FACTORS INFLUENCING PERFORMANCE STANDARDS
FOR PROFESSIONAL OPERA SINGERS FROM 1600
TO THE PRESENT TIME

DOCUMENT

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By

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* * * * *

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For exemplifying the spiritual joy of learning.
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INTRODUCTION

George Bernard Shaw frequently complained that the operatic singers of the 1890's could not aspire to the glories of Luigi Lablache (1794-1858) and Maria Malibran (1808-1836) (Schonberg, 1984, p. 84), prominent singers of the mid-1800's. In the eighteenth century the virtuosic vocal feats of the castrato Crescentini (1762-1846) were sometimes compared unfavorably to the marvels of the earlier castrato Farinelli (1705-1782) (Pleasants, 1966, p. 91). In the 1930's at the zenith of the old Metropolitan Opera House in New York City, certain "old-timers" spoke little about Enrico Caruso or Nellie Melba, in favor of Lilli Lehmann (1848-1929) and Jean de Reszke (1850-1925) (Schonberg, 1984, p. 84). Even today it is not unusual for the student of singing to encounter aging aficionados who believe that contemporary operatic superstars such as Placido Domingo, Luciano Pavarotti, Marilyn Horne, and Samuel Ramey should not be mentioned in the same breath as singers of the post-war era such as Richard Tucker, Franco Corelli, Regina Resnik, and Nicolai Ghiaurov. It seems therefore, that within every generation of professional singers and operatic
audiences there have always been those who felt that the previous generation of singers was far superior to the existing one. This recurrent argument might be called a "golden age" syndrome, since it holds that the "golden age" of singing always existed in what went before.

Although historians work with a body of objective facts as they reach conclusions about social movements and cultural norms, we must acknowledge from the outset that the evaluation and appreciation of the singer's art is by its nature subjective. We should also note that there is a characteristic feature of aging which is to cling to cherished memories of the "golden" past. It would seem however that there are other questions that beg for more concrete, objective answers. For example, we might question what changes have occurred from generation to generation that might have caused singers to feel expectations had changed for them and their art, and what factors are responsible for those changes. How did the performance standards of a given operatic era relate to the predominant vocal pedagogy of the time, or conversely, how did the voice instruction of the day respond to the perceived changes in performance requirements?

These questions are important to both students and teachers of singing because there is always a degree of mystery in discussing what is "traditional" in the art. It is a common occurrence for a student to be told by a teacher
that what he/she is being taught is representative of "the bel canto tradition" or "the way that Gigli sang." Any study which helps student and teacher solve some of the "mystery" of the vocal tradition is helpful. Aspiring professional singers need to be made more keenly aware of social, musical, professional, and physical factors which bring powerful influences to bear on the way opera is performed. Finally, teachers of singing stand to benefit from the consideration of salient pedagogical priorities connected with different historical styles of operatic singing.

The purpose of this study is to document the known changes in performance standards for opera singers from the seventeenth century until today, and to investigate the reasons for those changes. Three epochs in the operatic art will be considered in this study, The Age of Bel Canto, The Age of Grand Opera, and the Modern Era. The parameters of this investigation include:

1. **Performance standards** as evidenced by contemporaneous "reviews" and theoretical (pedagogical) writing. Taken into account are issues of voice production such as intonation, evenness of scale, dynamics, diction, agility, and breathing. The question of expressiveness, especially in relation to voice production, is addressed. Also considered are the demands placed on singers according
to their voice classifications -- soprano, mezzo-soprano, tenor, bass, etc.

2. **Cultural influences** of a given era on the art of singing, with regard to social and artistic trends which affected vocal composition and expression. National trends among some of the major "schools" of singing are included, along with phenomena within the milieu of the operatic world.

3. **Performance environment:** factors which affect the singer in the production process. Considered here are the size and other characteristics of opera houses, the development of the opera orchestra, and changing standards of concert pitch. Also of importance in the consideration of performance environment is the question of the relative authority among singer, composer, conductor, and stage director.

In Chapter I, the seventeenth and eighteenth century art of "bel canto" singing is considered in the cultural perspective of the boundless ornate Baroque artistic climate. Evidence of vocal standards is to be found in the treatises of teachers such as Pietro Tosi (Tosi, 1743) and Giambattista Mancini (Mancini, 1777) as well as in the accounts of performances by historians such as Dr. Charles Burney (Burney, 1771). There are indications in this era of differences in national tendencies in vocalism, especially between Italy and France. An analysis is made of the
typical performance environment, including the nature of the opera house, the strikingly rude and clamorous deportment of the audience, the variations in standards of concert pitch, the composition of the orchestra, and the relatively powerful authority of the singer in musical and artistic matters.

Chapter II deals with the dramatic changes which affected singers and singing during the nineteenth century as the populations of cities expanded geometrically and audiences demanded a greater degree of realism in the arts. Evolution in vocal writing culminated in the idiomatically demanding operas of Verdi and Wagner. As the taste for dramatic singing, heavier timbres, and declamatory projection spread, vocal pedagogy struggled to keep pace (Newton, 1984, p. 101). Opera houses and orchestras grew larger and controversies arose over the standardization of concert pitch. Important questions arose about the tuning of the orchestra for performances of seventeenth and eighteenth century works as well as nineteenth century operas. Opera stars such as Gilbert-Louis Duprez (1806–1896) and Wilhelmine Schröder-Devrient (1804–1860) created sensations in the bold new dramatic use of their voices with effects ranging from tenor high C's in chest voice to the actual spoken declamation of a musical phrase. This chapter also discusses the continuing loss of authority and artistic control by the singer as composers indicated vocal effects
more explicitly in the scores and the conductor rose to power in the production process (Pleasants, 1984, p. 34).

Questions concerning the state of the operatic singing art and various modern influences thereupon comprise Chapter III. Some venerable music critics feel that singing is in a state of decline and search for reasons to explain this perception. Also discussed is the sometimes anti-vocal nature of modern operatic composition as well as the high priority given to the visual aspects of a singer's performance. This chapter considers difficulties presented by the multi-purpose auditoria which function as opera houses in North America, the most recent developments in the orchestra, and fresh concerns that concert pitch is still on the rise. The relatively new prominence of the stage director suggests a more disparate appropriation of artistic authority among singer, director, conductor, and agent. General questions are raised about the direction of operatic singing and related pedagogy.

Appreciative mention needs to be made of some previous research relative to this topic. George Newton, in his historical essay, *Sonority in Singing*, traces the development of the singing voice from the time of Chaucer to today's opera performers (Newton, 1984). In his colorful and informative biographical study, *The Great Singers*, Henry Pleasants documents the careers of famous opera singers from the days of the seventeenth century castrati to the singers
who were prominent in the 1960's (Pleasants, 1966). *Historical Vocal Pedagogy Classics* by Berton Coffin (Coffin, 1984) provides synopses of the pedagogical writings of famous voice teachers from the seventeenth century to the early twentieth century. J. Merrill Knapp, in *The Magic of Opera* (Knapp, 1984) surveys opera in history with regard to its conventions, national traditions, voice classifications, orchestra, production process and evolution of musical style.

Drawing on numerous sources, including the aforementioned excellent studies, I plan to trace through documented and often disparate materials the common threads of changing influences on the art of operatic singing since its inception until the present day, and the resulting changes in vocal sound and voice study. I also hope to ascertain why the "golden age" syndrome continues to exist, and if, indeed, it is valid.
CHAPTER I
THE AGE OF BEL CANTO

Evidence of Standards

Sources. Because of the lack of aural evidence and our distance in time from the pedagogical tradition in the seventeenth and eighteenth centuries, the best indications of the vocal standards in that era are derived from the writings of contemporaneous voice teachers, composers and a few historians. The most exhaustive summary of the pedagogical treatises of this epoch is Bel Canto in its Golden Age (Duey, 1961). A more distilled synopsis of general trends appears in Performance Practice after 1600 (Harris, 1990). The two primary sources which offer the most detailed advice for pupils of singing are Observations on the Art of Florid Song (Tosi, 1743) and Practical Reflections on the Art of Singing (Mancini, 1777). An Early History of Singing (Henderson, 1921) offers a mostly factual, if occasionally subjective, treatment of topics such as the classification of voices, early ideals of singing, and some specifics about ornamentation.
The "bel canto" manner of singing which these writings attempt to describe is one of the more imprecisely used terms in the business of singing. In Italian it means "beautiful song" and is generally associated with the style of singing appropriate to the extant operas of the seventeenth and eighteenth centuries. *The Harvard Dictionary of Music* offers this: "Bel canto ("beautiful singing"), denotes the Italian vocal technique of the 18th century with its emphasis on beauty of tone and brilliant virtuosity, rather than dramatic expression or romantic emotion" (Apel, 1972, p. 88).

The term does not appear as a separate entity in either general or musical dictionaries until after 1900 (Duey, 1961, p. 4). The first indicative use of the words appears in the title of a collection of songs by Nicola Vaccai, "Dodici Ariette per Camera per l'Insegnamento del Bel-canto Italiano" (Duey, 1961, p. 5). It was not until 1865, however, that the *Dizionario della Lingua Italiana* stated that "Il bel canto e lode special del canto condotto con finita ornatura e con esattezza delicata" ("Bel canto is special praise of singing performed with finished ornamentation and sensitive exactitude" (Duey, 1961, p. 6).

In the late 19th century, mavens who felt that Wagnerian *Sprechgesang* was not beautiful were opposed by Wagnerians who thought that beautiful singing was not enough (Pleasants, 1966, p. 19). It is interesting to suppose that
"bel canto" became more clearly defined in "the sulphur of pro- and anti-Wagnerian invective, employed by the Wagnerians pejoratively, by others as a symbol of the assumed virtues of the older Italian vocal tradition" (Pleasants, 1966, p. 20). At any rate present usage limits its definition to the "Italian singing methods of the seventeenth and eighteenth centuries with its [sic] emphasis on beauty of tone and virtuosity" (Duey, 1961, p. 12).

**Vocalism**

Major sources emphasize several aspects of vocal technique which clarify the general requirements for singers in the era of bel canto. These may be stated as perfect intonation, the smooth joining of registers, agility, clear enunciation of the text, and dynamic flexibility.

A quote indicative of the importance placed on good intonation comes from Tosi:

Let the master do his utmost to make the scholar hit and sound the notes perfectly in tune in Sol-fa-ing. One who has not a good Ear, should not undertake either to instruct, or to sing; it being intolerable to hear a Voice rise and fall discordantly. Let the instructor reflect on it; for one that sings out of tune loses all his other perfections. (Tosi, 1743, p. 19)

Tosi does not seem, however, to offer any specific remedies or methods for training the ear. Mancini, though, recommends the following procedures for determining the cause and remedying the problem:
1. The student should be tried at singing early in the morning before eating; and during the day, when the sky is cloudy and also when it is serene; when the air is placid and tranquil, on windy and stormy days; also soon after a full meal. If on all these occasions he sings out of pitch without noticing it and every possible correction is of no avail, then one can state with surety that the fault comes from nature herself, or from imperfect hearing. This defect is impossible to correct and the student should be discharged at once. (Mancini, 1777, p. 61)

2. After the student has been tested as to his ability in intonation, and after having found him to have a good ear, then, in order to insure him, he must be kept Sol-fa-ing on graded tones; first on the ascending and then on the descending scales. All this work must be done with scrupulous attention, seeing that every tone is perfectly in pitch. Then a solfeggio must follow with notes forming the normal intervals. (Mancini, 1777, p. 67)

Sliding, or "scooping" up to a tone was evidently more common in the earlier years of bel canto than later.

Marpurg, a German source, speaks of the practice called Tonsuchen ("tone-seeking"): When one reads in the writing of some old singing-masters that the musicians do not agree among themselves as to whether one should attack with the right or just tone, or with a second, a third or a fourth, etc., lower or higher, then one perceives from this that the defect of tone-searching or tone-groping must have been considered a musical virtue in olden times. But in these days of ours no other persons but little old women or grannies, children's nurses, etc., are permitted to make easy for themselves the legs of a note in their ditties. The singer must, with regard to intonation, take as a model the instruments which in turn must follow (copy) the vocal line. (Marpurg, 1763, p. 34)

Representative of French sources on correcting bad intonation, Bacilly suggests proper breath support and
careful attention to the learning of intervals (Harris, 1990, p. 99). He reasons that bad tuning is often attributable to "ignorance of whole-steps and half-steps" and "that a good knowledge of notes can greatly contribute to its correction" (Harris, 1990, p. 99). He also makes clear that the pupil "will be able to sing without concern over his pitch, on condition that he sings the notes from the diaphragm [du fonds du gosier], which is the sole guide to correctness in singing" (Bacilly, 1668, p. 28).

Even Caccini, the earliest source on Baroque singing, places the utmost importance on singing in tune. He writes "Therefore, to proceed in order, thus will I say that the chiefest foundations and most important grounds of this art are the tuning of the voice in all the notes" (Caccini, 1601, p. 302).

Registration is another issue addressed at length in most Baroque treatises on singing. On one hand, it can appear that there was a concern for an equalization of registers similar to modern practice:

A diligent master, knowing that a Soprano without the Falsetto is constrained to sing within the narrow compass of a few Notes, ought not only to endeavour to help him to it, but also to leave no Means untried, so to unite the feigned and the natural Voice, that they may not be distinguished; for if they do not perfectly unite, the Voice will be of divers Registers and must consequently lose its Beauty. (Tosi, 1743, p. 22)

Tosi was obviously writing about the castrato voice, but his use of the term "falsetto" wants further explanation. Tosi
was one of the teachers who believed there were three registers of the voice:

Voce di Petto is a full Voice, which comes from the Breast by Strength, and is the most sonorous and expressive. Voce di Testa comes more from the Throat than from the Breast, and is capable of more Volubility. Falsetto is a feigned Voice, which is entirely formed by the Throat, has more Volubility than any, but of no Substance. (Tosi, 1743, p. 22)

On the other hand, it is possible that the concern was to simply join the registers at the "break" while maintaining the distinctiveness of each register (Harris, p. 102). This is, at least, one possible interpretation of Mancini, who, unlike Tosi, believed there were two vocal registers:

The voice in its natural state is ordinarily divided into two registers, one of which is called the chest, the other the head or falsetto . . . Every scholar, whether he be soprano, contralto, tenor or bass, can ascertain for himself the difference between these two separate registers. Have no doubt that of all the difficulties that one encounters in the art of singing, the greatest by far is the union of the two registers. (Mancini, 1777, p. 20)

At any rate, Mancini realized that nature endowed different singers with different balances of registration, and that the singer should carefully control his strength and make strong his weakness:

Take for instance a student who has a strong chest voice, and head tones out of proportion, weak and feeble. in such a voice the break between the two registers comes between C and C [treble clef] . . . The way to correct it is to have the pupil at once undertake and fix in his mind in his daily study, to keep the chest tones back as much as he can and to force the voice little by
little against the head just there where it seems to be most unfriendly to him and thus fix it and develop it with the same strength that the chest tones have already naturally developed. (Mancini, 1777, p. 109 ff)

In the early years of the bel canto era, the Italians shunned the head voice, considering it to be unnatural and giving it the name falsetto (Duey, 1961, p. 124). By the time of Tosi and Mancini, the necessity of blending the registers was recognized and it was considered impossible to attain agility without it (Duey, 1961, p. 124).

**Agility.** Ornamentation of the melodic line and the improvisation of cadenzas by a soloist was a practice inherited from the Renaissance and continued through the eighteenth century (Grout, 1988, p. 224). The importance placed upon considerable skill in this aspect of Baroque singing is evident in the words of Tosi:

> Among the Things worthy of Consideration, the first to be considered is the manner in which all Airs divided into three parts are to be sung. In the first they require nothing but the simplest Ornaments, of a good Taste and few, that the composition may remain simple, plain, and pure; in the second they expect that to this Purity some artful Graces be added, by which the Judicious may hear, that the Ability of the singer is greater; and, in repeating the Air, he that does not vary it for the better, is no great Master. (Tosi, 1743, p. 93)

The obvious point for a cadenza was on the 6/4 chord of an important cadence, exactly as it is found in the concertos of the classical period. Serving par excellence for the display of singers' powers, cadenzas were often stretched to absurd lengths. According to a petition submitted to the
management of the Paris Opera as a joke by the "Italian Eunuchs:"

A cadenza, to be according to the rules, must last seven minutes and thirty-six seconds, all without drawing breath; for the whole thing must be done in one breath even though the actor should faint on the stage. (Grout, 1988, p. 226)

Excess of this sort was, of course, one of the targets of Gluck's eventual "reform" of opera and bothered many teachers and observers when it was popular. The thrilling effects of the most talented of virtuosi are evidenced by Burney in his description of a competition between the castrato Farinelli and a famous trumpet player:

... after severally swelling out a note, in which each manifested the power of his lungs, and tried to rival the other in brilliancy and force, they had both together a swell and a shake by thirds, which was continued so long, while the audience eagerly awaited the event, that both seemed to be exhausted; and, in fact, the trumpeter wholly spent, gave it up, thinking, however, his protagonist tired as himself, and that it would be a drawn battle; when Farinelli, with a smile on his countenance, showing he had only been sporting with him all this time, broke out all at once in the same breath, with fresh vigor, and not only swelled and shook the note; but ran the most difficult and rapid divisions, and was at last silenced only by the acclamations of the audience. (Burney, 1771, p. 153)

Diction. Though the demand for a clear pronunciation of the text is consistent in Baroque treatises (Harris, 1990, p. 99), there is but little discussion of methods aimed at achieving good diction. We know that in Italy aspiring professional singers spent hours a day practicing solfege (Pleasants, 166, p. 49). French singing placed even
greater emphasis on the text. Quantz characterizes the French style:

French arias have a spoken rather than a singing quality. They require facility of the tongue for pronouncing the words more than dexterity of the throat. That which should be added in the way of graces is prescribed by the composer: hence the performers do not have to understand harmony. They make hardly any use of passage work, since they maintain that their language does not allow it. (Quantz, 1966, p. 172)

German teachers also write of lofty standards in matters of articulation. Bernhard speaks of fluency in languages other than the singer's own:

Burrs, lisps, and other forms of bad diction must be eschewed, and a graceful, blameless manner of speech be cultivated. In his mother tongue, the singer should certainly adopt the most elegant way of speaking . . . If, however, he is to sing in a language other than his mother tongue, then he must read that language at least as fluently and correctly as those people to whom it is native. (Bernhard, 1649, p. 20)

There is general advice in the Italian treatises about not over-articulating the words and not singing with any distortions of the mouth or face. Mancini (1967, p. 30) recommends that the five vowels, A, E, I, O, U, be pronounced with little movement of the lips and jaw (only slightly for O and U) and jaw. At the outset of the period Caccini admonishes that "unless the words [are] understood," the singer cannot "move the understanding [sic]" (Caccini, 1601, p. 378).

