurate, brilliant, and pure if the student used this method. This procedure was quite controversial, because some believed that it produced a harsh tone and it was not adequately prepared. It was also associated with a forced tone without control, and that was considered to be detrimental to the voice. Nevertheless, Garcia continued to support and promote this theory on the proper vocal attack.

Garcia believed that both female and male voices have three registers, with the exception of the two lowest male voices. His definition of register:

A series of consecutive, homogeneous sounds produced by one mechanism, differing essentially from another series of sounds equally homogeneous, produced by another mechanism, whatever modifications of timbre and strength they offer. Each register has its own extent and sonority depending on the gender and the nature of the organ (Garcia 1982, 7).

Garcia believed the three registers were the chest, falsetto, and head, which signified the origin and where the tones were primarily felt. When the lower tones are
emitted, a singer often feels vibrations in the chest cavity. Depending on the voice type, the chest register slightly varies. The falsetto register represents a weaker and somewhat childlike quality being "identical in range, different in intensity and beauty" (Garcia 1984, 18). And the head register contains the higher tones which are usually felt in the head. For many women, this is the strongest part of their range until the entire compass of their voice is strengthened and equalized. The lower male voices do not have a head register, but the tenor and counter-tenor have access to the chest, falsetto, and head registers.

Once a register is established, it needs to be blended in order to create one unified vocal line that is free of audible transitions or register breaks. Garcia suggested practicing this by singing the last few notes at the end of each register in a single breath and without interruption. For example, the woman would sing from a "d\textsuperscript{1}\text{"} to "f\textsuperscript{1}\text{"} to smoothly pass from the chest to the falsetto register. Fully equalizing the registers also involves modifying the positions of the pharynx and the velum and a "pinching" of the glottis. Register blending or equalization is a primary prerequisite of the bel canto technique because it allows the voice to easily execute the florid passages characteristic of this style.
Garcia dedicates the last chapter to a thorough discussion of vocalization, which he uses synonymously with the term agility to mean singing on the vowels. Garcia describes all types of ornamentation that a singer will encounter and provides exercises to develop the skills to perform them successfully. He instructs the student on how to sing them in different registers, timbres, and levels of speed. Garcia notes the five types of vocalization: the portamento, smooth, marked, staccato, and aspirated vocalization, with the smooth being used most often. The exercises include varying patterns with ascending and descending lines, because ascending agility is more challenging than descending agility. He supplies examples of pauses, chromatic scales, and runs. Garcia explains the messa di voce which was a common feature used in the bel canto repertoire. It was described as a “spinning out of the tone” gradually moving throughout the entire dynamic range. He felt that “people make the mistake of completely neglecting the study of repeated tones used with success in the seventeenth and eighteenth centuries” (Garcia 1984, 137), so he included it in the method. It ends with the different types of trills and mordents and exercises on the preparation and termination of these embellishments. Garcia believed that every voice can learn the trill but some with more effort than others.
Garcia summarizes agility by identifying the two different types: *di forza* (also called *di bravura*) and *di maniera*. In agility *di forza*, the passages are executed with more power and vigor. The agility *di maniera* has a lighter quality and is usually more difficult to perform. He also concluded that open vowels are more conducive to agility. In accordance with other discoveries, agility is also related to the management of the air and pharyngeal activity.

After Garcia’s experiments with the laryngoscope, there were subsequent editions of this method. Consequently, some modifications were made, and he changed his opinions on some of his theoretical conclusions. One modification in particular was the format in which he discussed each register for both sexes before proceeding with the next one. In reference to vocalization, it was rephrased to indicate the skill of freely connecting the tones. The laryngoscope caused him to reconsider and alter certain techniques in the method, and the necessary changes were made to those particular theories in the appendices. By adhering to the principles set forth in this first part, Garcia believed that the student would be well equipped to apply these primary elements to the concepts presented in the second part of the treatise.
Part 2 of this method focuses on applying the techniques already learned to the interpretation of song and the vocal performance practices of the bel canto era. Garcia begins with articulation in singing, which is produced by the oral and nasal tissues. Vowels are especially affected by these cavities that house the lips, teeth, tongue, velum, and other organs. Whether the vowels are pure or impure, they are affected by the length and width of the vocal tract in proportion to the larynx, pharynx, and tongue. This process can result in various timbres of the voice. Vowels must be clearly enunciated because they carry the melody. To assure a clean and precise delivery, he recommends using the coup de la glotte. The consonants are a result of the pressure and approximation of the muscles of articulation. Garcia discusses the explosive and sustained consonants, and he lists the families of consonants. Instructions are given on when and how to accent a consonant and the natural stresses of the Italian language. Consonants should be stressed at the start of the word or with double consonants, depending on the number of syllables in a word. Garcia explains Italian rules of poetry that were based upon the quantity of syllables in each verse which supports the melody. This is an interesting topic that is usually omitted from vocal methods.
According to Garcia, the art of phrasing can only be achieved when a singer has mastered the instrument and is knowledgeable of the meaning and the compositional form of a song. Even then, “a great part still remains up to the inspiration and the ability of the artist” (Garcia 1975, 49). Garcia combines the art of phrasing under subcategories such as pronunciation, phrase formation, respiration, dynamics, ornaments, and expression. Many of these categories are directly related to each other. For instance, when a singer knows how a musical phrase is structured, then matters of respiration will be solved. The musical excerpts are excellent examples to demonstrate dynamics, tempo changes, ornaments, reprises, and other musical liberties that may be suggested by the composer. The majority of Garcia’s examples come from the compositions of Rossini, Bellini, and Donizetti, and he points out that in “the music of Donizetti and especially that of Bellini, there are a great number of passages which, without carrying the indication of the rallentando or accelerando, call for the use of them” (Garcia 1975, 73). Phrase endings are important because they finalize the sentiment of a piece which should be sustained until the very last note. A “vigorous articulation of the time by means of the consonant and the inflection, the appoggiaturas, the ornamentation, the warmth, all combine, in able singers, to give this
decisive moment the final degree of the effect" (Garcia 1975, 105). The true essence of a song is captured when the above topics are properly treated.

In the chapter entitled "Alterations," Garcia states that alterations are "introduced either for necessity or to add to the effect" (Garcia 1975, 106). He calls them alterations because a singer can vary a repeated musical idea by enriching the dynamics, slightly changing the tempo, or modifying the ornaments. But some ornaments may not lend themselves to much variance, such as the appoggiatura or the acciaccatura. For those places within a passage that do allow alterations, they should always be done in a gradual manner and not overly exaggerated.

Expression is essential to an artist because it conveys to the audience the character and sentiment of a song. In order to successfully express a song, Garcia advised the singer to read the words carefully and become aware of all of the emotions that are involved in a specific verse or scene. Once it has been studied, practice showing those emotions in a more pronounced fashion. Then Garcia discusses the many ways that a person can show emotion: facial movements, alterations in breathing, different timbres, body movements, and varying vocal intensity, among other things. Since the voice is susceptible to emotions, it will "modify the capacity, the conformation, the rigidity
and all the physical conditions” (Garcia 1975, 151). The timbre will also change based on the emotions. The ability to communicate a wide range of expression, precise pronunciation, vocal flexibility, and style represent the desired goal of a singer.

The final chapter covers the various styles of singing that came from the three original styles identified by Tosi, an Italian master of singing. Those three were chamber, church, and theatrical. Since these styles became less distinct, the type of composition dictates the style. As a result, the three major styles were the broad, the florid, and the dramatic. The florid style was most often used during Garcia’s time because the singer demonstrated a higher level of vocal agility to meet the demands of the repertoire. This style was full of embellishments of all kinds, and Garcia believed that these “passages should be free, the performance light and the voice used sparingly” (Garcia 1975, 194). Following the various styles, he included more musical examples of cadences and interpretive analyses of specific arias to show the singer the correct procedure for interpreting a role in an aria.

This two-part vocal treatise is considered to be one of the most comprehensive guides in the art of singing. But since its publication there has been some debate over the techniques that Garcia employed. In an effort to reply to
his critics, he attempted to clarify the theories by publishing in 1894 *Hints on Singing*, which is a succinct version of his method written in a question-and-answer format. Garcia's treatise remains a highly respected manual that made an immense impact on the field of vocal science and served as a link to the bel canto tradition for future generations of teachers and singers.

As a student of Garcia, Mathilde Marchesi utilized the wealth of knowledge that she acquired from him and became an excellent teacher, composer, and author, continuing the legacy of Garcia's teachings. With much success, she produced many of the famous female singers of our time. Marchesi's technique focused on the precise formation of the female voice, and she outlined her theory on the voice in her book entitled *Bel Canto: A Theoretical and Practical Vocal Method*. This is a systematic course that emphasizes mastering a specific task before progressing to another one. She concisely sets forth her beliefs on the requirements for singing in the "Practical Guide for Students," which serves as a preface to the method.

Marchesi believed that correct posture was significant because it promoted healthy singing: "The body should be kept upright, the head erect, the shoulders well thrown back, without effort and chest free... all the muscles surrounding those parts should be completely relaxed"
(Marchesi 1970, vi). The mouth should also be in an open and relaxed position similar to the word "ah" to avoid any possible obstructions in the vocal tube. She stated that breathing involves three types of actions: the diaphragmatic, clavicular, and intercostal. In agreement with Garcia, Marchesi believed that the coup de la glotte was the most natural and proper vocal onset because it makes the most efficient use of the breath. She believed that the female voice consisted of the chest, medium, and head registers, with the head register taking the longest to develop. To equalize these registers, it was suggested that "the student slightly close the vowel of the two last notes of the former in ascending, and open them in descending" (Marchesi 1970, 15). She advised this procedure for all registers.

Marchesi encouraged practicing for short lengths at a time and incorporating mental preparation proved beneficial. She believed that the ideal environment for vocal training was group lessons, because the student had vocal rests and could learn by listening to others. Marchesi felt that every student should be taught about the physiology of the voice in order to preserve it and obtain the best results. The exercises are based upon this principle, and she provides instructions before each one. Marchesi believed that words should only be sung once the student's voice has
been accurately placed, registers blended, and has a degree of vocal flexibility. It also states that the student must possess technical mastery before approaching the aesthetics of the voice. This method contains primary exercises on scales, portamento, trills, intervals, syncopation, and many other tasks.

In addition to this method, Marchesi wrote numerous books of vocalises for the various female voice types and specific topics like style and agility. Marchesi firmly stressed the importance of practicing ascending patterns due to the vocal challenges. In the *Elementary Exercises—Opus 1*, there are "one hundred ninety-four exercises and only six are exclusively descending" (Nix 1995, 6). Marchesi's forty-two years of experience are evident in her pedagogical methods, her vocalises, and the successes of her students. Marchesi's contributions to the pedagogy of the female voice and her combining of the bel canto technique with scientific knowledge have kept her in the forefront of vocal pedagogy, and perhaps even more so during this revival of interest in the "Golden Age" of singing.

One of Marchesi's famous students was an American singer and vocal teacher by the name of Estelle Liebling. She was born in New York in April 1880 and died there in September 1970. She studied with Marchesi in Paris and with Nicklass-Kempner in Berlin. Liebling made her début at the
Dresden Royal Opera as Lucia and made subsequent appearances in Germany, Paris, and the Metropolitan Opera in New York from 1902-1903. She was a soloist with many symphonic orchestras throughout the United States and Europe. After teaching at the Curtis Institute of Music, she returned to New York to continue a career in vocal pedagogy. In 1943, she wrote and published the Estelle Liebling Coloratura Digest, and in the 1950s and 1960s she wrote Vocal Courses for all male and female voice categories.

The Estelle Liebling Vocal Course briefly outlines her philosophy on teaching singing, which states that a singer needs a good voice teacher in order to be a good singer. Although each voice must be considered on an individual basis, all voices can be enlivened by interpretation, proper phrasing, pure intonation, and precise diction. She believed that a singer must study the music and the bel canto technique. The vocal course consists of three parts. Part 1 describes the elements of vocal anatomy, covering respiration, phonation, and articulation. She believes that respiration consists of quickly inhaling as much air as possible and exhaling it slowly. This process utilizes the chest, lungs, diaphragm, ribs, and abdomen. Therefore, correct posture is crucial to singing properly. Liebling discusses the functions of the vocal cords and the larynx. She also believes that the voice has three registers:
chest, medium, and head. The course includes pictures of the vocal organs while explaining certain concepts, which is quite productive for the student. Liebling explains the articulating system and the resonating system, which consists of "primary and secondary resonators" (Liebling 1956, 13). The primary resonators are the pharynx, trachea, and bronchia. The secondary resonators are the oral and nasal cavities.

Part 2 of her vocal course contains exercises relating to the specific needs of each voice type. It covers ornaments, style, and other difficulties that may arise during these studies. She gives instructions and states the purpose above each exercise. She suggests that the student vocalize on "ah," "ma," and "la" for intonation purposes and to establish vowel purity. The importance of proper diction is discussed. Liebling explains the rules for vowels and consonants, diphthongs, and triphthongs. There are tables of pronunciation for vowels and consonants in English, French, Italian, German, and Spanish. Then she includes a concise glossary of musical terms, a recommendation of songs, and recordings of famous singers so that students can enhance their knowledge of repertoire and hear examples sung by accomplished singers. Following in the tradition of Marchesi and Garcia, Estelle Liebling’s vocal course is
geared to producing a vibrant and efficient vocal mechanism that is fully capable in technique and musicianship.

This detailed discussion of some of the major vocal methods and treatises from Vaccaj to Liebling provides greater insight into the care and the development of the singing voice during the bel canto era. The fundamental concepts that were established by the old Italian masters are still used and respected in present-day vocal pedagogy. The renewed interest in these pedagogical approaches to bel canto can only intensify what has been proven as a successful singing technique.
CHAPTER IV

VOCAL AGILITY AS A COMPONENT
OF BEL CANTO TECHNIQUE

The main characteristic of true art is the concealment of art and this cannot be attained by any other means but the study and achievement of perfect agile vocalization (Parisotti 1911, 166).

The bel canto style is often characterized by a predominance of virtuosity demonstrated by one of its most distinguishing features: vocal agility. Vocal agility will be defined as the ability to sing with precision, accuracy of pitch, and proper tone quality florid passages spanning the entire singable range of the voice. During the bel canto era, a singer developed this skill in order to successfully meet the demands of the music. There were numerous types of fioratura, an Italian term for ornamental passages that were written out or improvised and rapid phrases of all kinds that required a poised and flawless execution. In addition to the technical requirements, a singer had to be proficient in the use and artistic function of the ornaments for the purpose of displaying the distinct traits of their particular voice and enhancing the expressivity of the song. Vocal agility was an integral part of the bel canto technique, and various elements constitute the development of this skill. The determinants
consist of a combination of musical and physiological factors that assist in producing a flexible instrument.