**Dynamics.** It is generally evident that a great deal of dynamic flexibility was practiced. The use of crescendo and
diminuendo on single tones (messa di voce) is widely discussed and abrupt dynamic shifts were discouraged. Bacilly advises:

The proper technique . . . is to increase the volume of the voice up to a certain point and then to diminish it little by little so that the resulting effect is a sort of surge and ebb. (Bacilly, 1668, p. 100)

Bernard states "Care must be taken not to shift too abruptly from the piano to the forte, but rather to let the voice wax and wane gradually" (Harris, 1990, p. 107). Harris suggests that the modern practice of maintaining phrases at a single dynamic level ("terraced dynamics") has no advocacy in the treatises of bel canto, and indicates that dynamic markings from the period illustrate the employment of crescendo and decrescendo "from Monteverdi to Leopold Mozart and beyond" (Harris, 1990, p. 107 ff).

The use of forte and piano, though, was never to have been exaggerated. Caccini speaks critically of singers who perceive it as a "general rule that in increasing and abating the voice, and in exclamations, is the foundation, and who . . . always use them in every sort of music, not discerning whether the words require it" (Caccini, 1601, p. 381). Bacilly (1668, p. 97) contends that since vocal music involves a text it does not need as much variation of dynamic as instrumental music to be expressive. Tosi (1743, p. 176) refers to dynamic volubility as a kind of shading in music. He is also concerned with pragmatism as well as
aesthetics, warning the singer to "regulate his Voice according to the place where he sings; for it would be the greatest Absurdity, not to make a Difference between a small Cabinet and a vast Theatre" (Tosi, 1743, p. 150).

It should be noted that the Baroque treatises all ascribe importance to proper breathing, but not one author speaks clearly or in much detail about breathing technique(s) (Newton, 1984, p. 47). Some write that coloratura passages should not be broken by breaths or that one should not interrupt a word or phrase to breathe. There is no indication of whether proper breathing was pointedly clavicular, costal, or abdominal diaphragmatic (Newton, 1984, p. 47).

**Expression**

There is but scant mention of singers' standards of dramatic expression in the treatises of bel canto. Moreover, the lack of involvement in characterization by prominent virtuosi became one of the phenomena which motivated the aforementioned reforms of Gluck, as detailed in most general histories of music. The level of dramatic detachment by performers at the zenith of *opera seria* in Italy is illustrated in the satirical treatise "Il teatro alla moda" (1720) by Benedetto Marcello:

> The singers, male and female, are to keep their dignity above all things, ever listening to any other actor; saluting the people in the boxes, joking with the orchestra, etc., that people may
clearly understand that he or she is not the prince Zoroaster, but Signor Forconi... If the singer plays the part of a prisoner, or slave, he must take care always to appear well-powdered, with many jewels on his dress, a very high plume, nice shining sword and chains, which latter he is to clatter frequently in order to awaken compassion in the audience; the prima donna must always raise one arm, then the other constantly changing her fan from one hand to the other; and if she perform the part of a man she must always be buttoning one of her gloves, must have plenty of patches on her face, must bow very frequently on entering the stage, forget her sword, helmet, wig... (Marcello in Pleasants, 1966, p. 27)

The theatrical substance of the operas themselves was stereotyped and stilted. The plots were predictable, dealing with the fate of mythological gods, classical heroes, and medieval kings and queens. Good conquered evil, monarchy was revered as an institution, and only lofty personages were acceptable subjects of epic narrative (Pleasants, 1966, p. 28).

Whether or not acting was a serious craft undertaken by singers, voice teachers of the era were consistently concerned with matters of appearance. Tosi advises performers to "sometimes sing before a looking glass, not to be enamoured with his own person, but to avoid those convulsive motions of the Body or of the Face, ... which, when once they have took Footing, never leave him (Tosi, 1743, p. 25). Mancini teaches that the movements of the hands and arms must be "dictated by sane and mature judgement, or copied from actors of renown by observing them in those special roles we are learning" (Mancini, 1777, p.
184). He speaks also of the need for clear articulation in
the flow of various expressions:

One must have ease in the changing from a sweet
expression to a harsh one, from tenderness to
madness, from affection to disdain, etc. This is
the most beautiful part of the art of acting. The
important thing is that these changes of
expression must succeed each other with
naturalness, and at the exact moment. (Mancini,
1777, p. 184)

Newton (1984, p. 27) contends that expression in bel
canto singing was principally a matter of intellectual,
abstract musical representation, owing to the Baroque
Doctrine of Affections (Affektenlehre). This doctrine
involved the stereotyping of moods, or affections in melodic
figures. Each piece had a basic affection, and appropriate
musical figures would be devised to represent it. Bukofzer
further explains:

Since they did not "express" but merely
"presented" or "signified" the affections,
musically identical figures lent themselves to
numerous and often highly divergent meanings. It
is therefore misleading to isolate certain figures
and classify them in a system of absolute meanings
as motives of joy, steps, beatitude, and so forth.
Nor should these proceedings be misinterpreted as
emotional program music or as psychological
expressions of feelings. The affections were non-
psychological static attitudes and were therefore
peculiarly fitted for musical representation.
(Bukofzer, 1947, p. 389)

Flexibility of rhythm and dynamics for expressive
purposes are occasionally discussed in Baroque writing.
Bacilly writes that "the variation of measure, now slow, now
fast, contributes a great deal to the expressivity of a
song" (Bacilly, 1668, p. 101). He instructs singers that
The dance meter is broken in order to give the air more refinement... It is completely unfair to criticize this style of performing by saying that the airs are not danceable, as thousands of ignoramuses have done. If this were to be the intention of the performing singer, then his function would be no more than that of a viol. (Bacilly, 1668, p. 101)

The expressive effect of dynamic gradation is observed in Burney's writing about a performance by the castrato Guadagni in London in 1769:

The music he sang was the most simple imaginable; a few notes with frequent pauses, and opportunities of being liberated from the composer and the band were all he wanted. And in these seemingly extemporaneous effusions he proved the inherent power of melody totally divorced from harmony and unassisted even by a unisonous accompaniment. Surprised at such great effects from causes apparently so small, I frequently tried to analyze the pleasure he communicated to the audience, and found it chiefly arose from the artful manner of diminishing the tones of his voice like the dying notes of the aeolian harp. Most other singers captivate by a swell or messa di voce; but Guadagni, after beginning a note or passage with all the force he could safely exert, fined it off to a thread, and gave it all the effect of extreme distance. (Pleasants, 1966, p. 67)

**Voice Types**

The castrato voice was particularly prized for its power, agility, and unusually high range (Heriot, 1974, p. 14). Because of this sensational success, castrati significantly influenced the standards for other singers, especially with regard to the development of coloratura skills. The phenomenal levels of skill acquired by castrati are attributable to the daily rigors of their training:
The pupils were obliged to devote every day one hour to the practise of difficult pieces in order to acquire the necessary experience. Three hours were distributed, one to trills, the second to passages, and the third to ornaments. During another hour the pupil worked under the master's direction, placed before a mirror in order that he might acquire no contortions of the eyes, the face, or the mouth in singing. . . . theory was studied for half an hour, an hour was devoted to the study of counterpoint, and another to the study of letters. For the rest of the day the student exercised on the clavecin or in the composition of a psalm, motet, or other kind of piece according to his talent. (Henderson, 1921, p. 143)

Women only gradually entered the field of opera. The opera seria evolved into a rather rigid form:

... the serious opera uniformly consisted of the following persons: the primo uomo (soprano), prima donna, and tenor; the secondo uomo (soprano), seconda donna, and ultima parte (bass). It had rarely more characters and choruses were seldom introduced. (Mount Edgecumbe, 1834, p. 1)

Since many operas were composed with the cast already engaged, voice classifications were not necessarily important in bel canto operas. The composer knew what each singer's strengths and weaknesses were and arias were accordingly customized (Grout, 1988, p. 224 ff). Women and castrati often exchanged roles and portrayed parts of both sexes. Range, however, was associated with vocal quality:

A Soprano has generally most Volubility, and becomes it best, and also equal the Pathetick! The Contr'Alto more of the Pathetick than the Volubility; the Tenor less of the Pathetick, but more of the Volubility than the Contr'Alto, though not so much as the Soprano. The Bass, in general more pompous than any, but should not be so boisterous as now too often practiced. (Tosi, 1743, pp. 10-11)
Throughout the Baroque era the treble voice was preferred. Both Tosi and Mancini wrote their treatises for sopranos, and the soprano was widely considered the best for coloratura and emotional expression. For these reasons, the falsetto range of the adult male was also cultivated (Harris, 1990, p. 112).

During the seventeenth and eighteenth centuries most Italian tenors sang in what we now consider a baritone range, playing character parts.

The evidence that the tenor of comic opera had often a baritone quality is shown by the circumstance that some of the most celebrated eighteenth century exponents of the category -- Caribaldi, Bussani, Mandini -- were able at a certain point in their careers to shift to comic bass parts (always keeping in mind that bass then signified baritone also); and Mandini, moreover, who was accustomed to alternate in the two ranges, was no other than the first interpreter of Almaviva in Le Nozze di Figaro, just as Bussani was to be the first Don Alphonso in Così fan tutti. (Celletti, 1963, p. 109 ff)

Tenors had a greater opportunity to develop in France, since there was no competition from castrati (Newton, 1984, p. 43). Lully, Rameau and others gave the hero and lover parts to the tenor.

The bass voice never engaged wide acclaim in Italian operas. In Italy, there was often little difference in the ranges of their roles and those of tenors (Newton, 1984, p. 44). Raguenet indicates that the French attitude toward this voice type was somewhat different:

Besides, our operas have a farther advantage over the Italian in respect of the voice, and that is
the bass, which is so frequent among us and so rarely to be met with in Italy. For every man that has an ear will witness with me that nothing can be more charming than a good bass; the simple sound of these basses, which sometimes seems to sink into a profound abyss, has something wonderfully charming in it. (Raguenet in Strunk, 1950, p. 475)

German opera used basses as elderly statesmen, comic servants, and raging tyrants. The one composer who treated the bass voice with importance in the level of vocal skill required was Handel, especially in the operas written in Hamburg (Harris, 1990, p. 111).

Cultural Influences

Aesthetics

The infamous excesses of vocal virtuosity associated with bel canto opera are aesthetically consistent with the artistic trends of the era in which they occurred. The *Harvard Dictionary of Music* defines the term "baroque" as:

The term baroque . . . (probably from Port. barròco, irregularly shaped pearl; or from the painter F. Barrocci, or Baroccio, d. 1612) was used formerly in a decidedly pejorative sense to mean "grotesque," "corrupt taste," "overladen with scrollwork," etc. . . . Generally speaking, the baroque period is an era of ecstasy and exuberance, of dynamic tensions and sweeping gestures, an era of longing and self-denial, much in contrast to the assuredness and self-reliance of the Renaissance. It is a period when men liked to consider this life the "vale of tears," when the statues of the saints look rapturously toward heaven, when the clouds and the infinite landscape were discovered. Much of this attitude is reflected in the expressive melodies of the 17th century, in the long coloraturas, the pathetic recitative, the frequent use of chromaticism, the capricious rhythms. (Apel, 1972, p. 82)
Lang frames the bel canto vocal art in the context of all the Baroque genre venues (Lang, 1949, p. 240). He contends that the Baroque artist abhorred strict form and harmony of proportions as being too doctrinal and coercive, and welcomes expressions which are newer, more astounding, and more contrary to accepted canons of art. The Baroque man wanted to render a mood or present us with a drama, the components of which were immaterial as long as the dynamic force was felt. The Greek-born painter El Greco is cited as epitomizing the soul of the Baroque, creating other-worldly figures which ignore the phenomena of reality, filled with enchantment and longing for the transcendental (Lang, 1949, p. 282).

Celletti argues that virtuosity is "the outcome of fantasy and of the search for sophisticated technical progress" and "nothing more than the effort to conceive and bring into being something which goes beyond the reality of everyday life and the normal capacities of human beings, and therefore seems wondrous, wonderful" (Celletti, 1991, p. 2). He maintains that Baroque art aimed at a kind of amalgam of intellectual, abstract emotion and the emotions associated with the sensibilities of human beings, and that the virtuosic and hedonistic music of the period was inspired by the same emotions and sense of amazement as were the aim of the poets, painters, sculptors and architects (Celletti, 1963, p. 2).
This virtuosity coincides historically with the time when composers began to take interest in the idea of writing music expressly for a particular medium, such as the solo voice or violin, as opposed to writing music that might be performed by any combination of voices or instruments, as was the practice in the sixteenth century. Violins replaced viols, and composers cultivated an idiomatic violin style; wind instruments were technically improved and were utilized for their individual color and capabilities. Idiomatic keyboard styles arose, dynamic markings began to appear, and vocal and instrumental styles began to be differentiated to such an extent that later Baroque composers "consciously used vocal idioms in instrumental writing, and vice versa" (Grout, 1973, p. 298).

That the age of bel canto became an age of vocal virtuosity would seem ironic in consideration of the aims expressed by the early founders of Italian opera, the Florentine Camerata (Bardi, Galilei, Caccini, et al.). Their long study and discussion of ancient Greek writings on music had led them to the deduction of one fundamental principle, namely, the perfect union of words and melody, a union to be accomplished by the dominance of the former over the latter. From this axiom three subsequent corollaries materialized.

First, the text must be understood with clarity. There was to be no contrapuntal writing to distract the mind and
cause confusion, appealing not to the intelligence at all but merely to the sense of hearing. Second, the words must be delivered with natural, speechlike declamation, avoiding both the regular dancelike meters of popular song and the textual repetitions and subjugation to contrapuntal necessities in madrigal and motet writing. Peri clarifies:

I believe that the ancient Greeks and Romans (who, according to the opinion of many, sang their tragedies throughout) used a kind of music more advanced than ordinary speech, but less than the melody of singing, thus taking a middle position between the two. (Peri in Strunk, 1950, pp. 373-76)

Third, the melody must not merely "paint" the text, but must interpret the mood of the entire passage. The proper method is to imitate and intensify the inflections proper to the voice of the person speaking the words under the influence of the emotion which motivates them (Galilei in Strunk, 1950, pp. 315-19).

According to Henderson, these principles seemed to have obtained beauty of style, at least in the early years of the seventeenth century:

... that beauty was the ultimate aim of the great artist, and this end became obscured only when a voluptuary public, insatiable in its desire, clamored for more and more feats of virtuoso. In the early years of the seventeenth century the style of singing was distinguished by its limpid purity of tone, its perfect diction, its long drawn and exquisitely graded phrases, its elegant delivery of passages and ornaments. Speed was not a desideratum. The astonishment of the hearer by the emission of a great number of notes in a second began with the vocal gymnastics of the latter part of the century. In the first part the aim of the singer was to do everything elegantly
and with finish, but not swiftly. His emotional range was limited to the grave, the contemplative and the pathetic. (Henderson, 1921, p. 186)

Henderson further links virtuosic display to the setting in which singers performed, indicating that a struggle between the original artistic purpose and the desire to satisfy the public ear began with the creation of the opera house (Henderson, 1921, p. 97).

The Castrati

Bel canto singing, like all other Baroque music, was dominated by Italian characteristics. The extent to which certain aspects of Italianate vocal skills were cultivated across Europe is attributable in part to the unusual capabilities and itinerant careers of the castrati (Duey, 1961, p. 45).

Castrati existed because the Roman Catholic church had always forbidden women to speak or sing in church, choosing to interpret literally the Pauline injunction in I Timothy 2:11-12: "Let the woman learn in silence with all subjection. But I suffer not a woman to teach, nor to usurp authority over men, but to be in silence . . ." (Pleasants, 1966, p. 31). By the second half of the sixteenth century, the vocal difficulty level of multiple-voiced choral music became too great for the voices of boys. Attempts were made at the Sistine Chapel to solve the problem with male falsettists imported from Spain. In 1599, however, two
Italian castrati, Pietro Paolo Folignato and Girolamo Rossini, were admitted to the Sistine Chapel Choir, and the era of the castrato began (Pleasant, 1966, p. 31).

Never losing the small larynx and thin vocal folds of their childhood, castrati exhibited unbelievable agility in runs, trills, leaps, and other feats. By means of the falsetto register some may have been able to extend that range to an incredible four octaves, from low B or A (108.75 cps) to a³ or b³ (near 1953 cps) (Street, 1987, pp. 5-7). Some of their most astonishing attainments were due to their legendary breath capacity, which resulted from both extensive training and an over-developed ribcage capacity. Testosterone, the hormone that produces many of the male sex characteristics, also assists in ending long bone growth at the conclusion of puberty. Without testosterone, castrati grew to unusual height and experienced an abnormal expansion of the rib cage which measured approximately the same front to back as side to side (Street, 1987, pp. 5-7). Lungs conformed to chest contour, making possible an enormous air supply. The combination of rigorous training, a huge air supply, and a small larynx requiring relatively little expenditure of air enabled castrati to sustain tones for a minute or more without pausing for breath (Street, 1987, pp. 5-7). This sustaining capacity further encouraged lengthy melismatic passages, such as the ones shown in Figures 1 and 2.
Figure 1: Elaboration on the melody of "Son qual nave" by Riccardo Broschi

(Pleasants, 1965, p. 73)
Figure 2: Paisiello: "Nel cor piu non mi sento"
   as performed by soprano Angelica Catalani

(Pleasants, 1966, p. 115)
Fascinating as the question might be, it is difficult to determine why the castrato singer held such a highly esteemed position in European musical culture in the seventeenth and eighteenth centuries. The possibility exists that there was some dimension of their singing that surpassed the capabilities of female singers. A later historian, Enrico Panzacchi (1840-1904) had the following to say about a live castrato performance:

What more can I say? I have heard Frezzolini and Barbi in camera, and Batti in the theatre; I have admired Masini, Vogel, and Cotogni, but in the midst of my admiration there remained always something unappeased in the depths of my desire; there remained a certain disparity between the artists' intention, however lofty it might be, and her artistic means. Here, however, all my being was marvellously satisfied. Not the least mark of the passage from one register of the voice to the other, no inequality of timbre between one note and another; but a calm, sweet, solemn and sonorous language that left me dumbstruck and captivated me with the power of a most gracious sensation never before experienced. (Panzacchi in Heriot, 1974, pp. 36-7)

Raguenet becomes even more specific about the castrato's superior tonal characteristics:

Our women's voices are indeed as soft and agreeable as are those of the castrati, but then they are far from being as strong or as lively ... castrati who, with a voice the most clear and at the same time equally soft, pierces the symphony and tops the instruments with an agreeableness ... (Raguenet in Strunk, 1950, p. 483)

It was, however, the phenomenal fioritura technique of the castrati that captivated the public. Henderson quotes the historian Bontempi, who describes the art of the castrato Baldassaro Ferri:
One who has not heard this sublime singer can form no idea of the limpidity of his voice, of his agility, of the marvelous facility in the execution of the most difficult passages, of the justness of his intonation, the brilliance of his trill, of his inexhaustible respiration. One often heard him perform rapid and difficult passages with every shade of crescendo and diminuendo. (Bontempi in Henderson, 1921, p. 143)

It is well to note here that there was already some slight evidence of a "golden age" syndrome in the age of bel canto, specifically in reference to some of the famous castrati. The first era was epitomized by the careers of Farinelli (1705-1782) and Caffarelli (1710-1783); the second flowering of extraordinary singers was represented by Pacchierotti (1774-1821) and Crescentini (1762-1846) (Pleasant, 1966, p. 96).