To obtain vocal agility, the musical determinants are tonal accuracy, articulation, and register equalization. The physiological determinants are breath support, laryngeal/pharyngeal flexibility, and muscular coordination. All of these qualities are essential in acquiring vocal agility because it is a coordinated effort. Consequently, the factors indirectly or directly influence each other. The skills needed to develop agility are also needed to establish the singing voice. A singer can only benefit from this facet of vocal training.

Precise intonation or tonal accuracy is vital to mastering the art of singing, and vocal agility cannot be achieved without the accurate production of pitch. When the pitch is not accurate, the florid passages will lack clarity and ease of delivery. The early masters frequently began vocal studies by developing the student's intonation. Caccini stated, "The first and most important foundation is a vocal intonation on all the notes, not only to avoid flatting and sharping but to have a good style" (Sanford 1979, 64). It was especially important to maintain a tonal center in highly decorated passages, because the embellishments can lead the singer in another tonal direction. Tonal accuracy can be acquired as long as the
student has the necessary tools to obtain this sense of precision.

First, a singer must have a good ear that is consistently capable of hearing the correct pitch and/or series of pitches in any part of the vocal range. After hearing it, the singer should be able to translate the aural process into singing with tonal accuracy. This skill can be developed by matching pitches that are played on a precisely tuned instrument, which helps to acquire a well-trained ear. A keen sense of hearing allows the singer to discern whether a pitch is flat or sharp and gives the singer the ability to make the necessary adjustments. The early singing masters believed that the study of trills proved beneficial in developing tonal accuracy. Each note of the trill must be correctly pitched, which is one reason why the teachers encouraged the students to begin practicing the trill at a slow rate, gradually increasing it as it became easier. The teachers of the bel canto era believed that pitch accuracy was directly related to the vocal mechanism and that any modifications within the vocal organ affected the pitch. Consequently, tonal accuracy is a clear indication of precise vocal function.

According to Garcia and Lamperti, tonal accuracy was also linked to the proper preparation and attack of tones. The preparation involved respiration, resonance,
articulation, and other factors which they believed were vital to achieving accurate pitch. They emphasized the total coordination of each system mentioned above, and the absence of any of them would result in improper intonation. The attack of a tone was another factor that they believed ensured accuracy, because when a note is properly attacked the pitch will be exact at the onset. This concept prevents the singer from having to make pitch adjustments due to faulty preparation or attack. Garcia stated that "each tone should be approached boldly and the accuracy along with the purity of the tones depend upon the stroke of the glottis" (Garcia 1984, 44). Lamperti agreed with Garcia's ideas on the stroke of the glottis, and he believed that it was an important factor in the study of agility. Tonal accuracy is fundamental to the acquisition of vocal agility, and it is the result of all systems coordinating with each other in order to function as one whole unit.

Articulation is essential to vocal mastery and is especially important in highly technical passages that were abundant during this era. The teachers of the Italian school stressed the necessity for a clear articulation in the early stages of a singer's training in order to prepare the artist for singing various types of passages. Without precise articulation the singer will not be understood, and the message from the music will not be effectively conveyed.
to the audience. It is clearly an integral part of singing which requires a certain degree of skill originating in the organs of articulation. The principal mechanisms of the vocal apparatus, the oral and nasal tissues, must be functioning efficiently to achieve excellent articulation. Similar to many processes involved in vocal production, articulation is dependent on its coordination with systems of respiration, phonation, resonation, and others.

Articulation is “brought about by stops or partial blocks in or closely connected with the oral cavity which are set up by the articulators—the tongue, lips, teeth and soft palate” (Ross 1959, 9). Precise articulation stems from proper usage of the articulators in vowel and consonant production. Vowels, unlike consonants, are sung with an opened and unobstructed mouth position, and they are produced within the laryngeal cavity. A change of shape or length or any other alteration within the vocal tract causes the vowels to modify. During vowel production, the singer should avoid any obstructions that would block the passageway and affect the purity and sonority of the vowels. These obstructions are often the result of improper positioning of the articulators. Garcia agreed with Mancini regarding the position of the mouth while singing. They believed that the mouth should be opened as if the person is smiling naturally with the upper and lower teeth slightly
separated. They stated that this "mouth position should be the same for all the vowels except for O and U which require a small movement of the lips" (Garcia 1975, 7). Too much movement of the mouth would be visually and aurally disruptive and most likely produce vocal tension. A stable mouth position keeps the jaw free of tension and the "resonance area remains substantially the same size... so that a uniform quality is achieved throughout the entire vowel spectrum" (Newton 1984, 67). Although there were and still are varying opinions about correct mouth positioning, it is still agreed that there should be consistency in articulation and that the mouth must remain relaxed while singing. To achieve vocal agility, the teachers of the bel canto era "cautioned against any extraneous movement of the tongue or jaw in performing rapid passages" (Sanford 1979, 55). Proper position and movement directly influence vocal flexibility.

The tongue has a significant function in vowel production even though its movements are moderate and automatic. However, the singer needs to make sure that the rear part of the tongue does not impede the sound and that the tip stays flat and relaxed against the lower front teeth. Depending on what vowels are being formed, the tongue arches slightly from front to back. But the tongue should always remain free of tension in order to avoid
developing vocal defects. The soft palate is in a high position, similar to a yawn, when singing vowels because it creates a larger area of resonance. In articulating consonants the tongue is more active, and it avoids excessive movement of the jaw. Consonants must be "articulated briskly and vigorously without interrupting the flow of the melody" (Manén 1974, 42). The tip of the tongue is used to produce many consonants along with the lips, teeth, and palate.

The consonants are described according to the articulators that are involved in their production. Garcia classifies them into five families: the labials, labio-dentals, linguo-dentals, linguo-palatals, and linguo-gutterals. The labials are the consonants p, b, and m that use the lips as the main articulators. The labio-dentals are the consonants f and v that use the lips and the teeth. The linguo-dentals are the consonants t and d that employ the tongue and the teeth in the Italian language. The linguo-palatals are the consonants k, g, s, and z that are articulated by the tongue and the palate. The linguo-gutterals are the hard c, k, and g, and the Russian l primarily found in foreign languages and involving the tongue and the posterior part of the oral mechanism. The proper placement of consonants is an essential element in acquiring clear articulation.
Once singers can clearly articulate consonants and vowels, they can skillfully sing the various types of articulation such as staccato, legato, and marcato along with others. The music of the bel canto period employed numerous types of articulation, so the artist had to have the ability to sing with precise articulation. Expression and phrasing are enhanced by articulation through emphasizing or de-emphasizing a part of a word or words and other artistic effects. Garcia said, "It is necessary to stress the articulation in order to appropriately strengthen the sentiment" (Garcia 1975, 24). Good articulation is a requisite for vocal agility not only to effectively project the text, but also to enhance the expressivity of the music while maintaining a beautiful sound.

A singer's ability to quickly adapt to several variations in tempo will create a more flexible instrument that is capable of responding to the demands of the music in a natural and artistic manner. Accurate consonant articulation is also related to the execution of various tempos because they "serve to mark the time, to make it incisive, to speed up or slow down the movement and to accentuate the rhythms" (Garcia 1975, 27). During tempo adjustments, the singer must maintain musical and dramatic continuity for the cohesiveness of the song. But the tempo variations add an element of variety and spontaneity to the
performance. The early singing masters taught their students to sing rapid florid passages with the same accuracy, purity of tone, and flexibility as they would slower passages of *fiorature*.

Composers such as "Haydn, Mozart, Cimarosa and Rossini required a complete exactness in the rhythmic movement" (Garcia 1975, 71). Any changes in tempo in their compositions were usually quite moderate, and there were specific indications in the music. On the other hand, tempo variations were not always indicated in the compositions of Bellini and Donizetti, so the singer needed to be knowledgeable of composers' styles. The modifications of time that were and still are used are the *accelerando*, *ad libitum*, *rallentando*, *tempo rubato*, and many others. The *tempo rubato* gave the voice more freedom to increase or decrease the speed while the accompaniment maintains the original tempo. It was also used as preparation for the trill, and it proved to be an effective device that heightened the sentiment of the music. An artist who has the ability to skillfully maneuver the voice through all types of tempo alterations while sustaining the melodic line has developed a degree of vocal agility.

The teachers of the old Italian school emphasized the significance of register equalization prior to any attempt to acquire agility. They believed that when the registers were
already equalized, the voice had a uniform quality throughout the range which involuntarily lends itself to vocal freedom. This smooth transition between registers was accomplished only after each register was fully developed. For the female voice there was more focus on the head register, because it was usually not used as frequently. To unify the head voice with the chest, the student was given exercises that started in the head register and descended into the middle part of the singer's range. This technique strengthened the head voice and solidified the tone quality, and it avoided the danger of forcing the weight of the chest register up to the head register. Developing each register—chest, medium, and head—helped to extend the vocal range, which is especially beneficial to a singer who is striving for vocal agility.

This process of equalizing the registers was done as early as possible. Therefore, the teacher needed to be very cognizant of the student's vocal development and abilities along with eliminating any defects within the registers before starting agility training. If these corrections were not made, the agility would be uneven and lacking in power and precision.

Vowel modification is a vital part of register equalization because it enhances intelligibility and resonance and maintains good tone quality and ease of vocal production in the upper portion of the range. The vowels are modified to avoid a dull, harsh quality that would
interrupt the tonal uniformity. As the singer ascends and approaches the *passaggio*, the vowel is modified by "a sensation of additional spaciousness in the pharynx, by a high velum, a low tongue, and a lowered larynx, thereby increasing 'depth' in the tone" (Miller 1986, 150). According to the Italian school, vowel modification was a gradual process that resulted in the upper pitches matching the rest of the scale. The modification technique *aggiustamento* was the method in which closed vowels like [i] and [u] would modify to a more opened neighboring vowel like [I] and [U] as the pitch ascends. Consequently, it will produce a resonant tone quality that projects well. All vowels can and should be modified to achieve pure register equalization.

There are many additional factors that play an influential role in register equalization, such as pitch, intensity, breathing, and other physiological activities. Proper register equalization will build the voice in many aspects and create a flexible vocal instrument that is equipped to perform all types of music with a high level of virtuosity.

Prior to acquiring vocal agility, the singer must have a mastery of certain physiological factors to establish a solid foundation. Perhaps the most important underlying force that sustains the voice is proper breath support. The
masters of the bel canto era recognized its importance in many styles of singing, because it solidified the technique by influencing every aspect of singing. Correct breath support consisted of diaphragmatic breathing that ensured optimal use of the respiratory organs and promoted vocal health and longevity. The singer’s posture was established first by standing upright yet relaxed, with the shoulders slightly back and chest moderately elevated, allowing the ribs to lift and expand. This noble posture was conducive to natural and relaxed breathing, and the singer was encouraged to maintain this position throughout the inspiratory and expiratory cycle.

During inhalation, the ribs should be expanded as the abdominal area descends along with the diaphragm. The intake of air should be gradual, calm, and noiseless with very little if any movement in the chest and thoracic region. In the exhalation process, the ribs should delay their collapse as long as possible while the abdominal muscles, the viscera, and the diaphragm slowly ascend and the breath is expelled in a steady flow. When the cycle is completed, it is repeated in the same manner whether a partial or full breath is taken. The "cultivation of the 'partial' breath is as essential to good vocal technique as the ability to take a 'full' breath" (Miller 1986, 38). The
partial breath can be particularly effective in executing rapid musical passages.

The development of proper breath support must be coupled with its "proper application which is variable, depending on the pressure needed to support different degrees of loudness and different ranges of the voice" (Ross 1959, 23). This fact leads the singer to the concept of breath management. The term *appoggio* is used to refer to a balanced system of support between the inspiratory, resonatory, and phonatory systems in singing. Each tone should be well-supported, and there should be "a feeling of muscular connection from sternum to pelvis" (Miller 1986, 25). With the correct posture and muscle coordination over the inspiratory and expiratory forces that control diaphragmatic activity, the skill of breath management will be accomplished. When the breath is managed properly, the singer will maximize vocal efficiency by combining the breath source and the larynx, which is the vibrator. The artist is then capable of pacing the breath to sustain long phrases or sing rapid passages. Proper breath support and management is essential to phrasing, articulation, pitch accuracy, good tone quality, register equalization, and other musical traits.

Efficient breath support and management will create a steady and flexible voice. It develops the elasticity of
the lungs so that they are able to quickly adjust to varying levels of breath pressure by learning how to conserve, hold, and intake air. In order to achieve a flexible breathing mechanism, "it is important not to let any air be expelled other than the portion required to make the vocal cords vibrate; this provides facility" (Sanford 1979, 90). This method of conservation affects range and volume, which are significant in acquiring vocal agility. Consequently, many of the breath-management exercises are also used for the development of agility. The flexibility of the diaphragm and the umbilical-epigastric region creates a feeling of suppleness that is necessary to sing rapidly and precisely. The activity of the diaphragm is significant in executing various types of ornamentation, such as the messa di voce, which was commonly used for dramatic purposes during the bel canto period. The facility of the vocal organs involved in respiration makes it possible to achieve vocal agility.

Tetrazzini stated, "In attacking the very highest notes. . . no singer can really get the high notes, vocal flexibility or strength of tone without the attack coming from the seat of respiration" (Tetrazzini 1975, 16). Agility can only be obtained with the establishment of proper breath support and management.

The level of flexibility within the laryngeal and pharyngeal mechanisms has a definite impact on vocal
agility. The larynx, being the vibrator and sound-producer, forms a link between the lungs and the nasal passages. It is surrounded by numerous muscles that can alter its position thereby modifying pitch, resonance, and tone quality among other things. Although the larynx should be kept fairly stable during the act of singing, there is a slight range of motion that will occur due to pitch and phonetic definition. There has been much debate from current pedagogues as to laryngeal positioning which is often tied to varying opinions about breathing. Those who advocate diaphragmatic breathing believe that the larynx is allowed to rest in addition to increase its activity when it is slightly lower and it "does not need to make any significant excursions up or down once phonation has started" (McKinney 1982, 133). It is generally believed that a poised and moderately low position will eliminate laryngeal tension, relax the muscles of articulation, and increase the size of the throat. Famous singers such as "Domingo, Ponselle, Pavarotti, Horne and others agree with the lowered laryngeal position" (Timberlake 1994, 41). On the other hand, there are some who believe that a raised larynx frees the voice.