The difference in the two eras is summarized by Burney:

... such execution as many of Farinelli's songs contain, and which excited such astonishment in 1734, would be hardly thought sufficiently brilliant in 1788 for a third-rate singer at the opera. The dose of difficulties to produce the same effects as fifty years ago must be more than double. (Burney, 1771, p. 125)

Spohr, after meeting Crescentini in 1817, spoke of his own preference for the older style:

I was pleased to have my judgement of the present state of music in Italy confirmed by him ... He complained that in recent times the good vocal school, which formerly had alone distinguished the Italians, had become rarer and rarer. On his last return to Italy he had found Italian taste so frivolous that not a trace was left of the simple, grand method of former times. (Spohr, 1961, p. 169)
Despite Italian hegemony, the performance standards confronting an opera singer in the bel canto era appear to have varied somewhat from country to country. There were especially marked differences between the Italian and the French priorities in singing.

**National Tendencies**

According to the majority of sources, the most distinguishing characteristic about Italian singing was the extent to which portamento was used. In addition to being a device of slurring from one note to another for the purpose of expression, it was the Italian technique of equalizing the scale for a smooth transition from one place to another. Mancini writes:

> By this portamento of the voice is meant nothing but a passing of the voice from one note to the next, with perfect proportion and union, as much in ascending as in descending. (Mancini, 1777, p. 40)

Bacon becomes more detailed in his explanation:

> Another of the most striking distinctions . . . is the use of portamento . . . or the lessening of the abrupt effects of distant intervals, or gliding from one to the other, whether ascending or descending. This is in constant use among Italian singers, and sometimes with beautiful effect. In passages of tenderness or pathos it is most expressive. As the harsher passions prevail, it approaches more nearly the nature of a regular volata, from the increased force and more distinct articulation given to the notes. (Bacon, 1966, p. 55)

Evenness of scale was of greater importance to Italian singers than to those in other countries (Newton, 1984,
Quantz asserted that the "joining of the chest voice to the falsetto is as unknown to them (German singers) as it is to the French" (Quantz, 1966, p. 336 ff). Duey found no evidence that Italian singers of the seventeenth and eighteenth centuries ever attempted to produce a bigger sound than was natural for keeping the chest voice in balance with the falsetto (Newton, 1984, p. 57). Berard declares, "The Italians are more accustomed to singing with a small volume of voice and with high sounds than are the French" (Berard, 1775, p. 74).

Mancini speaks of certain singers who

Deceive themselves into thinking that they gain esteem by beating all the notes with immeasurable force, and making the voices unequal and thus it happens that they execute the passage all in one piece without distinction and in consequence deprive themselves of the grace which comes only from taking back and giving the voice gradually from which results a pleasing and perfect execution. (Mancini, 1777, p. 128)

French opera began from a separate impetus from the Italian monodic ideal, and was built simply around the purely lyrical air de cour, which was suitable as incidental music in ballets (Newton, 1984, p. 58). French theorist Marin Mersenne discussed the nature of this music.

It must be admitted that the accents of passion are most often lacking with the French because singers are content to titillate the ear and to please with their delicacy without going to the trouble of exciting the passions of their listeners following the subject and intention of their word. (Mersenne in Newton, 1984, p. 58)
The air de cour was a simple strophic song in which expressiveness was accomplished through embellishment.

As the century progressed, this style, in which the melody became increasingly divided into ornaments became the new fashion (Grout, 1988, pp. 145-146). Agréments were usually ornaments on one note, or ornaments tying one note to the next. The underlying purpose of agréments was to clearly represent the length of long syllables in French poetry. (Bacilly, 1968, p. 4 ff). Small voices were considered best for this sort of singing:

In regard to small voices doubtless they have a great advantage over big ones, in that they have greater flexibility for the performance of vocal agréments since the vocal cords are more delicate and therefore more suitable for slurring over certain tones which ought not to be accented. (Bacilly, 1968, p. 22)

More than half of Bacilly's treatise is devoted to the French language, and places the utmost priority on pronunciation in singing. Quantz offers this description of French style:

The French manner of singing is not designed like the Italian to train great virtuosos. It does not at all exhaust the capacities of the human voice. French arias have a spoken rather than a singing quality. They require facility of the tongue for pronouncing the words, more than dexterity of the throat. That which should be added in the way of graces is prescribed by the composer; hence the performers do not have to understand harmony. They make hardly any use of passage work since they maintain that their language does not allow it. (Quantz, 1966, p. 172)

He later elaborates:
The Italian manner of singing is profound and artful; it at once moves and excites admiration; it stimulates the musical intellect; it is pleasing, charming, expressive, rich in taste and expression, and transports the listener in an agreeable manner from one passion to another. The French manner of singing is more simple than artful, more spoken than sung, more forced than natural in the expression of the passions and in the use of the voice; in style and expression it is poor and always uniform . . . (Quantz, 1966, p. 334)

This subservience of words to music apparently exacted its toll on French singing by the early eighteenth century, because a primary emphasis on the correct vowel without modification forced French singers to increase intensity to sing over the orchestra (Newton, 1984, p. 60). This led to the tendency to scream and lose vocal quality, and French singers became widely known for this trait through the eighteenth century. Of the many writers who complained about the forcing of the voice by French opera singers, Rousseau is representatively astute.

Besides, it is a mistake to believe that the Italian singers generally have less voice than the French. On the contrary, they must have a stronger and more harmonious resonance to make themselves heard in the immense theatres of Italy without ceasing to keep the sound under the control which Italian music requires. French singing requires all the power of the lungs, the whole extent of the voice. "Louder," say our singing masters, "more volume, open your mouth, use all your voice." "Softer," say the Italian masters, "don't force it; sing at your ease; make your notes soft, flexible and flowing; save the outbursts for those rare brief moments when you must astonish and overwhelm." Now it seems to me that when it is necessary to make oneself heard, the man who can do so without screaming must have the stronger voice. (Rousseau in Strunk, 1950, p. 641)
German teachers, theorists and composers drew upon Italy for inspiration. Praetorius borrowed from Caccini for his ideas, and later Agricola translated the works of Tosi into German. As Duey enumerates, there are Italianate warnings from all the German authors about keeping the voice out of the nose or throat, and singing with a calm, natural pose. Burney found that the "German language, in spite of its clashing consonants and gutturals, is better calculated for music than the French" (Burney, 1959, 2:31). While the overall quality of German singers varied, the best performers in Germany tended to be itinerant foreign artists. The German-born Quantz agrees:

These (German) singers are better versed in note-reading than many gallant singers of other nations, but they hardly know how to manage the voice at all. Thus as a rule they sing with uniform volume of tone, without light and shade. They are hardly cognizant of those defects of the voice which stem from nose and throat. Joining the chest voice to the falsetto is as unknown to them as it is to the French. They have little feeling for Italian flattery, which is effected by slurred notes and by diminishing and strengthening the tone. Their disagreeable, forced, and exceedingly noisy chest attacks, in which they make vigorous use of the faculty of the Germans for pronouncing of the (h), singing ha-ha-ha for each note, make all the passage work sound hacked up. (Quantz, 1966, p. 366)

Performance Environment

Opera House

Though it is widely acknowledged that opera houses in the seventeenth and eighteenth centuries were smaller in
their seating capacities than those constructed in the nineteenth century (Pleasants, 1966, p. 35), there is a dearth of concrete information about actual figures for Baroque theaters. It is known, however, that in Italy the Teatro Caro Melisso built in 1667 seats 500 (Turnbull, 1980, p. 31 ff). In Germany the Württemburgisches Stadtstheater (built 1751) holds 850, and in France the Théâtre Gabriel at Versailles built in 1748 accommodates 600 (Turnbull, 1980, p. 87 ff).

By the early seventeenth century the audience and performers were separated by a fixed proscenium, while two-dimensional scenery, attached to runners, could recede into the background (Knapp, 1984, p. 114). Private boxes or loges stacked in vertical rows formed a "horseshoe" audience section. This arrangement came about because of social distinctions engendered by aristocrats who demanded both privacy and splendor (Knapp, 1984, pp. 114-115).

Assuming then that opera houses of the bel canto were, like the populations of their lost cities, smaller than those constructed later, and that the use of vertical seating space shortened the distance over which singers had to project their voices, it seems logical to conclude that singers of bel canto were not confronted with the demand of great volume presented by larger nineteenth and twentieth century structures. However, the social dynamics and deportment of the audience could well have influenced the
singers' desire to capture attention with unbelievable feats of virtuosity.

The opera theater of the bel canto era was the meeting place of society, and all of the rites of social intercourse were celebrated in the boxes, some of them equipped with anterooms where refreshments could be served (Heriot, 1974, pp. 70-73). Pleasants writes:

The box had an influence that permeated through the whole organization . . . It became simply another room in a rambling mansion, the obvious means of cramming as many people as possible into a confined space, yet preserving the amenities of a civilized social life. For, if St. Marks Square can be considered today the drawing room of Europe, the box was the boudoir from which the world of politics and fashion could be discussed and plans for future policies laid. (Pleasants, 1966, p. 31)

Audiences, rather than regarding opera as a serious drama, viewed it as an amusement. Brosses, after visiting the opera at Rome, reported:

The pleasure these people take in music and the theatre is more evidenced by their presence then by the attention they bestow on the performance. After the first few times, no one listened at all except to a few favorite songs. The boxes were comfortably furnished and lighted so that their occupants could indulge in cards and other games. Chess is marvellously well adapted to filling in the monotony of the recitatives, and the arias are equally good for interrupting a too assiduous concentration on chess. (Brosses in Heriot, 1974, p. 34 ff)

Apparently the pit of the theater was not necessarily always the exclusive location of the orchestra. Heriot relates that:
The pit of the theatre was filled with a heterogeneous mass of more or less disreputable characters -- servants, gondoliers, young rakes on the loose -- who had a fine time behaving exactly as they thought fit, shouting amid and bandying insults, chattering loudly, searching for some gallant adventure, and occasionally staging a riot, while the bottom row of boxes was given over to women of doubtful character, who were often admitted free as an added attraction, and with whom assignations could be made during the performance. (Heriot, 1974, p. 73)

Circumstances such as these explain why those things which were the very life of the performance were the things which could never be written into a score -- the constantly varied embellishments by the singer (Grout, 1988, p. 198). The tasteful rendition of a lovely aria, sparsely embellished, may have secured the singer the approbation of connoisseurs, but stunningly rapid roulades, trills and acrobatic high notes were more likely to gain the attention of the public.

It must be noted here that these accounts are written about conditions in Italian opera houses. The primary sources seem devoid of information regarding the deportment of French, German, or English audiences.

**Orchestra/Concert Pitch**

The total size of the orchestra in operas of the bel canto period was considerably smaller and less daunting to the singer than the instrumental mass filling the pit in the nineteenth and twentieth centuries. With the two *Euridice* settings of Peri and Caccini, the text was paramount and the
four instruments were harpsichord, bass lute, lyre, and another higher lute (Knapp, 1984, p. 91). As opera became a fully fledged commercial venture and it became necessary for works to travel from one theater to another, the standard orchestration of the orchestra became necessary and instruments which were not generally available disappeared from the score (Raynor, 1978, pp. 22-23). The orchestra assumed a formation which lasted well into the eighteenth century: strings, harpsichord or small organ, and possibly lutes. Monteverdi's Orfeo was a notable exception -- 12 winds and brass, 14 strings, and 13 accompanying instruments (Grout, 1988, p. 60).

In general, the orchestra scrupulously avoided overshadowing the voice (Knapp, 1984, p. 91). Orchestral passages called ritornellos frequently introduced or echoed the vocal line. The first violins frequently played in unison with the singer, or rather, played the literal written version of the melody as the singer improvised (Grout, 1988, p. 232). The secco ("dry") recitative was accompanied only by continuo instruments. Recitativo accompagnato ("accompanied recitative") was accompanied by strings or full orchestra, in addition to continuo. These passages were reserved for the two or three most dramatic moments in the work, for monologues expressing powerful emotion at the climaxes of the action. The singer, in expressively flexible and varied phrases, alternated with
instrumental outbursts of chords, tremolo or rhythmic motifs. Grout explains that the essential function of the orchestra in recitative was not so much to accompany as to express, during pauses in the singing, the emotions for which words were insufficient (Grout, 1988, p. 232).

To follow the conductor (although it could easily be conjectured that the conductor followed the singer -- see "Authority" following), the singer would have found it necessary to look into the pit at the seated harpsichordist, who kept time by nodding his head or by moving his body. Only at Paris and Versailles did a conductor use a piece of parchment or a stick to maintain time. In places where the orchestra was small the seated time-beater was sufficient. The average size of the opera orchestra in the early eighteenth century was probably 25 to 30 players (Knapp, 1984, p. 93); the court orchestra in Dresden in 1731 consisted of 6 violins, 3 violas, 4 cellos, 2 basses, 3 flutes, 4 oboes, and 2 horns (Knapp, 1984, p. 93).

In the latter decades of the eighteenth century the orchestra became the classical orchestra of Mozart and Haydn. The continuo function faded as strings became the center of the group. Horns and winds began to participate in more than a mere obbligato fashion. Oboes joined with bassoons and flutes in a woodwind ensemble which, with the horns, began to assume the former continuo functions of filling in harmonies. The strings were divided into four or
five sections, and there were pairs of oboes, flutes, bassoons, horns, and sometimes trumpets or clarinets.

The operatic scores of Mozart, for example, indicate efforts to avoid overpowering the singer. Despite their greater numbers, strings would accompany many arias, while the wind ensemble provided color. The total orchestra seldom played except in climaxes, ensembles, or the ends of acts (Knapp, 1984, p. 93).

Nor were seventeenth and eighteenth century instruments as loud as they later became. The violin, for example, was played with less string tension and therefore less volume (Boyden, 1992, p. 773). It was not until the second half of the eighteenth century that the type of bow developed by François Tourte allowed for a stronger response from tighter metal-wound strings (Raynor, 1977, p. 23). The upper registers were almost never exploited, since it was rare for a player to be asked to move up into the fourth position, which enables him to reach an octave above the note of the string on which he is playing (Raynor, 1977, p. 23). It was only in the eighteenth century that the range of the cello was increased by adding a fifth string and the tone was made cleaner and more responsive by the lengthening of the neck and fingerboard and raising of the bridge (Marx, 1992, p. 806). In the nineteenth century, hardware added to wind instruments allowed them to achieve greater volume, and
organs were built with many of their pipes in shuttered swell boxes for crescendo and diminuendo.

Singers of the bel canto era had to contend with variations of orchestral concert pitch standards. The most important primary source regarding pitch in the Baroque era is the second volume of Syntagma Musicum (Praetorius, 1619). Praetorius describes the confusion when he states: "For this reason a musician is subjected to great strain when the organs, positives, harpsichords, and other wind instruments are not kept together at one proper pitch" (Praetorius in Karp, 1990, p. 148). He describes at some length three different pitch standards: "Chor-Thon," "Cammer-Thon," and "Tiefer Cammer-Thon" (Rhodes and Thomas, 1980, pp. 781-83).

"Chor-Thon" was the first discrepancy in pitch standard mentioned:

However, the "Chor-Thon" of our ancestors was initially one tone lower than it is now . . . but over the years it has been raised to its present level in Italy and England, and also in the ducal chapels of the German states. The English pitch may be a very little lower than this, which is noticeable on the cornetts . . . which are made there. There have been some who allowed themselves to raise our present pitch by yet another semitone; although it is not my place to correct this, nonetheless in my opinion it is so high that singers, especially altos and tenors, would find it very uncomfortable and often almost impossible to reach. For this reason it would be best to leave the previously mentioned pitch unchanged; because even that is often found too high not only for singers but also for string players. (Praetorius, 1619, pp. 14-15)

He then labels the two different standards:
... I am particularly pleased by the distinction whereby in Prague and many other Catholic chapels pitch is divided into "Chor-Thon" and "Cammerton." There the present common pitch, to which almost all our organs are tuned, is called "Cammerton"... "Chor-Thon," however, which is a whole tone lower, is used only in churches, and then primarily for the sake of the singers... (Praetorius, 1619, pp. 15-16)

A third pitch standard begins to confuse the terminology:

In England previously and to this day in the Netherlands, they voiced and tuned most of their wind instruments a minor third lower than our present "Cammerton," so that their F is D in our "Cammerton" and their G is our E... In fact, with this pitch one not only bestows harpsichords with a lovelier and more graceful resonance than when they are divided according to "Cammerton," but also the flutes and other instruments are lovelier at this lower pitch... (Praetorius, 1619, p. 16)

Since "Cammerton" was the pitch to which orchestral instruments tuned, it is significant to note that this has been set by some scholars at ca. A' = 422 to 430 (Rhodes and Thomas, 1980, p. 782). Table 1 illustrates the variations in Baroque pitch on the evidences of pitch pipes, reconstructed instruments, tuning forks, extant pipe organs, and calculations made from drawings of instruments. 'P' means the Praetorius Cammer-Thon standard and 's' means one semitone.