Outside of the debate regarding laryngeal positioning, it is generally agreed that laryngeal flexibility is advantageous and must be coordinated with the breath for
purposes of changing the timbre to bright or dark to convey a specific mood in a song. The "laryngeal muscles must be able to contract and relax in response to the breath with perfect readiness and accuracy" (Behnke 1926, 138). As long as the larynx is allowed to operate properly and extreme positions are avoided, laryngeal flexibility greatly enhances vocal agility.

The pharynx is the main resonator of the voice, located immediately above the larynx and extending upward into the oral and nasal cavities. The teachers of the Italian school believed that the pharynx must be open and free from tension in order to encourage flexibility. During this era, "the proper speed and articulation of ornaments was generally obtained through a controlled, delicate use of the muscles of the throat, centered primarily around the epiglottis" (Sanford 1979, 56). The size and shape of the pharynx is principally controlled by the action of the velum and tongue while singing. When the velum is high and the tongue lies deep, the pharyngeal cavity is extended; but when the velum is lowered and the tongue rises and widens, the pharyngeal tract is shortened.

The alternative in pharyngeal size or shape produces a variety of timbres which can be used for dramatic effect covering a range of emotions. In Part 1 of Garcia's Treatise, he discusses the various timbres that result from
simply modifying the pharyngeal tract. Pharyngeal flexibility also influences pitch and tone quality since it is located "so near the larynx that it has the first, and therefore the most potent effect upon tone quality" (Vennard 1967, 92). Pharyngeal facility assists the singer in the precision, expression, and tonal quality required to acquire a highly skilled and flawless instrument.

The entire act of singing centers around the ability to effectively coordinate various muscular activities. Similar to any other physical activity, singing involves synergism; and the energy needed to supply the vocal organ is contingent on the coordination of all muscles that are employed within the process. The muscles must first be stabilized and individually strengthened in addition to understanding their purpose. The coordination of the breathing mechanism and the larynx, the abdominals and the thoracic region, the articulators with the breathing mechanism, and many others are very significant; but their operation as a unit produces a well-coordinated vocal mechanism.

The vocal onset and release of a phrase requires balanced muscular activity in order to maintain a smooth musical line without damaging a particular muscle or group of muscles. A lack of coordination may result in excessive muscular activity known as hyperfunction or inadequate
activity known as hypofunction. Flexibility and balance are necessary so that the muscles can share in the total process of singing. Throughout the onset and release cycle, the coordination of the laryngeal mechanism with the glottis is essential. The laryngeal muscles must have a balanced action and a certain amount of elasticity, and the "glottis needs to be open before phonation to produce a clean and precise onset" (Miller 1986, 5). Otherwise, the onset would be characterized by a hard glottal attack or a soft onset with too much aspiration. During the release, muscular balance is important because the vocal quality should be consistent from the beginning to the end of the phrase. When the release is coordinated, it will create the "optimum condition for the continuation of efficient phonation" (Miller 1986, 19). Muscular coordination during onset and release is a vital part of achieving vocal agility.

Muscular movement and coordination was described by John Lester as "the tension of one set of muscles and the controlled release of the opposite that causes accurate action" (Lester 1951, 4). This was generally believed to be a correct statement, but due to the connotations of the word "tension," most teachers use the word "relaxation" to explain this action to their students. Complete muscular relaxation was not implied, but it helped keep the student from thinking of constricting the muscles during the act of singing, which would inhibit the vocal process. When the
muscles are independently operating properly, then they will perform accurately as a total unit.

In Cornelius Reid's *The Free Voice*, he refers to this system of muscular coordination as the "Conditioned Reflex Theory" in which the "muscular coordination adjusts in response to a mental picture of pitch, intensity, vowel and duration" (Reid 1965, 204). Reid views the coordinated activity as conditioning the singer to respond by reflex in terms of his/her own natural functioning. This theory requires the singer to already have an established and workable technique. Muscular coordination can only be achieved with a proper vocal technique.

The acquisition of vocal agility requires a mastery of the previously discussed musical and physiological factors in addition to others not mentioned within this chapter. As the hallmark of the bel canto period, a well-trained singer possessed the vocal agility that was necessary to perform the music of the time with a beautiful tone and flawless technique.
The primary objective of vocal instruction during the bel canto era was to develop a voice with pure intonation, strength, equality, and agility, in addition to the ability to skillfully execute a diversity of styles and vivid displays of expression. These qualities characterized a well-trained voice. Due to the technical expectations that the music placed on the voice, agility was considered a requisite for all singers. The voice was fortified and prepared for this florid style, along with other styles, because of the high level of vocal proficiency it exhibited. The early masters realized the significance of agility as a part of the singer’s training, and it proved beneficial in artistically communicating the music to its fullest extent.

The teachers of the old Italian school had similar views regarding the general precepts of vocal agility, which helped to maintain a certain degree of consistency in this aspect of vocal training. In the early methods and treatises, agility was discussed in a succinct manner, and it was often accompanied by exercises that were used to develop this skill. The masters stressed a progressive and organized study of agility, and they encouraged students not
to rush because more harm could be done than good. It was believed that a gradual course of study would create an efficient and healthy voice. The bel canto method was based upon "lines of rational consistency, patience and perseverance" (Ffrangcon-Davies 1968, 55). A singer was allowed to proceed only after mastering a particular task. As a result, many artists during this golden age of singing were highly skilled and avoided some of the vocal problems that are more common in present-day singers.

The early singing masters believed that a singer must demonstrate technical proficiency before dealing with aesthetics. Once a solid technique has been established and the voice has flexibility throughout its entire range, then the singer is free to display the expressive and interpretative elements of a song. Vaccaj believed that technique and aesthetics are closely related because if a technical feat is properly executed it enhances musical expression. Garcia, Lamperti, Marchesi, and others agreed that expression would be ineffective if the technique was unstable because they influence each other. The effort to convey the aesthetics of a composition will have an impact on the technical aspect of singing, because "each emotion, however slight the shade of it may be, will appropriately affect the vocal organ by modifying the capacity, the conformation, the rigidity and all the physical conditions
of it" (Garcia 1975, 151). A firm technique and a keen sense of aesthetic principles produce a high level of artistry.

Despite the fact that most of the scientific research on the voice had not yet been conducted in the eighteenth century, the instructors were knowledgeable of the general systematic operation of the voice. They believed that agility training helped the singer to successfully coordinate the vocal mechanism because it incorporated the activities of the respiratory, vibratory, and resonating systems. Agility is impossible without the well-balanced and precise coordination of the muscles, organs, and tissues that comprise each system. The manner in which the numerous parts of the vocal apparatus function is closely related to the performance of many types of florid passages. It is necessary for a singer to be able to coordinate and properly utilize the voice with a degree of flexibility in the various regions of the vocal organ. The development of agility clearly enhances several aspects of the singing voice and plays a significant role in the total coordination of the vocal mechanism.

An exploration into the bel canto teaching styles has shown numerous similarities in their approaches to vocal agility. However, there were some differences in approach that existed primarily because of the unique background or
experiences of the respective teachers. Since Porpora did not leave any treatises or manuals dictating his method, with the exception of books written by his students, very little, if anything, was known about his concept of vocal agility. Besides acknowledging it as one of the characteristics of a good singer, there was no additional information available pertaining to agility. Yet it was known that Porpora did not believe in supplying his students with an abundance of written exercises because he thought that the teacher’s practical examples were more beneficial. He was concerned about whether the student would develop the necessary skills from the exercises. Porpora believed the singer learned more about vocal production and execution from imitation. It can only be surmised that he may have also used imitation as a method for teaching vocal agility.

The singing masters who continued the bel canto tradition maintained the significance of agility in vocal training with some slight differences in their approaches. In Vaccaj’s *Practical Vocal Method*, he uses ariettas with various types of ornaments and other embellishments to illustrate the kinds of passages that a singer will encounter. He includes the Italian text with each selection instead of vocalizing on vowels, which was customarily used in other treatises and methods. His discussion of the ornaments provides a little information on the correct
positioning of the diaphragm and the oropharyngeal cavity in addition to stressing the importance of proper breath support and management. Vaccaj's approach to developing agility was quite thorough, and it was clearly considered to be an essential skill for an aspiring singer.

In Francesco Lamperti's *Treatise on the Art of Singing*, he briefly addresses vocal agility primarily from the standpoint of how it should be studied in order to avoid vocal problems. He agreed with his contemporaries that agility can be studied in four different ways: *portamento*, *legato*, *picchettato*, and *martellato*, with *legato* being the most important quality in healthy singing. Yet Lamperti's approach was somewhat different from those who preceded him because he believed, along with Garcia and Marchesi, that agility should be practiced with a shock of the glottis on each pitch. Lamperti believed that a glottal stroke prior to each note would result in a more clear and precise tone quality which is a characteristic of agility. He emphasized the necessity of this glottal activity in developing vocal flexibility.

The final pages of Lamperti's treatise provide some exercises for the purpose of producing a healthy and agile voice, because it was believed that certain difficulties can be prevented if only a few well-constructed exercises are used on a regular basis. Although his treatise does not
include a detailed discussion of agility, it outlines the basic approach that he used which highlighted some of the similarities and differences in his teaching style in comparison to other teachers of this technique. Giovanni Lamperti supported Francesco's ideas regarding vocal agility, with the exception that if a singer has "no aptitude or natural gift he should not waste time on coloratura study because it may be injurious to the voice" (Coffin 1989, 65). He believed that all voices should be trained in agility but not all voices lend themselves to executing all types of ornaments. Consequently, Giovanni's approach incorporated a more individual assessment of a singer's potential for agility.

Garcia's pedagogical views concerning vocal agility were the most diverse in relation to the previously discussed teaching styles. With the invention of the laryngoscope and the scientific research that ensued, there was more emphasis placed on the physiological factors involved in the acquisition of vocal agility. It was believed that if a singer is aware of the various parts of the vocal mechanism and how they function, then vocal flexibility can be achieved in all types of passages. Garcia's discussion of vocal agility is very comprehensive and illustrative, and it assists the student in developing the necessary flexibility within the voice with varying
degrees of force and speed throughout the vocal range. Garcia believed that there were five ways to execute a musical line. In addition to the legato, marcato, portamento, and staccato, the term aspirato, which comes from the word aspiration known as the French "accent," was also used to refer to many of the ornaments during this period. The aspirato would most often occur before the repetition of each pitch for the purpose of clarity. This type of execution with respect to agility was only mentioned in Garcia's treatise, possibly because he had a section dealing with the proper delivery of repeated notes. Garcia did not want to neglect any aspect of vocal study because that resulted in an insufficiently trained singer.

Garcia provides a description of each type of execution mentioned above along with some musical examples. Unlike the previous treatises and methods, he explains the activities of the lungs and the glottis for each one because he believed that they had a specific function depending on the kind of execution. He supplies numerous exercises starting from simple and progressing to more complex patterns. Garcia continues in great detail with definitions and exercises for various ornaments in addition to what should happen physiologically in order to successfully perform the task. For instance, in the section on the trill he states that a singer must "impair to the larynx a regular
oscillatory up and down movement. ... and the pharynx serves as an envelope for the larynx" (Garcia 1984, 160). Garcia emphasized that the mastery of the trill is directly related to this activity. Once laryngeal flexibility is achieved, then the pharynx would be "supple in order that the shortening and lengthening of the depressor and elevator muscles may take place with ease and rapidity" (Garcia 1984, 160). Consequently, Garcia encouraged students to "seek the trill through the spontaneous trembling of the throat and not through the progressive movement of the two notes" (Garcia 1984, 163). He believed this approach would create a smooth and precise trill; and, contrary to some of the other singing masters, he believed that every voice can learn the trill but that it may be more difficult for some.

The scientific research conducted by Garcia made a major impact on his pedagogical approach to vocal agility. The combination of the empirical and scientific observations accounts for some of the varying ideas regarding vocal agility, although many of Garcia's beliefs remained consistent with fellow masters of the bel canto style. Since Marchesi studied under Garcia, she had similar views concerning vocal agility. Garcia's treatment of this aspect of vocal training was the most diverse with respect to other manuals and treatises of the time. Yet, for the most part,
there were many commonalities in the manner in which the various teaching styles dealt with vocal agility.

The similarities and differences within the teaching styles had a significant effect on agility. There was more time and effort spent developing this skill, because it not only enabled the singer to perform the florid music of the time but also gave the artist the ability to sing all types of styles. The singing masters emphasized the fact that agility should be a part of every singer's daily regimen regardless of voice type or size. The empirical method of the old Italian school had a positive effect on agility, because it encouraged singers to take the necessary time to fully develop the skill so that when they performed in public they were vocally prepared. This approach further enhanced the student's awareness of the physical sensations that are present in this style of singing. The level of expression was heightened due to the flawless manner in which florid passages were executed.

The introduction of the scientific approach affected vocal agility by incorporating more information about the physiological factors that play an important role in this skill. This knowledge was for the purpose of acquainting the singer with the proper functions of the muscles, cavities, and organs that constitute the vocal mechanism. Vocal flexibility could not be achieved without the
coordination of the entire vocal apparatus, and it provided a more concrete description of what takes place physically for purposes of instruction. Perhaps the student would feel a greater sense of control over the voice with the knowledge of how it should operate. Some teachers may have believed that this information would preoccupy singers and inhibit their ability to attain agility; nevertheless, it had an impact on vocal instruction and agility in particular. The pedagogical methods of the bel canto period had a positive effect on vocal agility, and the "voices during this time showed remarkable flexibility. . . the tone was steady and continuous--excellent cantilena and an intensity of tone" (Kay 1963, 22). Vocal agility was perhaps at its peak during this era, and it was evident in the various documents written by the early masters.

The teachers of this "Golden Age of Singing" had several ideas on how agility was acquired. Some writers and instructors, such as Tosi and Mancini, believed that vocal agility was a natural gift that could be developed through proper training but that it could not be acquired. They were of the opinion that "vocal agility was a gift imparted to relatively few singers" (Sanford 1979, 51). If a singer did not possess this gift, they thought that practicing certain exercises was a waste of time. Their observations and experiences led them to believe that only specific types
of voices automatically lend themselves to a high degree of flexibility. There were varying opinions as to the validity of this statement, which caused some debate on whether to perceive agility as primarily a gift, an acquired skill, or a combination of both factors. Garcia believed that this aptitude stemmed from a mixture of both elements because they influenced each other. If a student had a natural gift for it but did not apply oneself, then he felt that the singer would not reach fullest potential. On the other hand, he believed that certain ornaments, such as the trill, were "difficult to acquire by means of study alone" (Vaccaj 1990, 45). Therefore, Garcia believed that natural ability combined with consistent study was essential in the acquisition of agility.