With regard to singers and standards of singing, it would seem important that there are abundant references in seventeenth and eighteenth century writings to the fact that
### Table 1

**Performing-Pitch Levels 1500-1850**

<table>
<thead>
<tr>
<th>Pitch Level</th>
<th>Pitch Description</th>
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| P + 3s (a' = c510) | Praetorius and Ellis -- old organ at Halberstadt  
Schlick's C organ (1511) |
| P + 2s (a' = c480) | Praetorius - organ at St. Blasius, Nordhausen (c1550)  
Durham Cathedral organ (1684-5, 'Father' Smith), a' = 474  
St. James's Palace chapel organ (1708), a' = 475  
Organ pitch at Leipzig, Weimar and Hamburg in Bach's time  
Kuhnau, Mattheson, Walther, Adlung and others - Cornett-Ton and/or  
Chor-Ton; Muffat - Cornett-Thon; Agricola - Trompet-Thon |
| P + s (a' = c455) | Rejected by Praetorius (1619) as leading to broken violin strings  
Quartz (1752) - Venice; Agricola (1757) - Lombard and Venice  
Late 19th-century orchestral pitch in London, New York and Vienna |
| P (a' = c430) | Praetorius pipe diagram (1619), a' = c425 at 15°C for Cammer-  
and Chor-Ton  
Tuning-fork associated with Handel, in London (1740), a' = c422%  
Stein's tuning-fork, (1780), a' = c421%  
London Philharmonic fork (1813), a' = c423%  
Muffat (1698) - ordinary French orchestral pitch; Kuhnau, Walther -  
Chor-Ton; Mattheson - B♭-Cammer-Ton; J.S. Bach, Adlung - hoher  
Chor-Ton; A. Schindler - Normal-Stimmverhältnis ... bis zum  
Jahre 1816 |
| P - s (a' = c410) | Gedacht stop, Hamburg Jacobikirche organ 91688-93), a' = 411  
Christian Rygers's harpsichord, a' = 409  
Sauveur (1713), a' = 408  
Taskin's tuning-fork (c1780), a' = 409  
Muffat - Lully's opera pitch; Mattheson - opera pitch; Mattheson,  
Agricola,  
Quartz - A-Cammer-Ton; J.S. Bach, Adlung - tiefer Cammer-Ton |
| P - 2s (a' = c380) | Schlick's F organ 91511)  
Praetorius (1619) - Chor-Ton of Prague  
French classical organ pitch  
R. Smith's Roman pitchpipe (1720)  
Agricola - Roman and former French pitch; Quartz - Roman pitch c1730,  
Parisian and very low French chamber pitch |
| P - 3s (a' = c360) | Worcester Cathedral (1611), organ pitch 'by the keys'  
Praetorius (1619) - Chor-Ton 'in England formerly' |

(Rhodes and Thomas, 1980, p. 780)
Roman pitch was remarkably lower than in Italian cities further north and in Germany, and that it was found comfortable by singers. Tosi said that singers should be taught to reach the higher pitch of Lombardy to acquire the high notes (Tosi in Rhodes and Thomas, 1980, p. 782). His English translator, Galliard, considered the pitch of Lombardy and Venice as being the same, approximately one large semitone above that of Rome (Tosi in Rhodes and Thomas, 1980, p. 782). Rhodes and Thomas gives an indication that what Roman pitch might have been:

... is indicated by Ellis's report of $a = 395.2$ for 'Father' Smith's chapel organ (1708) at Trinity College, Cambridge: in 1759 the college master, Robert Smith, had the pitch of the instrument lowered to a level matching that of a pitchpipe that he had purchased in Rome in 1720. G.B. Doni, a widely travelled scholar interested in fine points of tuning, gave in his *Annotazioni sopra il Compendio de generi ed è modi della musica* (Rome, 1640) a geographical procession of semitones relating to organ pitch, starting in Naples and ending in Venice. Accepting Smith's pitchpipe for Rome, the procession includes Naples, three semitones lower than Praetorius; Rome, two semitones lower than Praetorius; Florence, one semitone lower; Lombardy, the same pitch level as Praetorius; and Venice, a semitone higher. (Rhodes and Thomas, 1980, p. 782)

Further evidence of varying pitch standards is derived from instrumentalists who had to cope with the annoyance of continuously adjusting the dimensions of their instrument. Adlung writes:

From where do we take the start of tuning, or how do we determine the pitch of the C? It is known that organs are not in agreement, so that the musician in addition to his trumpet, always must carry several crooks if he is to play in more than
one church . . . It is therefore not unreasonable to wish that the organ makers were in agreement about this, and that they should have some rule according to which they were able to set a uniform bass and treble. (Adlung, 1758, p. 387)

Quantz also found it necessary to have an adjustable instrument:

Because the pitch according to which one tunes varies so much, so that a different one is used not only in every country, but also for the most part in every province and city, to say nothing of the harpsichord which in a single town due to incautious tuners may be tuned now too high or then too low; about 30 years ago the flute was fitted with several middle joints. At that time one made . . . two or three which, since the one had always to be shorter than the other, differed from each other by about a semitone. (Quantz, 1966, p. 3)

Authority

In the seventeenth and eighteenth centuries the collaboration between composer and performer was more heavily weighted toward the direction of the performer than at any subsequent time (Fuller, 1990, p. 118). The greater part of the music of the whole era was sketched rather than fully composed, and the performer had the responsibility of transforming these outlines into full compositions. Even though the composer was often the conductor seated at the harpsichord, the singer was in complete command of every detail of tempo, rhythm, ornamentation, phrasing, etc. (Pleasant's, 1966, p. 32).

In fact, the immense bulk of music written by composers of this period testifies to their servile role in the
process of production. A tabulation of 40 leading composers of the period shows nearly 2,000 works, or an average of about 50 operas each, because the drafting of a score was not the time consuming process that it later became (Grout, 1988, p. 228). It was common for a composer to complete a score in four to six weeks, and receive for it only a modest sum (Grout, 1988, p. 228); once the first copy was sold, the composer's income from the piece ended, because there was no copyright protection for him.

The whole system was structured in such a way as to glorify the performer. Lee describes the singers' status:

The singer was a much more important personage in the musical system of the eighteenth century than he is now-a-days. He was not merely one of the wheels of the mechanism, he was its main pivot ... The singers were not trained with a view to executing any particular sort of music, but the music was composed to suit the powers of the singers. Thus, ever since the beginning of the seventeenth century, when music first left the church and the palace for the theatre, composition and vocal performance had developed simultaneously, narrowly linked together; composers always learning first of all to sing, and singers always finishing their studies with that of composition. Scarlatti and Porpora teaching great singers, Stradella and Pistocchi forming great composers; the two ... branches ... acting and reacting on each other so as to become perfectly homogenous and equal. (Lee, 1880, pp. 117-118)

Knapp (1984, p. 110) explains that in this period of opera the stage director as such did not exist. The singer, therefore, was not required to contend with complicated movements that challenge or compromise vocal technique. The singers' positions on stage, gestures, and spatial
relationships on stage were conventionalized and rigidly prescribed. Knapp writes:

If the occasion demanded it, one actor could step a little in front of the others for emphasis . . . Arias were sung from the middle of a group . . . entrances and exits occurred on the ritornellos of the arias. Movements of the arms, legs and head were stereotyped according to the emotion being portrayed; when the singing started, the action froze so that there could be concentration on the music. (Knapp, 1984, pp. 110-11)

In other words, during the bel canto period, the performing art belonged to the singers. They had such a degree of power in performance that they decided what instrumentation would be used in the accompaniment, in which key an aria would be performed, and in which tempo (Pleasants, 1966, p. 27 ff).

The end of the singer's authority, at least in relation to that of the composer, can be sensed in an account of the 1813 premiere production of Rossini's Aureliano in Palmira in Milan by Stendahl (Stendahl, 1970, pp. 340-342). The leading role was taken by Giovanni-Battista Velluti, who was regarded as one of the last great castrati. At the first rehearsal with orchestra, Velluti sang the aria as written, and Rossini was impressed. At the second rehearsal, Velluti began to embellish the melody, and Rossini found the performance satisfying and in keeping with his own intentions. At the third rehearsal, however, the original melody had almost completely disappeared beneath the elaborate ornamentation.
Velluti's performance at the opening was a roaring success, but the opera was a failure. Rossini's vanity was deeply offended. All the applause had gone to his soprano, and his own music had become completely unrecognizable. Rossini quickly evaluated the situation and drew the inevitable conclusion: it behooves the composer to indicate his own ornamentation and insist that the singers use it and nothing else (Stendahl, 1970, pp. 341-2). Rossini did not put an end to all improvisatory embellishment, however; it continued in the older Italian repertoire throughout the nineteenth century, though the tendency increasingly was to restrict it to "ad libitum" cadenzas (Pleasants, 1966, p. 94).

Summary

On the basis of the foregoing discussion regarding vocal performance and training in the seventeenth and eighteenth centuries, the following conclusions may be drawn:

1. Although the primary theoretical and pedagogical treatises of the bel canto era offer little in the way of precise methodology, there was general agreement about the fundamental aspects of good singing. These features were perfect intonation, a clear enunciation of the text, agility, the smooth joining of registers, and dynamic flexibility.
2. Despite complaints from some contemporaneous critics and historians about poor acting skills among opera stars of the era, there is little mention in the treatises about visual expression. There was, however, widespread agreement about the need for naturalness in pose and appearance. Dramatic expressiveness was largely based on musical devices -- ornaments, fioritura, "affects" based on standardized melodic figures, dynamic gradations, and rhythmic figures.

3. The soprano, especially the castrato, was the most important voice classification. Since vocal music was composed to suit the abilities of the individual singer, voice classifications were not so important then as now. In the height of opera seria (ca. 1650-1750), or at least until the Hamburg operas of Handel, tenors and basses were given little of importance to sing and both sang in a range similar to that of the modern baritone.

4. The virtuosity of opera singers was consistent with the virtuosity of instrumentalists of the period and paralleled the elaborate, ornate nature of other Baroque art forms, despite the fact that the operatic form was founded upon simple declamation of the text. Strongly influencing the level of virtuosity was the phenomenon of castrati and their unusual vocal capabilities.

5. Italian influences dominated the operatic singing of the period, while the most significant differences of
approach were to be found in the French school. The French favored a more stylized, less elaborate manner of ornamentation and based their singing entirely on the precise enunciation of the text.

6. Even in this early period of opera, there is some evidence of a "golden age" syndrome, whereby the singing of the previous generation was considered by some to be superior to that of the present.

7. Opera houses of the bel canto era were generally smaller in size and made greater use of vertical audience spacing than many in use today. Audience deportment was quite boisterous, however, and might have contributed significantly to the singers' desire to attract attention with virtuosic vocal feats.

8. Orchestras were smaller in size and consisted of instruments of a lower dynamic range than those of later periods. Conductors and instrumentalists were cautious not to overwhelm the voices. Accompaniments to arias were written with light orchestration, usually strings, and louder orchestral passages normally occurred when the vocal line was at rest.

9. The singer's authority in the production process afforded him/her a high degree of control over his own vocal art. In performance the singer had almost complete control of dynamics, tempo, phrasing, and choice of key.
10. Concert pitch fluctuated from town to town, and some instruments were by necessity designed to accommodate these wide variances. It is possible, therefore, that the singer's choice of key was influenced by local standards.

For several reasons, which will be discussed in Chapter II, the art of singing changed dramatically after the "bel canto" era. These changes embraced qualities of tone and expression which we now associate with "grand" opera, and which caused 19th century listeners to question whether the "Golden Age" had indeed passed forever.
CHAPTER II

THE NINETEENTH CENTURY

Evidence of Standards

Jander writes that the most important aspect of nineteenth century operatic singing was a "taste for weightier timbres, more brilliant upper registers, more sonorous low notes and greater volume in general (Jander, 1980, 17: pp. 342-46). He adds that the effect of this seems to have been to lead performers and teachers to investigate the achievement of increasing the penetrative power of the voice by finding additional resonances (Jander, 1980, 17: pp. 342-46). Crutchfield states that "the need to cultivate greater vocal power exercised a progressively increasing, multi-faceted influence on technique and style" (Crutchfield, 1990, p. 424) and that a fundamental feature of these efforts was "the exploitation of the registers in which the greatest power was available" (Crutchfield, 1990, p. 427). Newton (1984, pp. 112-114) indicates that singers were striving not only to sing louder in an attempt to be more directly emotive, but to sing higher.
Some mid-nineteenth century reviews of operatic performances bear out these perceptions. Chorley wrote:

Fourteen years ago we were little used to the coarse and stentorian bawling which the Italian tenors of late have affected. The newcomer, naturally anxious to recommend himself by the arts which had delighted his own people, seemed to become more and more violent in proportion as the "sensation" failed to be excited. (Chorley, 1972, p. 190)

The same critic made a similar observation of a female singer:

Ernani was spiritedly performed. The heroine Mme. Rita Borio, was, in every sense of the word, a stout singer with a robust voice -- a lady not in the least afraid of the violent use to which the latest Italian maestro forces his heroines, but able to scream in time, and to shout with breath enough to carry through the most animated and vehement movement of those devised by him. (Chorley, 1972, p. 165)

George Bernard Shaw found the singing at Bayreuth less than satisfactory:

Good singing there is merely "glatt," obviously an effeminate, silly, superficial quality, unsuited to the utterances of primeval heroes. The notion that this sort of smoothness is one of the consequences of aiming at beauty of tone and singing in tune is apparently as strange in Germany as the notion that it is more truly virile to sing like a man than like a bullock. (Shaw, 1955, p. 20)

Sources. Singing method books became more prolific in the nineteenth century, and the writers seemed particularly concerned with three issues concerned with increasing the power and projection of the voice: resonance (or timbre), registration, and breathing. By far the most important and exhaustive treatment of singing technique in this period is
A Complete Treatise on the Art of Singing (Garcia, 1984). Among other aspects of vocal technique, Garcia details the use of the famous sombre timbre (voix sombrée) which was employed to render voices more powerful. Meine Gesangskunst by Lilli Lehmann, recalls the technique of this noted soprano of the 1860's through the 1890's (Lehmann, 1909). Mathilde Marchesi was a Parisian teacher who attained a high degree of success in training female voices, and her Methode de chant theorique et pratique (Marchesi, 1886) is especially useful for its articulation of registration issues. Vocal Wisdom (Brown, 1903) is a reconstruction of the maxims of Giovanni-Battista Lamperti from the period 1891-93. The most immediately helpful and efficient resources of all are the paraphrases of nineteenth century pedagogical writings in Historical Vocal Pedagogy Classics (Coffin, 1989) (see Introduction, p. 2).

Vocalism

Resonance. Garcia (1984, p. 31) leaves no doubt about the intent of creating more power by altering the timbre of certain tones in the voice. He even suggests that this darkening of the tone is what was always meant by the term "mixed voice":

The tones f♯ through b' . . . especially acquire in both sexes an admirable penetration. It is in this timbre that one must use them in passages of great energy, when the same tones in falsetto would be weak and colorless . . . the distinction between the registers and the timbres
never having been well-established or well analyzed, the masculine and dark vigor which the high tones of the chest voice acquire in the timbre which concerns us has been wrongly appraised . . . The range of the fourth indicated above has been named mixed voice: that is to say, chest and falsetto registers at the same time; others have named it the medium voice; borrowing that name from its position in the (female) range. It ought to have been named chest voice in sombre timbre, and one would have understood that it was imprudent to force oneself to obtain it any price . . . (Garcia, 1984, p. 31)

Garcia distinguishes this register from clear timbre which "allows the throat all possible flexibility and freedom" (Garcia, 1984, p. 30). It was the cultivation of the voix sombrée which made possible the first tenor high C in chest voice by Gilbert-Louis Duprez in 1937 (Newton, 1984, p. 88).

Lehmann (1909, p. 34) derived additional power through changing the configuration of the vocal tract by means of vowel adjustment. She believed that the [a] vowel, so widely popular in vocalization, was the primary reason for a lack of penetrating resonance ["Vor allem streiche man den im gewöhnlichen Sinne rein gennanten Vokal a-da er die Wurzel alles übels ist"] (Lehmann, 1909, p. 34). To obtain optimum resonance in vocalization, she favored practice on [e], [u] and [i], with each vowel preceded by [j]. She proposes that [u] be blended with [e] to give it overtones, and that [i] must be blended with [e] in order to project. A drawing attached to p. 44 of her text depicts precisely where each note of the scale for sopranos and tenors (from low a to high f) should be seen by the singer in, before
and/or above the face (Lehmann, 1909, p. 44 ff) for most efficient resonance.

Jean de Reszke, the reigning tenor at the Metropolitan Opera in the late nineteenth century, placed great importance on mask resonance to obtain maximum ring in the voice. This was achieved by allowing "just room enough for the tone to be thrown up into the resonance spaces behind the nose, using the sound of the French [ã] in 'souffrance.'" Coffin describes the method of de Reszke in teaching this resonance:

Because of its numerous nasal syllables a very effective sentence to obtain this resonance was "Pendant que l'enfant mange son pain, le chien tremble dans le buisson," monotonous on each successive syllable of the scale . . . In a course of purely mask singing o and a would become on and an, the open e as in être became ain, and the i as in si and the closed e as in été were hardly placed in the mask as all, but were supported on the diaphragm. (de Reszke in Coffin, 1989, p. 108)

Giovanni, Sbriglia (1832-1916) was the teacher of Jean de Reszke and himself a tenor of international reputation. He maximized resonance efficiency by the combination of two particular syllables in vocalization:

Sbriglia used the vowels (sic), "Te-ro" more than any other vowels in vocalizing. The Italian "t" brings the voice forward, as the tongue must be pressed against the lower front teeth to sing "R" properly. The French "R" loosens the tongue because it is made by rolling the tip of the tongue, and the "o" which is held, must be the round Italian "o," which requires perfect breath support . . . "Think "oh," and you will have a perfect Italian AH" in your upper voice, a sound with an overtone, your lips and jaw always loose. (Byers-Chapman, 1942 pp. 337-8)
Lamperti was given to more vague, proprioceptive descriptions of resonant carrying power. He believed, for example, that "the carrying power" depends on the regularity and intensity of the vibrations, and not on your efforts" (Brown, 1903, p. 41). He insisted that resonance be achieved without forcing.

When the tone is pure, the lower, harmonious overtones are heard in the voice. When the voice is forced, the higher discordant harmonics predominate causing hard, metallic, sharp quality. When overtones are lacking, the voice sounds hollow, sepulchral, wooden. (Brown, 1903, p. 42)

and

The presence of resonance in head, mouth and chest is proof that your voice is full-grown, full fleshed. (Brown, 1903, p. 45)

Delle Sedie took an interest in the resonance properties of vowels (Coffin, 1989, pp. 44-48). He constructed a chart which traces the modification of the "ah" vowel on each pitch of the scale. He was among the first Italian teachers known to maneuver the resonance of the voice by means of vowel modification.