A flexible voice was achieved through a progressive and organized course of daily study. Numerous types of vocal exercises were used, such as vocalises, or sometimes they were written as a song or aria with a text. The type of exercise that was used depended on the singer's level of technical development. They practiced all types of diatonic and chromatic scales, various patterns of intervals, arpeggios, and ornaments. The trill was often the starting point for studying the ornaments, because it required a degree of facility that would assist the student in mastering the shake, turn, mordent, and other
embellishments. The student was encouraged to begin practicing at a moderate speed, gradually increasing it as it became easier. Establishing proper aural skills was essential at this stage of development, along with efficient breath support and management. At first, the singers were instructed to take as many breaths as they needed to sing an exercise; but as they advanced, fewer breaths were needed to complete a particular phrase, which indicated proper usage of the breathing mechanism. In order to acquire a flexible instrument, the exercises were performed legato, marcato, portamento, and several other ways, with special emphasis on legato because "if the student cannot sing legato passages properly, it is impossible for him/her to run scale passages properly. . . ." (Stanley 1950, 207). Then, after a level of proficiency was achieved, the student was taught the messa di voce, which was commonly used for artistic effect during this period. With all of these musical devices, "there must be neatness, rapidity, precision of note values and correct intonation" (Garcia 1984, 44). The acquisition of agility involved time and focused study which, according to the early masters, were vital to a singer's success.

As discussed in the previous chapter, there are many physiological elements that are essential in acquiring vocal flexibility. The muscles of respiration must be controlled yet flexible in order to execute the different kinds of
passages without vocal strain. A supple laryngeal and pharyngeal mechanism helps to relax the muscles involved in oscillatory movements such as the trill. Efficient use of the articulators and resonators is significant in the precise and rapid delivery of florid passages, and the student should be able to expand and contract the resonating cavity in singing an ascending line. This will provide more space in the oral and nasal cavities for the purpose of eliminating possible obstructions during vocal production.

Garcia and Lamperti also believed agility was acquired with a shock of the glottis and that without this action the agility would not be perfect. It is clear that there were several ideas on how vocal agility was acquired; and it can be assumed that a combination of practice, natural ability, physiological control, and motivation is crucial to its development.

Vocalises are a significant part of a singer's training; and, if used properly, they can serve many purposes. These exercises may function as vocal warm-ups; they can be used to reinforce a musical concept and/or assist in developing a specific skill. The early masters included vocalises in some of their methods and treatises, especially with respect to achieving a flexible instrument. Usually, each vocalise focused on a particular task, and the teachers frequently grouped the exercises with certain
skills. For instance, some vocalises were composed strictly for the purpose of learning the trill, the appoggiatura, or other ornaments. They were very effective tools for establishing flexibility, and in some cases teachers would take portions out of a song and use it as a vocalise. The exercises were an integral part of a singer's vocal technique.

The following example is the last five measures of a vocalise composed by Porpora:

EXAMPLE 1

The tempo indication was larghetto, which was very slow in order to ensure tonal and rhythmic accuracy, and the

\(^1\)Weldon Whitlock, Bel Canto for the Twentieth Century, (Champaign: Pro Musica Press, 1968), 73-76.
dynamics suggested required a great deal of vocal control with the gradual crescendos and decrescendos. Unfortunately, Porpora only composed a few exercises, but the excerpt from this vocalise shows that they were quite challenging and enhanced vocal agility.

Francesco Lamperti composed some exercises for acquiring agility, and he included a few examples in the final pages of his *Treatise on the Art of Singing*. This example is part of an exercise in scale-work, and he emphasized the importance of proper intonation in singing the small intervals in this vocalise. He uses the symbol "" for the notes that singers usually find more difficult:

---

Lamperti indicates the type of articulation along with supplying the syllable "la" on which he wants the student to vocalize for this particular exercise. The entire vocalise employs many repeated patterns which, if sung precisely, will produce a smooth musical line.

Garcia included a large quantity of exercises to illustrate almost every concept of "vocalization," which he used to refer to agility, in the first part of his treatise. This first example demonstrates the "marked vocalization" or marcato as a way of executing a passage:

EXAMPLE 3

\[
\begin{align*}
\text{aaa} & \quad \text{aaa} \\
\text{e} & \quad \text{e} \\
\text{ooo} & \quad \text{ooo}
\end{align*}
\]

In order to successfully perform this example, he suggests that the student exert a little pressure with the stomach muscles and avoid any interruptions from sound or breath. It should not sound like what is written below:

---

This would result in an aspirated quality instead of a marked vocalization. Garcia stated that "each note requires the changing contractions of the vibrator, the various impulses of the air, the successive dilations of the pharynx—none should be shocking or abrupt" (Garcia 1984, 59). The exercise below may help to avoid sliding between pitches and assist in accurate tuning of a note.

The scale passages are intended to enhance speed and agility. Garcia urged the student to begin at a slow pace, breathing periodically, then gradually increase the tempo and sing in one breath⁴:

⁴Ibid., 76.
In addition to developing flexibility, it promoted register equalization and rhythmic accuracy. Garcia employed melodic motives as a basis for many pages of vocalises since they are commonly used throughout a composition. Garcia thought that the singer should be vocally prepared to execute them. The exercise started with two-note motives and increased to more than thirty-two-note motives. The examples below represent the beginning point:\(^5\)

---

\(^5\)Ibid., 82.
Once mastery is achieved, then the student can proceed to more complex patterns like those below:\footnote{Ibid., 90.}:
Then, with further technical proficiency, the singers may continue until they can successfully sing the last pattern of vocalises.

Garcia provided several exercises for the mastery of various types of trills. For the measured trill below, he gives the appoggiatura before the trill, followed by the trill, then the termination of the trill at the end of the phrase:

\[\text{Ibid., 170.}\]
He said the appoggiatura should be heard above the other notes. He advised starting at a moderate pace, then increasing the speed as it becomes easier to perform. The chromatic trill was challenging to master because of the minute intervals which must be perfectly pitched. Garcia suggests that the singer practice the chromatic pattern below several times before attempting the trill:\[8\]

\[\text{i}b\text{id.}, \ 180.\]
Garcia continues with more examples of trills; and if the student practices consistently and efficiently under the guidance of a teacher, there should be noticeable progress and a higher degree of agility.

Garcia realizes that a singer should have the ability to take shorter breaths or half-breaths because the music may not always allow enough time for a full breath. The following excerpt was used for practicing the half-breath:\footnote{Ibid.}
The above vocalise could only be possible with proper breath support and management, which requires coordination of the
muscles of inspiration and expiration. Garcia strongly emphasized the importance of agility and provided a wide range of exercises focusing on acquiring agility at any stage of vocal development.