Similarly, Emma Seiler is concerned with finding the vowels of loudest resonance. The following excerpt explains her thoughts about efficient vowels in female voices:

... all tones below c' should take the character of o. At c', a, as in the English word "hall," sounds the best, and at d'-e' passes to a, as in man, at f into a, as in May. With g' the a sounds again as in man; a-c^2 are favorable to all the vowels, while d^2-e^2 sound best with e. After e^2 every tone takes the coloring of a, in father, and sounds well only with this vowel; b^2-d^3 sound again better with e.
... the female voice, therefore, has only a few tones more than an octave, upon which every one of the vowels can be distinctly sung; and again, all these tones do not affect an equally sonorous tone with every vowel. (Seiler in Coffin, 1989, p. 54)

Registers (Equalization). Garcia (1984, pp. 43-46) believed the female voices should first try the chest voice on open vowels between a♭ and c', and the sound would come out pure and ringing. When the pitches between d' and a' were weak, he advised short attacks on the five Italian vowels. When the quality was thin he recommended correction by the use of the "close timbre" with [a] or [o]. He also thought that this process should sometimes be used at c♯ and d² because, if left unrounded, these notes contrast too greatly in quality with the notes e² and f², which are round and clear. The most important aspect of the head voice is roundness (Garcia, 1984, p. 46).

He graphically illustrates the boundaries of three registers (chest, medium and head) for all voice categories (Garcia, 1984, pp. 43-50). Special attention is called to difficulties encountered by tenors:

Tenors should attack their chest voice at d and e [below middle c]. The sounds g-b♭ offer a phenomenon worthy of attention. Unless care be taken, it becomes very difficult to produce them of a clear quality; the larynx always tending to render them sombre, and then they are a source of trouble to the singer. The only way to combat this tendency and give firmness to the voice, is to employ the clear timbre, emitting /A/ and /E/ with more and more openness. Tenors should begin to round gently at b' and c', for the actual clear quality would be too thin. The reader will remark that the word rounding, and not closing, is here used. (Garcia, 1984, pp. 47-48)
Lehmann writes that she believes there are registers of the voice, but that the terminology should be ignored (Lehmann, 1909, p. 71). She makes clear this approach to register equalization:

Everything should be sung in a mixed voice in such a way that no tone is forced at the expense of any other. [The use of mixed vowels would also enable the artist] to avoid monotony . . . and place at his disposal a wealth of means of expression in all ranges of his voice. (Lehmann, 1909, p. 64)

She also believed that strengthening the weaker register of the voice

. . . required many years of the most patient study and observation, often a long-continued or entire sacrifice of one or the other limit of a range for the benefit of the adjacent weaker one; of the head voice especially, which, if unmixed, sounds uneven and thin in comparison with the middle range until by means of practiced elasticity of the organs, endurance of the throat muscles, muscular tension of the organs in relative position, a positive equalization can take place. (Lehmann, 1909, p. 64)

Lehmann stressed the importance of the head register in relation to vocal health and freshness.

The . . . head voice is, on account of the thinness it has by nature, the neglected step-child of almost all singers, male and female . . . the sensation of it [is that] the larynx stands high and supple under the tongue . . . The head voice is the most valuable possession of all singers, male and female. Without its aid all voices lack brilliancy and carrying power . . . By it alone can we effect a complete equalization of the whole compass of all voices. (Lehmann, 1909, p. 64 ff)

Marchesi considered the issue of registration to be "the touchstone of all singing methods, old and new"
(Marchesi, 1886, p. xiii). She taught that there were three registers -- chest, medium, and head, and that the equalization of the registers was a matter of opening and closing the tone:

To equalize and blend the chest and medium register, the pupil slightly closes the last two notes of the former in ascending, and opens in descending. (Marchesi, 1886, p. xiv)

She believed that the soprano chest voice should be taken as high as e' or F' and the mezzo-soprano or contralto chest tones to F' to F♯'. The same closing or opening should occur at the passaggio of medium and head voice, and f² was the last note of medium voice and substantial time and work were needed for the development of head voice, since it is unused in speech (Marchesi, 1886, p. xiv).

Lamperti (Coffin, 1989, p. 67) considers head voice an important component of a well projected tone, writing that "when the chest voice is carried up too high, the head-voice loses its mellowness and carrying power. He felt that sopranos entered head voice at d♭², with the jaw slightly sinking and the resonance of the tone being "distinctly felt in the top of the head near the front, but not in the forehead or in the back of the head (Coffin, 1989, p. 65). The student was led to this sensation by having him/her sing "li" before making the head tone (Coffin, 1989, p. 65). In head voice the mouth should be slightly rounded, the vowel shaded toward [o], and the singer should feel that air is
being slightly drawn through the nose (Coffin, 1989, p. 65). Lamperti's description of the mezzo-soprano voice is fascinating and reveals the common practice of the time (Jander, 1992, 3: p. 372). He writes that the "Mezzo-Soprano, also called Dramatic Soprano, is a less flexible voice with developed chest register and medium compass" (Lamperti in Coffin, 1989, p. 66). He felt that the only difference in registration for male voices was the existence of a fourth register, the mixed voice: "on the tones b, c', d, and d#' head resonance mingles with the chest-voice carried up from below so that the singer sings with but half the chest resonance" (Lamperti in Coffin, 1989, p. 67)

Sbriglia felt that the falsetto register was still useful in developing the upper tones in tenors (Byers-Chapman, 1942, pp. 337-38). He writes:

As for teaching high notes falsetto, that is only for tenors who have trouble with their upper voice. Nobody seems to realize that a tenor's high notes are falsetto with breath under them. Jean de Reszke was a baritone. I made him into the greatest tenor of his time. (Byers-Chapman, 1942, pp. 37-38)

Breathing. Garcia felt that posture was important to good breathing, insisting that the singer "hold the chest erect, the shoulders back without stiffness, and the chest free" (Garcia, 1984, p. 33). He advocates a double procedure for inhalation:

Lower the diaphragm without jerking, raise the chest with a slow and regular movement, and set the hollow of the stomach (sic). From the moment
you begin, these two movements the lungs will dilate until they are filled with air. (Garcia, 1984, p. 33)

The inhalation should be quiet, and the procedure should be reversed for exhalation (Garcia, 1984, p. 34). He prescribed a four-part exercise which the singer could practice without singing:

1. First, one inhales slowly and during the space of several seconds as much breath as the chest can contain.

2. One exhales that air with the same slowness as with which it was inhaled.

3. One fills the lungs and keeps them filled for the longest possible time.

4. One exhales completely and leaves the chest empty as long as the physical powers will conveniently allow. (Garcia, 1984, p. 35)

Garcia believed that to advise abdominal breathing exclusively would be to weaken the most important element of strength to the singer, the breath (Garcia, 1984, p. 33).

Lehmann integrates breathing concepts with resonance sensations. She emphasizes the need for

... a clear understanding ... of breathing, in and out; of an understanding of the form through which the breath has to flow, prepared by a proper position of the larynx, the tongue, and the palate [and] of the chest muscle tension, against which the breath is forced, and whence, under the control of the singer, after passing through the vocal cords it beats against the resonating surfaces and vibrates in the cavities of the head. (Lehmann, 1909, p. 17)

She felt that the breath should be directed at the chest, so that the throat could remain free of tension (Lehmann, 1909,
p. 17) and that the abdomen should be brought back to its resting position during singing (Lehmann, 1909, p. 17).

Sbriglia also felt that the breath should be directed at the chest (Byers-Chapman, 1942, pp. 337-38). He taught that the diaphragm is the means of directing the breath:

Below them (the lungs) . . . the diaphragm that divides the body in half and assists in pumping breath in and out of the lungs . . . the air is slowly pushed out of the body through the small bronchial tubes, which merge at the big bronchial tube at the focal point in the chest, the "point d'apui" -- the place of support the place where everything rests . . . This is where the breath control, or the muscular control of the voice ends . . . It controls the amount of breath getting to the vocal cords . . . besides taking away all tension from your vocal apparatus. (Byers-Chapman, 1942, pp. 337-38)

De Reszke would have the singer sit with the elbows on the knees in a posture of complete relaxation; the breath was taken by expanding the lower ribs and not allowing the chest to rise (Coffin, 1989, pp. 105-106). The expansion was to be maintained as long as possible. He utilized a sigh to establish the connection between the voice and the support. De Reszke felt that breath support in singing is similar to the management of breath in some sports.

The whole body was to be as though one was "settling down" on the diaphragm, relaxed but ready to spring, as in tennis, golf, boxing, etc., rather than braced up and stiff as if "on parade." The effort was to come from the back as if the sound was following "a line drawn from the small of the back to the bridge of the nose. (Coffin, 1989, p. 106)
Lamperti believed that silent breathing was important to avoid unsteadiness and shortage of air during the phrase (Coffin, 1989, p. 92). He maintains the idea that the contraction of the diaphragm downward creates a compression of breath which allows control over the voice (Coffin, 1989, p. 92). He felt that

at no time during the song or series of exercises must you relax while replenishing the breath. Only when the song is over may you let go. (Lamperti in Coffin, 1989, p. 92)

Expression

The degree of importance placed on dramatic expression by nineteenth century opera singers is acutely evidenced by reviews of performers whose acting skills equalled or exceeded their vocal abilities. It became possible in this era to achieve an operatic career primarily on the basis of theatrical talent.

For example, soprano Wilhelmine Schröder-Devrient (1804-1860) brought a new concept to the role of Leonore in Fidelio. The critic Rellstab (1799-1860) wrote:

Her part does not begin when she first speaks or sings, or has business to do; it never ceases so long as elements of the poem concern the character. Thus, her pantomime, in particular, establishes a chain of subtle devices, which, when closely examined, are distinguished equally by organic homogeneity and imaginative variety. Every reference to the fate of the prisoner, every innocent utterance of the adoring Marzelline, finds a softly awakened echo in Leonore's features. (Rellstab in Pleasants, 1966, pp. 153-4)
Schröder-Devrient was much admired by Wagner, who cast her as the first Adriana in *Rienzi*, the first Senta in *The Flying Dutchman* and the first Venus in *Tannhäuser* (Pleasants, 1966, p. 155). Despite her popularity in the more declamatory form of music drama, her vocal technique did not survive the demands of a resolute dramatic temperament. Always more actress than singer, her vocal deficiencies became more noticeable as this imbalance grew (Pleasants, 1966, p. 155). Chorley writes of her performance in *Otello* (Rossini) in 1831:

A woman supposing she can correctly flounder through the notes of a given composition has been allowed, too contemptuously, to take rank as a singer. Such a woman was not Sontag -- neither of later days, Mlle. Lind. The two had learned to sing; Madame Schröder-Devrient not. Her tones were delivered without any care, save to give them due force. Her execution was bad and heavy. There was an air of strain and spasm throughout her performances, of that struggle for victory which never conquers. (Chorley, 1972, p. 186)

French baritone Victor Maurel (1848-1923), though experiencing no prolonged vocal difficulty, was another singer who became known primarily for his visual artistry (Rosenthal, 1992, 3: p. 843). Maurel was the first Iago and Falstaff for Verdi and the first Tonio for Leoncavallo; he sang the first London Wolfram and the first Covent Garden Dutchman. Maurel was so highly skilled as an actor that he appeared on the dramatic stage in the 1900's, and was co-director of the Theatre-Italien in Paris. His pictorial artistic orientation may well have come from his schooling
in architecture and his interest in painting (Pleasants, 1966, p. 249).

Maurel was apparently not a favorite to George Bernard Shaw. Reviewing the baritone in a performance of Don Giovanni, Shaw reveals not only his distaste but also the degree to which an operatic performance was being evaluated on the basis of acting:

Don Juan may be as handsome, as irresistible, as adroit, as unscrupulous, as brave as you please, but the one thing that is not to be tolerated is that he should consciously parade these qualities as if they were elaborate accomplishments instead of his natural parts. And this is exactly where Maurel failed. He gave us a description of Don Juan rather than an impersonation of him. The confident smile, the heroic gesture, the splendid dress, even the intentionally seductive vocal inflexion which made a success of "La, ci darem la mano," were all more or less artificial. A Don Juan who is continually aiming at being Don Juan may excite our admiration by the skill with which he does it; but he cannot convince us that he is the real man. (Shaw, 1955, p. 355)

Near the end of the century vocal technique had begun to keep pace with the changing manner of expression. Emma Calvé (1858-1942) was one of the first singers, along with Lilli Lehmann, to become famous for both their singing and their skill in characterization (Pleasants, 1966, p. 301 ff). Massenet wrote two roles for her, Anita in La Navarraise and Fanny in Sapho (Shawe-Taylor, 1992, 1: p. 693).

Calvé writes of learning from experience to restrain her desire to overact:
If I was criticized out of all measure before these two successes, after them I was praised with equal lack of restraint. Everything I now did was right. Unfortunately for me, no one dared utter a word of criticism; and in consequence, I was carried away by my passion for realism. Later, however, I learned wisdom and moderation. (Calvé in Pleasants, 1966, p. 98).

The alteration of the melodic line for expressive purposes still existed in the nineteenth century, but was gradually practiced to a much lesser degree (Crutchfield, 1990, p. 428). By the 1880's most embellishment was based on the sparing use of the grupetto and a few simple cadential figures (Crutchfield, 1990, p. 428). In the time of Rossini the fioritura requirements were virtually equal for all voice types, thereafter it declined more abruptly among the male artists than among the female (Crutchfield, 1990, p. 429).

Whereas musically interpretative expression in the bel canto era had been delegated to the singer with his/her stock of affective figures, the nineteenth century brought the exact notation of inflection and musical expression in the score. A clear example of this development is the setting of the role of Otello by Verdi for the tenor Francesco Tamagno (1850-1905). Tamagno was known for his lack of talent for subtlety in the delivery of recitatives, and what Verdi wrote for Otello has little in common with even the recitatives of his own earlier operas (Pleasants, 1966, p. 253). Figure 3 demonstrates that the subtlety in
this declamation has been written into the score by the composer.

The manner of late nineteenth century expressive singing style is evident on recordings made after about 1860. These cylinders show that portamento continued to be a prevalent aspect of expressive style (Crutchfield, 1990, p. 453). Also evident in the recordings is what would seem by modern standards a very liberal application of rubato; accelerando and rallentando are utilized, along with a type of rubato in which voice and accompaniment are permitted to be out of phase (Crutchfield, 1990, p. 453). One habit which is noticeable in Italian singers is to accelerate in crescendos, harmonically complex passages and impassioned cadenzas (Crutchfield, 1990, p. 453).

The recordings also show that ornamentation was indeed still practiced. The ornaments, as one would expect, are simpler and fewer than those of the previous era. It should also be noted that the nineteenth century recordings indicate the preoccupation with interpolated high notes had not fully evolved. There are many recordings of "Sempre libera," "La Donna é mobile" and "Largo al factotum" without the extra high notes which have become so conventional today (Crutchfield, 1990, p. 455).
Figure 3: Recitative from Otello

(Verdi, 1965, p. 172)
Voice Types

In the nineteenth century labels for voice categories became more precisely descriptive. Where there had been only tenors, there were now "heldentenors" (heroic tenors), "dramatic tenors" ("tenore di forza," "tenore robusto"), "lyric tenors" ("tenore di grazia," "tenore leggero" and the diminutive "tenorino"), and "spintos" (lyric tenors pushed toward the dramatic). There was now the "baryton lyrique," "Verdi baritone," "basso buffo" and "basso profundo." There was the "coloratura soprano," the "lyric soprano," the "Falcon soprano" and "Dugazon soprano" (named after particular singers), the "Italian soprano," "the spinto," "lyrico-spinto" and "dramatic soprano." With the exception of the coloratura soprano, there was little difference in the ranges of different categories within one type (Pleasants, 1989, p. 90).

In the eighteenth century, composers had written roles to suit the capacities of an individual singer; the first interpreter of a role was often the last (Jander, 1980, 17: pp. 342-46). Operas were seldom revived, and when they were the music would customarily be modified to fit the new performer or replaced. In the nineteenth century a standard international repertory was developing, and singers were called upon with increasing frequency to sing music that had not been expressly written for them.
In the case of the soprano voice, the whole problem of greater volume was especially acute since orchestral violins playing in the same octave were fitted with metal top strings and were played with heavier Tourte bows. For sopranos singing the Wagnerian repertoire the demand for larger tone was already considerable even at the Bayreuth Festspieldhaus, with a hooded orchestra pit. As Wagner's operas were performed at larger theaters which had uncovered orchestra pits, the task of the soprano surpassed even that which the score demanded (Jander, 1992, 4: pp. 532-33). As the nineteenth century progressed, more soprano voices were developed for maximum power and less emphasis was placed on coloratura singing. There appeared a number of sopranos who were associated mostly with the performance of dramatic roles, one example being Amalie Materna (1845-1918), the first Brunnhilde and Kundry (Jander, 1992, 4: pp. 532-33).

After the decline of the castrati in the eighteenth century, female sopranos became the primary objects of adulation. The expansion of European culture and improved transportation enabled singers to routinely visit North and South America, Mexico, and Australia. In many capitals, the opera house became a cultural status symbol, and the engagement of a diva of international reputation became a priority and was often crucial to the financial survival of the opera company (Pleasants, 1966, p. 190 ff). As a result, prima donnas such as Jenny Lind, Nellie Melba, and
Adelina Patti became stars whose singing was well known to the
general public.

It was the demand made on the upper range, used for
increasingly dramatic purposes in the nineteenth century,
that caused many singers who were called "soprano" to take
372). The absence of the castrato gave further impetus to
the evolution of the mezzo-soprano voice in opera, as many
of the important mezzo-soprano roles in the first decades of
the century are heroic, travesty parts. In this period the
mezzo-soprano range was often as extensive as that of the
soprano, but the tessitura was slightly lower. Composers
began to realize that the dramatic mezzo could more easily
surmount the heavier orchestration of the period than many
extended upper range were tackling the lower of two soprano
roles in operas such as Bellini's Norma (Adalgisa) and
Donizetti's Anna Bolena (Jane Seymour). At mid-century
singers at the Paris Opéra such as Rosine Stolz, Cornélie
Falcon and Pauline Guegmaid defied any exact classification
as either dramatic sopranos or dramatic mezzos. Wagner's
Kundry, Fricka, and Ortrud are roles difficult to
categorize; they may be sung by mezzo-sopranos and sopranos.

As composers turned away from classical tragedy, the
tenor voice gained pre-eminence with the rise of Romantic
opera. The plots of nineteenth century operas almost
invariably included a love story, usually involving a soprano and tenor, and frequently in a tragic context. In addition to the aforementioned categorizations of the tenor voice, the "character" tenor, who would play such parts as Mime in Siegfried or Goro in Madama Butterfly, appeared on the scene. Tenors in this era strove to develop powerful high notes, and in the first half of the century this would appear to have been a matter of utilizing a loud falsetto (Crutchfield, 1990, p. 427). Several theorists of this time describe the range of the tenor voice as ascending to d" or e", frequently with the designation of "falsetto" on the pitches above a' (Crutchfield, 1990, p. 427). The practice of falsetto fell into disuse with the development of powerful high notes in chest voice as exemplified by Gilbert Louis-Duprez in the 1830's. Verdi preferred the chest voice upper range, but rarely called for any tenor to sing above a' or b♭'; Wagner respected a' as the uppermost boundary for sustained singing (Crutchfield, 1990, p. 427).

As a concomitant to the development of chest voice in the upper range, the high baritone came into being, jointly derived from the low tenor and high bass (Crutchfield, 1990, p. 428). Several theorists called the baritone a "low tenor" or "mezzo-tenor"; the ultimate separation may have come when the upper register based largely on falsetto went out of style. Lower tenors, for whom Rossini could write G', A♭', and A' and falsetto coloratura up to d♭", were not
able to produce a' and b' in chest voice and became baritones. Comperti writes of "the tenori serii, who now sing the baritone" (Lamperti in Crutchfield, 1990, p. 428). Baritones specialized in full-voiced sound around and above c'.

Associated with the rise in importance of the baritone voice in the nineteenth century was Jean-Blaise Martin (1767-1873), one of the favorite singers at the Opéra Comique. He was famous for his predilection for falsetto singing, and the name "baryton martin" was used to distinguish this voice from the "Verdi baritone," which carried the chest voice into the upper register (Jander, 1980, 4: pp. 342-46).

A growing acceptance of the baritone as a singer of principal roles broadened the range of male characters beyond those always associated with the tenor (hero and lover) and bass (King, priest, old man). This voice type became the medium for the suitor in competition with another (Der fliegende Holländer), the brother (Faust), the not-so-wise father (La Traviata), the swashbuckling star of the bullring (Carmen) and the loathsome villain (Tosca). The skill of the baritone voice in equally projecting varied traits such as anger, love, wisdom, anguish, wit, compassion and authority made it suitable for some of the most complicated and three-dimensional characters: Rigoletto, Falstaff, Iago, Wotan, and Hans Sachs.
**Bass.** The most important development in the bass voice in the nineteenth century was the emergence of the baritone and bass-baritone as categories in their own right. Though they overlapped in repertory, these three types with their various subdivisions became more separate in recognition, and the true operatic bass was a specialist in certain types of roles (Jander, 1992, 1: p. 342).

The bass voice was chosen by Gounod and Berlioz to play Mephistopheles in *Faust*, and for an assortment of other villains including Sparafucile in *Rigoletto* and Hagen in *Götterdämmerung*. The bass voice was favored for the projection of authority (Jander, 1980, 17: pp. 342-46), for such roles as the father in *Die Meistersinger*, the King in *Tannhäuser* and *Lohengrin* and the priest in *La forza del destino* and *Don Carlos*.

The divisions of the bass voice were designated by terms such as "basse chantante" (basso cantante), "basse-noble" and "basso profundo." "Basse-noble" and "basso profundo" were heavy, deep voices appropriate to the portrayal of elderly father, high priest, king and so forth. *Basso profundo* roles are characterized more by a low tessitura than by extremely deep notes, since "even when well-produced they tend to have a somewhat ludicrous effect" (Jander, 1980, 17: pp. 342-46).
Cultural Influences

Romanticism

The transition in the art of nineteenth century operatic singing from an emphasis on beauty of tone and virtuosity to a high level of personal dramatic expression is consistent with the aesthetics of Romanticism. For example, the Romantic artist was attuned to "unusual states of the soul and life, and accordingly a predominance of extramusical impulses over form" (Wörner, 1973, p. 261). A singer performing in accordance with such a principle would be only logically led to extra-musical declamation and the introduction of tremolo as an expressive device (Newton, 1984, p. 91). The excessive striving for expressiveness, characteristic of much of this era, can be seen as related to the difference between Classicism and Romanticism:

The distinction depends perhaps essentially on the symbolic power of the form and on the consummation on the part of the listener: if the content of a piece of music rests more in a self-contained symbolic form and invites the listener to consummate the experience on his own, it will be felt to be more classic; if the formal power of the music is weaker but it yet compels the listener by the demonic qualities of its power to fascinate, it will be felt as Romantic. (Wörner, 1973, p. 262)

Compared to the bel canto singer, the vocal artists of the nineteenth century engaged to a much greater degree in directly emotive expressiveness (McKinney, 1940, p. 508 ff). As discussed in Chapter I, the bel canto singer was improvising the abstract, intellectual expressions of
exalted or mythological characters. The nineteenth century singer became part of an aesthetic spirit of revolt:

... a new understanding of and interest in the common people -- the natural unsophisticated type of humanity which dwelt in village cottages rather than in lordly halls. It pointed the way to the open country and the possibility of contemplating beauties and terrors of nature as a means of relief from the burdensome routines of society... it (Romanticism) insisted upon the importance, above all else, of exalting man's natural impulses and emotions. (McKinney, 1940, p. 513)

The operatic singer of this epoch may have been attempting to more perfectly fuse the arts of singing and acting. Grout (1947, p. 358) writes of the "coalescing of distinct factors in Romantic art." This principle is what led Wagner to his theories of the Gesamtkunstwerk (Grout, 1947, p. 393). Lang writes eloquently of this desire for unification in the arts:

This fanaticism that swirled everything into unity, that found all ideas kindred, was a direct answer for the cool and deliberate articulation of the Enlightenment. Romanticism strove to restore life and ideas to their erstwhile and natural unity, which was severed by the Enlightenment... Soul and matter, spirit and nature, melted into love and love of the infinite... To express their souls in lyricism was not enough for these dreamers; they wanted to envelop the world with their soul... (Lang, 1949, p. 737)

Was it possible that the singer related to his/her art in the same way as the Romantic composer? The bel canto composer had been a craftsman detached from his works; the nineteenth century composer viewed music as a venue of self-expression, an extension of his own ideas and feelings (Lang, 1949, p. 358). For example, the horror and rescue
operas of Weber, Meyerbeer, Donizetti, Verdi, and Wagner, all directly assault the nerves and feelings of the audience in a manner that Handel, Gluck or Mozart would have found inconceivable (Lang, 1949, p. 358).

It must also be remembered that nineteenth century singers were singing to audiences that were no longer comprised primarily of the aristocracy, but represented the tastes and sensibilities of the Bourgeoisie, the new middle class (Pleasants, 1966, p. 137). Lang writes that

... romanticism was also bound with many ties to the Revolution. The Revolution emancipated the middle classes, and in so doing yielded cultural leadership to the petty bourgeois spirit ... (Lang, 1949, p. 805)

Would a performance before such an audience not encourage the projection of common, universal, even elemental emotions?

Realism

The continuation of the romantic movement in the arts eventually led to the philosophy of realism, largely because of catering to bourgeois sensibilities:

Realism is the realization of romanticism; it arose from broken idealism, from a sobered romanticism, from a mental descent which corresponded with a sociological descent. (Lang, 1949, p. 845)

Realism could be natural and obvious, as in folk tales, or it could be drastically exaggerated, as in the art of Rabelais (Lang, 1949, p. 844).
The realists, whether authors, painters or musicians, enthusiastically delved into the uglier, seedier aspects of life for their art (McKinney, 1940, pp. 769-70). This spirit was felt more keenly in literature than in other arts. Anatole France wrote a series of books depicting humanity in somber and sodden characters, while Thomas Hardy concerned himself with the struggle of people for existence (McKinney, 1940, p. 770). In painting, Goya etched some of the most horrifying exposés of wartime brutality that exist in art, and Toulouse-Lautrec infused the bitterness of his private life into the Parisian scenes he painted.

As the realism movement worked its way into operatic composition, singers were required to be expressive of the widest possible range of emotions, from the soaring ecstasy of love to the darkest horrors of murder and death. In Mala Vita (Giordano) for example, the sordid conditions in the alleys of a big city and the mala vita ("wretched life") of a prostitute were transferred from a prose play without softening their crude reality (Sansone, 1992, p. 955). In I Pagliacci (Leoncavallo), a gathering storm of jealousy and rage leads to murder.

In these Italian verismo (Italian "verism" or "realism") operas singers were dealing with works which pursued the goals of presenting a vivid, melodramatic plot, of arousing sensation by violent contrasts, and painting a cross-section of life without concern for any larger
significance the plot might have (Grout, 1988, pp. 509-510). Verismo operas are comparable to "shocker" novels, and the music corresponds to this concept (Grout, 1988, p. 510). Everything is arranged so that moments of high excitement follow one another in quick succession.

The melodies of Puccini, the most prolific of the veristic composers, have been described as "naked emotion crying out, and persuading the listener's feeling by its very urgency" (Carner, 1970, p. 273). Grout writes that this sort of melody already had a history in Verdi within melodic phrases which seemed to encapsulate the whole feeling of a scene in a moment of concentrated expression, such as "E tu, come sei pallida" of Otello (Figure 4) (Grout, 1988, p. 511). In the music of Verdi, these moments stand out as contrasts; in the works of Puccini, there is a sort of "perpetual pregnancy" in the melody. The music is kept at a high tension in a sort of nervous stretto (Grout, 1988, p. 511).

The veristic style spread to other countries. The Frenchman Massenet wrote La Navarraise, an opera closely modelled on Cavalleria Rusticana (Sansone, 1992, 4: p. 955). In Germany d'Albert wrote Tiefland, and Janacek composed Jenufa.

Pleasants believes that the veristic style of composition brought into being a new kind of vocal sound, "fat, round, opulent, warm, and well-focused right up to a
Figure 4: Melody - "E tu come si pallida" from Otello
(Verdi, 1965, p. 361)
full-voiced and resonant top" (Pleasants, 1966, p. 286). He believes that the verismo operas brought about a revival of Italian vocal pre-eminence in the artistry of singers such as Campanari, Ancona and Scotti (Pleasants, 1966, p. 286).

National Tendencies

As the era of dramatic singing progressed, Italian singers no longer dominated the operatic centers of Europe (Newton, 1984, p. 100). Paris was becoming the operatic capital of the world, and even Donizetti and Rossini were writing some of their most important works for the Opéra (Grout, 1988, p. 356). The Italian tenor Domenico Donzelli (1790-1873) may have been a precursor of the Frenchman Gilbert-Louis Duprez (1806-1896), who is credited with representing a revolution in singing style (Newton, 1984, p. 87). According to Chorley, Donzelli had

... one of the most mellifluous, robust low tenor voices ever heard -- a voice which had never by practice been made sufficiently flexible to execute Signor Rossini's operas as they were written, but who, even in this respect, was accomplished and finished in comparison with the violent persons who have succeeded him. (Chorley, 1972, p. 4)

More significant with respect to changing trends in singing is a review of the tenor in the Allgemeine Musikalische Zeitung of Donzelli's Othello in 1823:

He has a beautiful mellifluous voice with which he attacks the high A in full chest-voice, without once resorting to falsetto, while Signor David (the Roderigo) rejoices in this higher voice and,
on occasion, once ascended to high F [above high C]. (Pleasant, 1966, p. 160)

These comments reveal that two techniques for male upper tones existed simultaneously, the falsetto being the older of the two methods.

In the middle third of the nineteenth century the use of falsetto began to disappear (Newton, 1984, p. 102). French baritone Jean-Baptiste Fauré abhorred this trend and blamed the Italians:

... the liking for vocalise is lost in Italy, they began to ridicule the falsetto voice by the aid of which tenors increased by several notes the range of their scale. Without needing to insist on the inconvenience which results from the abuse of the chest voice outside its limits... one can easily see the disastrous effects which this practice must produce on the voice, destroying the velvet, the sweetness, and the intonation, when it does not lead to complete ruin. (Fauré in Newton, 1984, p. 103)

Italian singers are credited with utilizing vibrato as an expressive device, a practice much criticized (Crutchfield, 1990, p. 429); some Italians seem to have sung with a vibrato on almost every sustained tone (Crutchfield, 1990, p. 429). Like "di petto," "vibrato" is written as a directive at specific points in scores of Donizetti, Halévy, Meyerbeer and others (Crutchfield, 1990, p. 429).

It is uncertain whether writers of this period use the terms "vibrato" and "tremolo" to denote the same feature. It is clear, though, that this Italian innovation, probably an exaggeration of the common Baroque "trillo" ornament became a noted aspect of Romantic vocal expressiveness.
(Newton, 1984, p. 91). Chorley, when referring to a performance in England by the great Italian tenor Rubini said that "his voice had contracted a sort of trilling or trembling habit, then new here, which of late has been abused ad nauseam (Chorley, 1972, p. 21) and that the "... tremulous quality of his voice (that vice of young Italy, bad schooling, and false nations of effect) became more monotonous and tiresome than the coldest placidity could have been" (Chorley, 1972, p. 146).

With many singers a tremulous quality appeared in the voice through the effort to be more expressive (Newton, 1984, p. 93). It was noted, particularly by George Bernard Shaw, that singers were having considerable technical difficulty coping with the demands of the new Italian operas:

He (Verdi) practically treated the upper fifth as the whole voice, and pitched his melodies in the middle of instead of in the middle of the whole compass, the result being a frightful strain on the singers. The upshot . . . was displacement, fatigue, intolerable strain, shattering tremolo . . . the development of an unnatural trick or making an atrociously disagreeable noise and inflicting it on the public as Italian singing, with the result that the Italian opera singer is now execrated and banished from the boards of which he was once the undisputed master. (Shaw, 1955, p. 143)

In France, the freedom of the sung tone continued to be subservient to the clear declamation of the text (Miller, 1977, pp. 178-81), with the principle being carried so far as to actually abandon the written pitch to shout the phrase
(Newton, 1989, p. 98). This was known as the "école du cri" (school of screaming) or "urlo alla francese" (French howling), as it was known in Italy (Newton, 1984, p. 98). What had originated as an infrequent effect for emotional intensity actually became a normal way of singing (Newton, 1984, p. 98). This manner of dramatic screaming even became popular in Italy. Edouard Robert, co-director of the Théâtre-Italien in Paris, wrote:

In Milan I encountered the urlo francese, which Rossini had rid us of at the Opéra, and which seems to have established its empire in Italy. Such delicious talents as Rubini and Tamburini are not listened to when they sing in a ravishing manner. Now the Italians listen to music like the English and neither applaud nor call out the actors except when they shout like demons; also, these unhappy singers are worn out; they lose their talent and shorten their careers. (Robert in Weinstock and Brockway, 1962, p. 449)

The most noted vocal phenomenon in France was the startling performance (1837) of tenor Gilbert-Louis Duprez in Guillaume Tell (Rossini) at the Opéra. In the stretta following the fourth-act aria, "Asil Hereditaire," in which the voice must twice ascend chromatically to a sustained high C (Figure 5), Duprez electrified the audience by singing the entire passage in chest voice (Pleasants, 1966, p. 165). The landmark nature of this event is made evident by two physicians, Diday and Pétrequin:

The art of music has been enriched recently by a new kind of voice, whose discovery introduces a new element in the problem of phonation, and seems to be bound to bring about a fundamental change in
Figure 5: End of aria, "Asil Hereditaire" from Guillaume Tell

(Rossini, 1961, p. 502)
the execution and study of singing . . . When in 1837 a celebrated singer introduced it on our foremost lyric stage, it attracted the general attention at once, and curiosity was all the more strongly excited because this type of voice, unknown until then, was a new acquisition by the artist who was using it. How had the vocal organ, previously piping and expressionless, been modified to this extent? (Diday and Pétrequin in Newton, 1984, p. 40)

For years, German audiences had relied on imported Italian singers to provide the enjoyment of the best singing (Pleasants, 1966, p. 224). Some of the earlier German singers, like tenors Anton Raaf and Ludwig Fischer, had been taught by Italians or Italian-trained teachers. As late as 1853, the general state of singing in Germany was abysmal (Pleasants, 1966, p. 224). The tendency in Germany was to blame modern composers -- Meyerbeer, Verdi, Wagner, et al., for an overly declamatory style and for using an orchestra so large and loud that singers had to scream to be heard (Pleasants, 1966, p. 224).

It was during the period in which singers struggled to deal with the demands of Wagner that a nineteenth-century "golden-age" controversy arose. At the same time that performances of this difficult new music were quite inadequate, the more florid, bel-canto-like repertoire of Rossini, Bellini, and Donizetti was being kept alive primarily by international stars such as coloratura sopranos Henriette Sontag (1806-1859), Jenny Lind (1821-1887), and Adelina Patti (1843-1919) (Pleasants, 1966, pp. 192-211). Those who viewed the music of Wagner as anti-vocal
considered singers of bel-canto operas to be representatives of the older, superior way of singing, while devotées of Wagner considered mere beautiful tone to be inadequate and incomplete (Duey, 1961, p. 1).

It was in the singing of Wagnerian opera, nevertheless, that the German school of singing began to take form (Duey, 1961, p. 1). Detailed techniques of breathing were developed to support a vocal line continually challenged by thick clusters of consonants (Marafiotti, 1949, p. 33). Elaborate theories of placement and vowel modification helped German singers find additional resonances (Coffin, 1989, p. 91 ff). Near the end of the century, the rough-hewn declamation of the sort practiced by Wilhelmine Schröder-Devrient had evolved into the accomplished singing and acting of Ludwig Schnorr (1836-1865) and Lilli Lehmann (1848-1929).