Mathilde Marchesi wrote numerous books of vocalises, each with its own specific purpose. Marchesi believed in the progressive method of teaching various concepts, including vocal flexibility. It started with simple scale-work and progressed to longer and more complex rhythmic patterns. Similar to Garcia, Marchesi had several vocalises for each type of passage or embellishment that a singer may encounter. Each book dealt with a specific female voice type, and it discussed the possible difficulties or limitations unique to that voice. The following example represents the beginning stages of scale-work from the *Elementary and Graduated Exercises for the Development of the Voice*\(^\text{10}\):

---

The students were advised to take their time practicing the above pattern, even though it may appear to be quite simple. The excerpts below are a continuation of the previous example.
Before proceeding to the next exercise, Marchesi encouraged her students to fully master each one.

**EXAMPLE 10 (CONT'D)**

The above example was the most complex pattern of this series.

The following excerpt was for the purpose of enhancing vocal flexibility by facilitating the study of the trill:\textsuperscript{11}

\textsuperscript{11} Ibid., 35.
It helped the singer perform different intervals with ease in an ascending and descending diatonic sequence.

This trill exercise is based upon the diatonic scale, and it is advised that the student practice slowly but in strict rhythm. As the throat becomes more flexible, the student can increase the speed\textsuperscript{12}:

\textsuperscript{12}Ibid., 31.
The example below is the first three and last three measures of a vocalise that introduced the mordent, which was a frequently used ornament during this period:\textsuperscript{13}

\begin{quote}
Starting at a slower pace was suggested, then increasing the speed as facility became easier and more natural. In all of the exercises, she allowed the teacher to decide what vowels to use for vocalizing. Marchesi's dedication to agility was evident in this progressive and comprehensive method.
\end{quote}

\textsuperscript{13}Ibid., 29.
Our views on vocal agility have changed along with the present-day vocal pedagogy. There is a lack of emphasis placed on acquiring this skill; consequently, very little information can be found on the topic in current pedagogical manuals. Many artists believe that vocal agility was lost at the end of the golden age of singing and that only recently, with the revival of this style, has it returned to the forefront. However, it is not yet perceived as a requisite, which was the overall opinion throughout the bel canto era. It may be due to the level of proficiency in our singers today and/or the different demands of modern music. Another type of agility may be required to perform twentieth-century music because it contains chromaticism, various types of articulation, and difficult intervals. A flexible voice is still advantageous for singers because it expands their repertoire of music and greatly improves the operation of the vocal mechanism. Miller states, "It is essential to any vocal category, whether or not the literature of that vocal type demands it, that agility be part of the singer's daily practice" (Miller 1986, 40). He stresses the significance of this skill from a physiological perspective which is indicative of current pedagogical practices.

Throughout the twentieth century, there has been an ongoing debate as to the effectiveness of several approaches...
in training the voice. There are numerous methods used in
developing the singing voice, but there is more disparity
between the supporters of the physiological approach than
with supporters of the psychological approach. Garcia's
invention of the laryngoscope marked the beginning of the
scientific or physiological approach, which advocates a
knowledge of vocal physiology in training singers and
maintains that "only by means of it will true vocal freedom
and ease be achieved" (Behnke 1926, 40). An understanding
of the muscles and organs involved in the processes of
respiration, phonation, and articulation was considered a
major factor in improving the singer's general health and
vocal longevity. This physiological awareness may help the
singer to establish good habits and prevent some vocal
defects.

The scientific approach is primarily based on laws,
techniques, and methodology which can be universally
transmitted. Supporters of this method believe that a
teacher must be able to accurately convey information to the
student regarding anatomy and physiology. This skill
provides the teacher with "a basis for analyzing errors in
production and a basis for working out ways and means of
correcting these errors" (Ross 1959, 39). With much
practice and guidance, the students will be able to diagnose
and correct some of their own faults. In addition to
supplying the teacher with a working knowledge of vocal physiology and other related principles, it empowers the students by giving them more control over their vocal development. Since it is impossible to consciously regulate the vocal cords along with some of the other tissues and ligaments, the followers of this method believe it is possible to manipulate the surrounding muscles and tissues to produce a desired effect. Yet the coordinated action of the entire mechanism should be the goal of each singer.

Vocal pedagogues such as Ralph Appelman, Douglas Stanley, James McKinney, William Ross, and others believe that knowledge of vocal anatomy is fundamental for the singer and teacher and that it "attempts an analysis of the artistic product without doing violence to its essential beauty or effect" (Fields 1972, 23). The objective of this approach is to enhance the art of singing through an understanding of the various systems of the vocal apparatus.

Advocates of the psychological approach believe vocal production is best achieved by training the mind, which will dictate sensations to the body. It was believed that proper mental functioning preceded the operation of the vocal mechanism. Too much attention to the physiology of the voice would impede the singer's progress and inhibit their expressive and interpretative abilities. These views were more consistent with the empirical method of the bel canto
period, when there were "no attempts at the conscious control of particular muscles" (Duey 1951, 154). A natural approach to singing was encouraged, and they believed it was the "mind and not the muscle that sings... because the nervous system, directed by thought, supplies the energy for muscular response in the body" (Fields 1972, 6).

Consequently, the mental picture attunes itself to the physiological responses. Mental discipline is essential to this approach, and some of the ways to acquire it are through "creating a tonal image, visualization, preparing a plan of study and removing all obstacles by systemic practice" (Fields 1972, 5). The teacher must assist the student in this process by communicating effectively so that the student is capable of mentally producing a certain outcome. Then the singer "will learn to depend on mental concepts which stimulate musical feeling and simplify, not complicate, her task" (Frisell 1966, 4). The psychological approach emphasized habit formation, versatility of expression, and—most importantly—mental control over the voice.

There are many objections to the psychological and physiological methods respectively, because singing simultaneously incorporates both factors, "whether it be through a conditioning of the larynx, the breathing apparatus or the ear" (Fields 1972, 26). One of the major
objections to the scientific approach is that a significant amount of emphasis is placed on the vocal organs during instruction and that it "makes singers conscious of their throat, their breath and so forth. . . ." (Behnke 1926, 21). On the contrary, those who oppose the psychological method believe that relying on sensations is unpredictable, because a student may or may not be familiar with a particular sensation and the attempt to capture the feeling could result in vocal strain. Strict adherence to the psychological or the physiological viewpoint could be equally detrimental to an aspiring singer. The true artist strives to maintain a balance between these approaches, and the "final aim of every singer is to attain such freedom, flexibility and spontaneity of expression that the singing voice will seem to be a natural endowment rather than an acquired skill" (Fields 1972, 7). Singing is an art that unites both physical and artistic elements into a powerful and synchronous unit.

Some of our great twentieth-century artists--such as Beverly Sills, Marilyn Horne, Leontyne Price, and others--provide a link to the old Italian school. Beverly Sills's pedagogical lineage can be traced back to Garcia by way of Liebling and Marchesi who continued in this tradition. These talented singers helped to keep the legacy of bel canto alive while passing it on to upcoming generations.
It is the goal of this study to acquaint the singer and teacher with the early techniques that were employed to enhance vocal agility, which is a vital component in successfully singing many styles of music. It also helps the singer understand the historical implications of this significant trait in the art of singing. The pedagogical aim is to promote a healthier exchange of knowledge within the vocal profession and improve the instruction of vocal agility, which is fundamental to the total development of the singing voice.
BIBLIOGRAPHY


The Tonal Art of Singing: The Sounds of Bel Canto--