Schnorr created the role of Tristan, and in his excellence enhanced the accomplishments of his followers to such a rigorous role (Pleasants, 1966, p. 232). His voice was described as having a baritone quality which is characteristic of great dramatic tenors. Robert Proelss, an historian of the Dresden theater, wrote of the tenor possessing a voice that was "curiously elegiac, somewhat veiled . . ." but flashing out when brightness was required "like the sun breaking through passing clouds" (Pleasants, 1966, p. 232).
Lehmann was among the first singers to truly master roles in all three of the German, Italian, and French repertoires. In the 1884 season at the Metropolitan Opera in New York, she sang all three Brünnhildes, Isolde, Venus, Marguerite, Fidelio, Rachel, Donna Anna, Aida, Norma and Carmen (Pleasants, 1966, p. 234); her repertoire included 170 roles in 119 operas. In addition to her thorough and intricate technique, Lehmann admitted to learning from her extensive experience with colleagues in the theater. She writes:

It suddenly occurred to me that it is not necessary to roar; that one could sing well even with little voice if the sound were noble; that it was foolish, merely for the sake of competitive effort, to be led into exorbitant demands on one's strength by large auditoriums and the big voices of one's colleagues; that "beauty remains beautiful under all circumstances, even when recognized as such only by a few. I never forgot this intelligence. (Lehmann in Pleasants, 1966, p. 235)

Performance Environment

Opera Houses

It is generally acknowledged that opera houses constructed in the nineteenth century were usually larger than those built earlier. Table 2 presents a representative indication of seating capacities for opera theaters erected in this period. Not only were the populations of cities growing larger, but also those theatres already in existence
Table 2

Nineteenth Century Opera Theater Seating Capacities

<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covent Garden</td>
<td>1856</td>
<td>2,000</td>
</tr>
<tr>
<td>Vienna Staatsoper</td>
<td>1869</td>
<td>1,642</td>
</tr>
<tr>
<td>Opéra de Lyon</td>
<td>1842</td>
<td>3,000</td>
</tr>
<tr>
<td>Paris Opéra</td>
<td>1820</td>
<td>1,991</td>
</tr>
<tr>
<td>Opéra Comique</td>
<td>1852</td>
<td>1,331</td>
</tr>
<tr>
<td>Strasbourg</td>
<td>1873</td>
<td>1,000</td>
</tr>
<tr>
<td>Toulouse</td>
<td>1880</td>
<td>1,500</td>
</tr>
<tr>
<td>Bayreuth</td>
<td>1876</td>
<td>1,800</td>
</tr>
<tr>
<td>Bayerische Staatsoper</td>
<td>1818</td>
<td>2,100</td>
</tr>
<tr>
<td>Bologna</td>
<td>1859</td>
<td>1,500</td>
</tr>
<tr>
<td>Catania</td>
<td>1890</td>
<td>1,470</td>
</tr>
<tr>
<td>Genoa</td>
<td>1828</td>
<td>1,500</td>
</tr>
<tr>
<td>Palermo</td>
<td>1897</td>
<td>1,800</td>
</tr>
<tr>
<td>Rome</td>
<td>1880</td>
<td>2,200</td>
</tr>
<tr>
<td>Venice</td>
<td>rebuilt 1836</td>
<td>1,500</td>
</tr>
<tr>
<td>Barcelona</td>
<td>1861</td>
<td>3,000</td>
</tr>
<tr>
<td>Prague</td>
<td>1883</td>
<td>950</td>
</tr>
</tbody>
</table>

(Turnbull, 1988, p. 25 ff)
were highly susceptible to destruction by fire, since candlelight was the only available means of illumination before the 1880's. Sachs and Woodrow chronicled more than 1,100 auditorium fires between 1797 and 1897. (Sachs and Woodrow in Langhans, 1992, 4: p. 719.) These burned structures were usually replaced by larger ones (Turnbull, 1988, p. 15).

One of the first to be thus rebuilt was the San Carlo in Naples. Although it was actually reconstructed to its present size in 1737, a strand of its history is enlightening about the way in which a composer could respond to a larger performance setting.

Spohr (1961, p. 176 ff) relates that the huge, acoustically dead space of San Carlo was the reason that Rossini admittedly began adding big drums, cymbals and trombones to prevent the audience from falling asleep. Spohr considered the new building, with its widened proscenium, less arched ceiling, and resonance-inhibiting stucco ornaments to be too difficult for singing, since "only their (the singers') highest and most stentorian tones could be heard" (Spohr, 1961, p. 176 ff).

Stendahl (1970, p. 135) writes that Rossini also adapted his compositional style for larger spaces. He considered it an accepted principle that it was essential to increase the share of large ensemble numbers for larger theaters. When asked about his lack of fine, well-developed
melodies in slow tempo, Rossini answered that he was obliged to write for voices that were strained, tired, or otherwise inadequate (Stendahl, 1970, p. 135).

Since opera was becoming an art no longer for the exclusive delectation of a subsidizing aristocracy, economic necessity was helping to determine the size of opera houses. The conflict between sufficient vocal power on the one hand and beautiful, interpretively subtle tone on the other was especially true of voices not naturally large (Mount Edgecumbe, 1834, p. 169). Many singers who cultivated larger sound by singing constantly above a comfortable dynamic level often found themselves unable to scale-down the sound for more intimate singing. Lord Mt. Edgecumbe said of Pasta, for example, that: "In a small room her voice was too loud, and sometimes harsh; her manner too forcible and vehement; but in the theatre all blemishes disappeared" (Mt. Edgecumbe, 1934, p. 169).

Coffin draws an intriguing connection between native language and opera house size (Coffin, 1977, p. 76). He maintains that since Italian is an open-syllable language whose rare final consonants are often followed by a voiced sound, Italian opera houses are large. German theaters, conversely, are smaller and more closed for the making of plosives (Coffin, 1977, p. 76). Table 3 illustrates the relative seating capacity of Italian and German opera houses.
Table 3

Representative sample of relative seating capacities of German and Italian opera houses.

<table>
<thead>
<tr>
<th>GERMANY</th>
<th>ITALY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bielefeld</td>
<td>Bologna</td>
</tr>
<tr>
<td></td>
<td>775</td>
</tr>
<tr>
<td>Bremerhaven</td>
<td>Catania</td>
</tr>
<tr>
<td></td>
<td>722</td>
</tr>
<tr>
<td>Coburg</td>
<td>Florence</td>
</tr>
<tr>
<td></td>
<td>557</td>
</tr>
<tr>
<td></td>
<td>1,806</td>
</tr>
<tr>
<td>Detmold</td>
<td>Genoa</td>
</tr>
<tr>
<td></td>
<td>676</td>
</tr>
<tr>
<td>Essen</td>
<td>Marcerata</td>
</tr>
<tr>
<td></td>
<td>637</td>
</tr>
<tr>
<td>Esslingen</td>
<td>Milano (La Scala)</td>
</tr>
<tr>
<td></td>
<td>460</td>
</tr>
<tr>
<td>Flensburg</td>
<td>Naples</td>
</tr>
<tr>
<td></td>
<td>601</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>Palermo</td>
</tr>
<tr>
<td></td>
<td>1,387</td>
</tr>
<tr>
<td>Giessen</td>
<td>Parma</td>
</tr>
<tr>
<td></td>
<td>662</td>
</tr>
<tr>
<td>Hamburg</td>
<td>Rome</td>
</tr>
<tr>
<td></td>
<td>1,675</td>
</tr>
<tr>
<td>Heidelberg</td>
<td>Rome</td>
</tr>
<tr>
<td></td>
<td>619</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hof/Saale</td>
<td>Turin</td>
</tr>
<tr>
<td></td>
<td>580</td>
</tr>
<tr>
<td>Hildesheim</td>
<td>Venice</td>
</tr>
<tr>
<td></td>
<td>697</td>
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<td>Kaiserslautern</td>
<td>Verona</td>
</tr>
<tr>
<td></td>
<td>514</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Koblenz</td>
<td>Spoletto</td>
</tr>
<tr>
<td></td>
<td>514</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Landshut/Passau</td>
<td></td>
</tr>
<tr>
<td>Luneburg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>626</td>
</tr>
<tr>
<td>München</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,100</td>
</tr>
</tbody>
</table>

(Owen, 1983, p. 78)

(Turnbull, 1988, p. 20 ff)
Knapp (1984, p. 115) points out that only in 1876, with the construction of the Festspielhaus in Bayreuth did the average design of opera theaters begin to move away from the horseshoe-shaped, "stacked-box" seating arrangement inherited from Baroque theaters. The new facility built for Wagner by King Ludwig of Bavaria had an amphitheater auditorium with bench-like rows of seats rising sharply from the stage, and the orchestra pit was lowered out-of-sight (Knapp, 1984, p. 115). It was not uncommon in previously constructed theaters for the pit to be on the same level as the stage, with viewers looking down upon the scene from their boxes (Langhans, 1992, 4: p. 718).

**Orchestra/Concert Pitch**

The number of players in the opera orchestra increased during the nineteenth century. The increase is attributable to both the introduction and multiplication of new instruments and the multiplication of new ones. Table 4 illustrates the composition of typical nineteenth century opera orchestras, showing a trend towards strengthening the strings in relation to the woodwinds and a tendency toward international standardization (Spitzer, 1992, 3: p. 730).

The loudest of the new instruments were the brass: trombones, ophicleide, cimbasso, and, eventually the tuba. Modifications made to new instruments resulted in greater volume: valves were added to horns and trumpets to enhance
### Table 4

Composition of typical 19th century opera orchestras

<table>
<thead>
<tr>
<th>City, institution</th>
<th>Date</th>
<th>Composition of typical 19th-century opera orchestras</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>STRINGS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>violins</td>
<td>viola</td>
</tr>
<tr>
<td>Berlin</td>
<td>1802</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1821</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1843</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1865</td>
<td>32</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1890</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>Dresden</td>
<td>1804</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1882</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1850</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1864</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1884</td>
<td>19</td>
<td>7</td>
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<tr>
<td></td>
<td>1896</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>London</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>King's Theatre</td>
<td>1812</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1832</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Her Majesty's Theatre</td>
<td>1839</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covent Garden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1847</td>
<td>28</td>
<td>10</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Farms, Opera</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1810</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1826</td>
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<td>1855</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1890</td>
<td>23</td>
<td>8</td>
</tr>
</tbody>
</table>

(Spitzer, 1992, 3: p. 730)
the low and middle registers and to modulate freely (Spitzer, 1992, 3: p. 730). For example, for the Ring orchestra, Wagner invented what became known as the Wagner tuba. The composer was primarily interested in unity of texture in his efforts to complete the brass choir (Raynor, 1977, p. 123), wishing to give them "not only as wide and complete a range as the strings but also a similar unity of tone" (Raynor, 1977, p. 123). The principal purpose of the Wagner tubas was to fill the gaps of texture between horns and trombones, and they were meant to be played by a second quartet of horn players. Wagner utilized them in groups of two in the tenor register, tuned in B♭, and two in the bass register, tuned in F (Raynor, 1977, p. 123).

Wagner was also responsible for the greatest increase in size in the nineteenth century orchestra (Knapp, 1984, p. 94). The Ring orchestra calls for 16 first violins, 16 second violins, 12 violas, 12 cellos, 8 double basses, 3 flutes, 1 piccolo, 3 oboes (sometimes a fourth) and 1 English horn, 3 clarinets and 1 bass clarinet, 3 bassoons, 8 horns, 2 tenor and 2 bass tubas, 1 contrabass tuba, 3 trumpets, 1 bass trumpet, 3 trombones, 1 contrabass trombone, 2 pairs of kettledrums, 1 triangle, 1 pair of cymbals, 1 side drum, 1 glockenspiel, and 6 harps (Knapp, 1984, pp. 94-5).

The role of the orchestra in opera also changed significantly. In the 18th century the orchestra had
"protected" the singer by differentiating between simple and accompanied recitative and aria. During the last quarter of the century, however, accompanied recitative became increasingly dominant, dissolving these distinctions. (Spitzer, 1992, 3: p. 731). The introduction of melodramatic episodes -- spoken dialogue with orchestra accompaniment, as in the dungeon scene of Beethoven's Fidelio, had a similar effect. These trends culminated in Wagner's idea of "endless melody," in which the music shifts smoothly from one level to another without formal boundaries (Spitzer, 1992, 3: p. 732). With the leitmotif technique developed by Wagner and utilized by many other composers, the orchestra became involved in the narration or represented the thoughts and emotions of the characters.

By the late nineteenth century the orchestra was a central element in the drama (Grout, 1988, p. 358). It could function as the medium in which the story was told, as a commentator on the stage action, or even as an "actor" (Spitzer, 1992, 3: p. 732). Sachs points out that the growth in the importance of the orchestra in opera is coincidental with the rise of non-Italian schools -- "the eternal antithesis between the playing North and the singing South" (Sachs, 1955, pp. 287-297).

In approximately the second decade of the nineteenth century, pitch began to rise (Rhodes and Thomas, 1980, 14: pp. 179-85). A tuning fork collection described by Ellis
(1968, p. 5 ff) shows that around 1810 in Berlin, Paris, and Dresden opera orchestras were using a concert pitch close to the "Chammer-Thon" standard of Praetorius. In the rapidly changing social climate, however, standardization of pitch disintegrated. What was formerly considered strident orchestral playing was now regarded as brilliant (Rhodes, 1980, 14: pp. 779-85).

For instance, in Dresden from 1815 to 1821 singers and players were obliged to conform to a concert pitch of A=423.2 (Ellis, 1968, p. 5 ff). By 1826 Riessiger, the Kapellmeister, was using a tuning fork set at A=435. A voice teacher, Näke, disapproved of the rise in pitch he sensed and, using a tonometer, complained the A=446 was being attained during performance. An ensuing controversy led to a conference report in 1862 which concluded that a lowering of the pitch to A=435 would be welcome, but that a return to an even lower previous standard would "injure the brilliancy" and effect of the music for listeners accustomed to higher pitch" (Rhodes, 1980, 14: pp. 779-85).

In 1810 the Paris standard was A=423 at the Opéra (Ellis, 1968, p. 5 ff). It had reached A=431.7 by 1822, when the singers protested and managed to have it set at 425.8 (Rhodes, 1980, p. 785). By 1830 it had risen to A=430.8 and continued to climb (Rhodes, 1980, p. 785); in 1855 it stood at A=449. So widespread was the interest in the matter that a government commission was appointed in
1850 to study the issue, resulting in a recommendation that a standard pitch (called diapason normal) of A=435 be adopted (Ellis, 1968, p. 5 ff).

The problems presented by rising pitch were addressed by A.J. Ellis in 1885. He writes of the danger for singers inherent in rising pitch:

Instruments can be tuned or manufactured at almost any required pitch. The human voice is born, not manufactured . . . an instrument beyond human control (sic). The usages of Europe have, however, made it the principal instrument, and when it is present, have reduced all others to accompaniment. Hence it is necessary that these other instruments should have their compass and pitch regulated by that of the human voice . . . it is evident that Händel's sustained a" in the Hallelujah chorus had 845 vib., but would now be sung in 904 vib.; and that Mozart's f" in Die Zauberflöte would have meant 1349 vib. The strain that this would put on voices is evident, and no composer who wished his music to be well-represented would think of making such demands on his singers. (Ellis in Coffin, 1989, p. 145)

The problems presented by varying standards were sometimes solved by transposition. In a production of Il Barbiere di Siviglia in 1815 the Roman pitch standard was substantially lower than that which was being used north of the Alps. According to Pleasants (1989, p. 61), this means that the high G's in "Largo al factotum" were F♯'s or F's by late twentieth century standards, and the F♯'s in "La Calunnia" were probably closer to the E's so common in transposition today. When the opera was produced in northern regions the local singers simply found the tessitura too strenuous (Pleasants, 1989, p. 62). "Un
dottor della mia sorte" was too high, so "Manca un folia" of Pietro Romani was substituted; "La Calunnia" was omitted or transposed down to C, while "Largo" was put down a whole tone to B♭ (Pleasant, 1989, p. 61).

Transposition for the comfort and vocal health of the singers was not unknown in the nineteenth century. For instance, mezzo-soprano Pauline Viardot wrote to Luigi Arditi, who was to be her conductor in an upcoming production of Macbeth in Dublin:

... Here are the transpositions I am making... The most difficult of all, which will necessitate certain changes in the instrumentation, will be that of the cavatina, the recitative in D♭, the andante, "Vieni t'affretta" in B♭ and the allegro, "Or tutti sorgete," in D♭, consequently, the whole scene must be a minor third lower... The cabaletta, "trionfari," is not sung... etc. -- along with composed insertions or alterations to achieve modulations from one key to another. (Viardot in Pleasant, 1989, p. 62)

An alternative method to effect agreement between the range of the performer and that of the part was called "puntatura" ("pointing"), in which the vocal line was recomposed to lie higher or lower while the orchestral score remained unchanged (Crutchfield, 1990, p. 455). Among the extant examples of puntatura are an adjustment by the tenor Mario of the role of Pollione to the higher tessitura of other parts written for himself, such as Ernesto in Don Pasquale; and a letter from Verdi approving and suggesting ways to eliminate the high notes from "O don fatal" (Crutchfield, 1990, p. 455).
Authority

In the nineteenth century the singers had much less liberty in the alteration of the composer's intention, though some degree of ornamentation, especially in Italian operas, was still practiced (Crutchfield, 1990, p. 455). Composers were now specifying what they wanted to hear. Some composes had such authority in the production process as to be able to choose a singer for a role. Verdi, for example, had clear feelings about casting the role of Lady Macbeth:

Tadolini sings to perfection and I don't wish Lady Macbeth really to sing at all. Tadolini was a marvelous, clear, brilliant, powerful voice, and for Lady Macbeth I should like a raw, choked, hollow voice . . . And these two numbers (the duet between Lady Macbeth and Macbeth and the sleep-walking scene) absolutely must not be sung: they must be acted and declaimed with a very hollow voice, veiled. (Verdi in Newton, 1984, p. 96)

Another major development in the realm of authority was the rise to prominence of the conductor. At Dresden in the 1820's Weber rehearsed interpretation, directed the stage movement of the singers and supervised the scenery, costumes and effects (Stevenson, 1992, 1: p. 915). By the second half of the century the role and authority of the conductor had become sufficiently established for Wagner to become famous as both conductor and composer.

Wagner became known for his dictatorial attitude toward singers. In a letter cited by Newman in The Life of Richard Wagner, Wagner is quoted as saying:
I do not know . . . an actor-singer of whom I could expect a proper realization of my dramatic figures unless I had taught him everything bar by bar and phrase by phrase. (Wagner in Newman, 1946, p. 334)

Hans von Bülow, a conductor who had studied with Wagner, expressed the belief that

in the interpretation of music a conductor should not be enslaved by the printed page but should permit his temperament and personality to shape the performance; that, far from adhering rigidly to the score, a conductor should take as much liberty with the music in tempo, phrasing and dynamics as is essential to give the work renewed effectiveness and a new lease upon life. (Ewen, 1946, p. 112)

Stevenson (1992, p. 916) writes that, as a conductor, Gustav Mahler built an ensemble of singers flexible to his demands in a wide repertory.

Pleasants (1984, pp. 60-64) proposes that the development of conductorial authority was inevitable because the complicated inter-relationship of orchestra and singer in Wagner's operas allowed no independent vocal or musical adventures, melodic or rhythmic deviations, or displays of virtuosity by the singers. Vocal virtuosity had long fallen into disrepute among the arbiters of musical taste in German-speaking central Europe; individual liberty was dismissed as vainglorious exhibitionism, doubly disdainful for diverting attention from the composer to the performer (Pleasants, 1984, pp. 60-64).

As a powerful composer-conductor, Verdi was another transitional figure in the shift of authority away
from the singer. However, he was by no means favorable to the status of dictator for conductors. In Interviews and Encounters with Verdi, Conati recalls the thoughts of the composer:

When I began to shock the musical world with my sins, we had to contend with the scourge of the prima donna's rondo, now we must contend with the tyranny of our conductors! Bad, bad! But the former is preferable. (Verdi in Conati, 1986, pp. 265-91)

Verdi opposed the uncritical adoption by Italian conductors of standards stemming from the Northern (because it was primarily instrumental) tradition (Pleasants, 1984, pp. 60-64).

Summary

1. Throughout the nineteenth century, singers and teachers looked for the means to achieve greater volume in singing. Concurrent with this development was the perpetuation of some bel canto repertoire, especially by famous coloratura sopranos.

2. In general there was far less emphasis on florid singing, though Italian singers moderately ornamented the scores of Donizetti, Verdi, and other composers.

3. Voice pedagogy strove for greater volume primarily through heavier registration, "darkening" ("voix sombrée"), seeking additional resonances, and developing detailed techniques of breathing.
4. Rather than the intellectual, affective ornamentation which embodied Baroque expressiveness, singers moved toward directly emotive expression, both vocally and visually. Several famous artists were even able to sustain their careers solely with acting skill, despite obvious vocal deficiencies.

5. Voice types became more precisely designated -- spinto soprano, tenore robusto, basso cantante, and so forth. Some dramatic soprano and mezzo-soprano roles became interchangeable. The baritone voice became a fully recognized type.

6. The operatic stage of the nineteenth century existed within the aesthetic climate of romanticism, with its passion for dramatic excess, the fusion of diverse elements, and its appeal to the tastes of the bourgeoisie. In the 1890's some performers took on the extreme dramatic and vocal demands of the verismo school.

7. The zeal for dramatic vocalism led Italian singers to develop a tremolo in the voice, while French performers were known to literally shout. In Germany a thorough, systematic school of singing was cultivated to cope with the operas of Wagner.

8. Opera houses were built on a considerably larger scale and opera audiences no longer comprised primarily the privileged aristocracy, but also the burgeoning middle class.
9. Orchestras grew both in number of players and types of instruments. Controversies arose over rising concert pitch and whether this trend was harmfully strenuous to singers.

10. The authority of the singer, the level of control the performer exerted upon his art, decreased dramatically as composers and conductors indicated more precisely what they wanted to hear.

11. The golden age "syndrome" was most evident in Germany during the time when singers struggled to handle the new operas of Wagner.
CHAPTER III
THE MODERN ERA

Evidence of Standards

Sources. Without the benefit of hindsight enjoyed in the historical perspective on the "Age of Bel Canto" and the "Age of Grand Opera," a discussion of contemporary trends evolves from the writings of critics, teachers, singers and scholars who are concerned about certain developing patterns. New York Times critics Donal Henahan, Will Crutchfield, John Rockwell, Bernard Holland and Harold C. Schonberg have written extensively and repeatedly about such matters as the apparent deterioration of overall vocal standards at the Metropolitan Opera (Crutchfield, 1986; Schonberg, 1987), the over-emphasis on acting in opera (Henahan, 1989), the concern about rising concert pitch (Holland, 1990), and the influences of other vocal genre on operatic singing (Rockwell, 1987). A number of prominent opera singers have spoken in interviews about issues such as the controversy over amplification (Horne, 1990), current rehearsal procedures compared with those in earlier decades (Kraus, 1991), the power and authority of stage directors (McGovern, 1991) and problems between singers and conductors.

**Vocalism**

It would seem that the "golden age" controversy has been kept fully alive in the twentieth century. In 1938, the critic W.J. Henderson offered his view of the situation:

> The urge to make a big sound (Caruso was the model for the tenors, Ruffo for the baritones) had made for hurried preparations for short careers . . . The others go to pieces anyhow in a few brief seasons . . . most became teachers of that which they never knew, namely, the art of bel canto. (Henderson in Kolodin, 1966, p. 240)

In recent decades, two prominent critics of the *New York Times* have spoken disparagingly about the vocal attainments of modern opera singers. Harold C. Schonberg was concerned with the ability of the modern singer to handle florid music:

> . . . very few (singers) have the vocal techniques of their predecessors . . . Is it demanding too much for singers to handle coloratura passages with neatness, to sing on pitch, and not to run out of breath before a phrase is ended? . . . It is not that today's voices are any less beautiful, as voices than in preceding generations . . . The trouble seems to be that hardly anybody around can take a young singer and instill a technique capable of handling a role like Donna Anna in Don
Giovanni or Adina in L'Elisir... And yet it is not so long ago that any number of sopranos could have swarmed all over a role like Adina...
These singers sang coloratura roles as naturally as they breathed, effortlessly and brilliantly, right on pitch, with the voice never losing quality above the staff. (Schonberg, 1984, p. 89)

More recently, Will Crutchfield wrote extensively about concerns for the quality and health of operatic singing in general, citing such phenomena as early vocal burnout, a perceived increase in the rate at which voices age, and a widespread tendency for career-level singers to develop a "wobble" (Crutchfield, 1986, Sec. II: p. 51 ff). His enumeration of the deficiencies in modern singers invokes the memory of "golden-age" arguments in the history of operatic singing:

While it is obvious that today's singers can operate in a wide range of languages and styles, to move on stage well, to deal with difficult contemporary music and subordinate themselves to intricate ensemble pieces, the question about skilled vocalism remains. The problem can be stated in terms of not only the number of great solo artists available, but also the level of vocal artistry considered acceptable for presentation, the mastery of technique, the respect for beauty of tone, and the degree of musicality among prominent artists... the singers who really can seize a night in the theater, who make you eager to hear what they will do with a new role, and whom you want to see over and over, almost all were born before 1935. (Crutchfield, 1990, p. 81)

Do Mr. Crutchfield and Mr. Schonberg, both venerable observers of world-class opera singers, accurately portray the trends in vocalism during the last quarter of the twentieth century? Should it be remembered on the contrary
that the task of the critic is to criticize, a function which by nature engenders an atmosphere of negativism?

It can at least be stated that there are opposing points of view. Metropolitan Opera Principal Conductor James Levine, for example, states:

For me, singing is a continuous Golden Age in and of itself. There are great singers in every age. The thing to remember is that they are all individuals; they are all different from one another, like snowflakes; and they are all changing constantly in vocal abilities and perceptions and growth musically, dramatically and physically. One should not try to compare live performances of contemporary singers with memories of past ones or records of performances one never heard live . . . The only generality we can make is that, as we get farther and farther from the time when these operas were contemporary art, the authenticity of performing style declines in every respect. But that is to fail to acknowledge the validity of the quality of the great artists of today, or any day, on their own terms. (Levine, 1991, p. 17)

Newton feels that the question deserves an objective, balanced argument. He writes:

As the end of the twentieth century approaches it is difficult not to join the chorus . . . that the art of singing has deteriorated so that there are just not any singers like there used to be. Then, of course, candor compels one to add the sequel: and there never were. The simple fact is that if one looks only at the small group of international stars, every generation is about the same in quality. In some decades, this small group may be a little more numerous than the average, while in other decades the size of the group may be a little smaller. The singers who qualify as international stars usually transcend the limitations of the national school from which they came . . . It is the much larger group of singers, who do not make the grade as international stars, but who are necessary to fill the casts of opera productions, that one hears the national variations in technique and taste most
clearly. It is from listening to these singers that the idea of decline comes, because one's memory of the previous generation of singers has sifted out the mediocre and left only the best. (Newton, 1984, pp. 127-28)

It would seem that the question of the golden age "syndrome" is as unanswerable today as it was in the past.

The advances in modern vocal pedagogy of the late twentieth century would seem to argue strongly that teaching is not the central issue in any perceived decline. The last several decades have seen a proliferation of shared research and knowledge among voice teachers, coaches and laryngologists. There have been pedagogical writings which have incorporated scientific/medical findings in the area of physiological function (Vennard, 1967; Bunch, 1982; Hammar, 1978; Miller, 1987) and works based on the study of acoustics (Coffin, 1980; Appelman, 1967; Doscher, 1988). Detailed research in comparative modern pedagogy (Burgin, 1973; Miller, 1977) is becoming available along with exhaustive studies of the teaching principles in other eras (Monahan, 1978; Duey, 1961; Celletti, 1991). Professional singers and teachers of today also have access to publications which detail systematic techniques of interpretation and characterization (Craig, 1990; Goldovsky, 1973; Balk, 1977). Practical information in the pronunciation of any language is easily accessible (Moriarty, 1975; Grubb, 1979; Cox, 1970). Coffin (1989, p. xiv) ventures to suggest that the Age of Information could
make possible an era of great singing. It may well be that any perceived decline in high-level operatic singing has its basis in other professional and cultural influences on performers.

Expression

The sensibilities and tastes of the electronic media age have made the visual aspect of the operatic art substantially more important, with audiences having become accustomed to convincing realistic portrayals (Crutchfield, 1986, Sec. VI: p. 51 ff). Concurrent with this development has been the increasing use of more svelte, agile and attractive singers (Henahan, 1987, Sec. II: p. 21). Lenore Rosenberg, a Production Director at the Metropolitan Opera, explains:

The trend in most companies across the country is to hire singers who look the part -- young, slender, romantic "leads," for example. However, here at the Metropolitan, because of its size, we don't care if you're fat and old, as long as you can be heard. (Rosenberg, 1990)

New York Times critic Donal Henahan feels that there has been an over-emphasis on operatic acting in recent years (Henahan, 1987, Sec. II: p. 21). He wishes that more importance could be placed on "the subtle art of acting with the voice" and writes that

By now we have seen more than enough Toscas sing Vissi d'arte while lying on their stomachs, more than enough Sieglindes scream orgasmically as Siegfried pulls the sword from the tree, more than
enough Otellos writhing in epileptic agony.
(Henahan, 1987, Sec II: p. 21)

The late voice teacher Berton Coffin would appear to be in agreement with Mr. Henahan when he writes that "we have trained a generation of singers who interpret far better than they sing" (Coffin, 1977, p. VI).

Crutchfield (1986, Sec. VI: p. 51 ff) believes that the soprano Maria Callas had a substantial impact upon the present generation of operatic performers with her considerably inspired interpretation and acting. He believes that singers who followed her discovered that "ragged and out-of-control singing for the sake of the drama was accepted to a greater extent than ever before" (Crutchfield, 1986, Sec. II: p. 51 ff).

If there is even a modicum of truth in any of these perceptions by critics, the question must be raised of how much emphasis on acting and visual impact is harmful to singing. Does modern vocal pedagogy over-emphasize expression and believability at the expense of fine vocal production, or do the demands of modern stage directors heavily influence both teachers and singers? Do the arts of singing and acting actually antagonize one another, or are they in the process of becoming more perfectly blended than ever before?
Voice Types

Among operatic sopranos, there has been a greater freedom to move from one type of role to another as the century has progressed (Jander, 1992, IV: 460). While Kirsten Flagstad had been recognized as the great dramatic soprano of her age, her successor Birgit Nilsson maintained a wider repertoire. It would appear that in the later years of the century the number of sopranos able to fulfill the requirements of the Wagner roles has become smaller. In contrast, a beneficial outcome to the revival of florid repertoire since the 1950's has been the recognition that training in some of the older traditions is desirable for all sopranos, from the lighter type who sings Rossini to the heroic soprano who may be called upon to sing Norma (Jander, 1992, 4: 460).

The same revival of fioritura singing has further influenced mezzo-sopranos to attempt soprano roles (Jander, 1992, 3: 373). Marilyn Horne and Teresa Berganza have made themselves available for work in operas written for sopranos, such as Tancredi and Semiramide (Rossini), and I Capuletti e i Montecchi (Bellini).

The later decades of the century have brought diversification to tenor roles. Operas such as The Rake's Progress (Stravinsky) and Troilus and Cressida (Walton) make use of the lyric-dramatic tenor, Wozzeck and Lulu of Berg deromanticize the voice while Peter Grimes (Britten) gives
the tenor dramatic opportunities comparable to those of the bass-baritone in *Boris Godunov* (Mussorgsky).

Basses, bass-baritones and baritones have also been influenced by the renewal of interest in florid vocal music. Justino Diaz and Samuel Ramey have both sung Mahomet in *Le siège de Corinthe*, and Ramey has appeared in numerous other Rossini operas, including *La Gazza Ladra* and *La Donna del Lago*. These singers have voices which are both flexible and powerful (Sawkins, 1992, 1: 342). *Wozzeck* has been an important extension of the baritone repertory, as well as the principal baritone role of Chou En-Lai in *Nixon in China* by Adams.

One question which might be asked about the classification of voices in the twentieth century is whether roles which were formerly sung by lighter-voiced singers are now being taken on by performers who bring both flexibility and power to the part. In recent decades Callas and Sutherland both sang "bel canto" roles which previously had seemed the exclusive province of "bird" voices such as those of Adelina Patti and Amelita Galli-Curci. In recent productions at the Metropolitan Opera, heftier voices like those of Cheryl Studer and Carol Vaness have sung the roles of Gilda in *Rigoletto* and Donna Anna in *Don Giovanni*, respectively, while recordings from the 1930's and 1940's indicate more lyrical approaches to these roles (Grubb, 1990).
Cultural Influences

Modern Professional Realities

Singers living in the age of jet travel maintain performance schedules which involve far greater physical and mental strain than those of their predecessors. Pleasants explains:

The case of the baritone -- Hans Hotter -- who worked in performances in Colorado between two appearances at Bayreuth in a space of ten days may have been exceptional, but it was not unique. The international circuit imposes severe strains on the singer in the form of sudden changes of climate and time and the sheer fatigue of constant travel. And once he has achieved that level of prominence where his services are in demand around the world, he can no longer afford to settle back and enjoy life. If he won't fly, his competitor will. (Pleasants, 1966, p. 348)

Tenor Alfredo Kraus, still performing at the age of seventy, explains some of the differences which existed as recently as the 1950's:

... the seasons were longer than now. Normally they engaged a singer for a whole season. You stayed in the same city, you didn't move around, you studied every day ... (Newman, 1991, p. 10)

The continuous jetting not only subjects modern singers to fatigue and strain. It also exposes some vulnerable upper respiratory systems, with resistance lowered by tiredness, to a different inventory of germs and allergens in each location. Laryngologist Friedrich Brodnitz, in his book Keep Your Voice Healthy, emphasizes the point that the single most important factor in both resisting and getting
rid of viral or allergic infections is plenty of bed rest (Brodnitz, 1988, p. 75). He considers this factor more important than doctors, drugs, vaporizers, vitamins or other remedies.

In addition to jet travel, another modern cultural influence on operatic singing may be advanced recording technology. The late tenor John Alexander strongly felt that the recording, in spite of its obvious usefulness to singers in studying interpretation, was one of the worst things to ever happen to the art of singing (Hines, 1983, p. 25 ff). He felt that this invention has caused too many singers to go too far in modeling their voices after famous professionals, often settling for skilled imitation rather than the free, natural use of their own voices. The dispensation of elements in an operatic recording also serves to make voices seem much larger and more stentorian than they actually are in live performance (Miller, 1981, pp. 43-35). Would this be a factor in a discussion of whether singers today are working for too much amplitude?

Another question might be whether the false vocal perfection which exists in recorded performances is adding to the live performance anxiety of modern singers. Audiences and performers alike have become accustomed to the results of such practices as splicing together isolated takes which do not represent what an artist can do in person, dubbing in singers who were not present when the
conductor and supporting cast laid down the track, and adding selected high notes from a few years back (Crutchfield, 1990, pp. 68-69). Tenor Ron Edwards, a cast member for the recording of Blitzstein's Idiots First, recalls his severe vocal indisposition on the final day of the session:

I had such a bad cold . . . that my voice couldn't stay on any pitch . . . and by the time they were through splicing, computerizing, and whatever else they do they had actually grafted my "normal," sound from previous sessions onto that day's music. That passage sounded much better than my own healthy singing. (Edwards, 1991)

Another interesting theory about modern influences on operatic singing is articulated by New York Times critic John Rockwell, who believes he can hear that vocalism is being colored by contemporary genre such as Broadway, jazz, and rock at the New York City Opera (Rockwell, 1987, Sec. II, p. 19). For some time, the company has included at least one Broadway show in its season, as have other American regional companies. Mr. Rockwell suggests that the opera singer, with his/her "fruity, throbbing, blasting" sound, has become a stereotype for social pretension, and that operatic singing might have to borrow from popular music to maintain its vitality. He believes that the operatic art is not dying, but is merely in transition to being more in touch with modern musical culture (Rockwell, 1987, Sec. II, p. 19).
Modern Operatic Composition

According to Henahan, modern operatic writing usually involves the assumption of the musically expressive function by the orchestra and the relegation of the singer to the role of recitative-articulating actor (Henahan, 1988, Sec. II, p. 23). Pleasants (1989, p. 20) describes the modern idiom of the singer as "the combination of the parlando style from the Italian verismo and the declamatory style of Wagner." He believes that the properties of free, emotional, or sensuous expression in song are largely ignored "as if composers were ascetics and song the epitome of evil" (Pleasants, 1989, p. 20). As Henahan writes:

True, an interlude identified as an aria will turn up in a contemporary score, but characteristically such rhapsodic flights are distorted intervalically or merely put through the atonal Cuisinart so that they will lose their lyric appeal and not clash with the score's contemporary style. (Henahan, 1988, Sec. II, p. 23)

The question for singers is whether the kind of melody often used in contemporary scores is congruent with fluent, healthy vocalism. Noteworthy exceptions such as Tippet's A Midsummer Marriage (Henahan, 1988, Sec. II, p. 23) notwithstanding, an array of contemporary works confront singers with frequent wide intervallic leaps and register changes, excruciating feats of tessitura, jagged rhythms and delicate pianissimo singing in an extremely high range (Figure 6). Comparatively, "bel canto" melodies are noticeably more "grateful" to the voice in their stepwise
Figure 6: Excerpt from Ulisso (Dallapiccola), illustrating wide intervallic leaps, register changes and high pianissimo singing typical of contemporary opera.  

(Dallapiccola, 1978, p. 40)
construction; even written-out fioritura is based mostly on scales, arpeggi and sequences.

A question may be asked about whether part of any perceived decline in singing is due to the enormous challenges to vocal ideals -- such as legato, evenness of scale, and comfortable ease of production -- presented by much contemporary opera. Prominent New York City voice teacher Dr. Robert C. White, Professor of Voice at the Aaron Copland School of Music at Queens College, succinctly summarizes at least one sentiment in the controversy of singing versus modern music:

At least in early music though there are contrived ideas about straight tone, etc., there is still a sense of line, phrase, and legato. But, God save us from the contemporary music people. (White, 1992)

Internationalism

Jander (1992, 4: p. 460) believes that there has been a reduction of national differences in singing during the 20th century. He enumerates some of the original differences as he hears them in recordings from earlier in the century:

. . . The Italian preference for brilliance of tone contrasts with the German taste for mellowness. A characteristic of French sopranos has been a brightness of tone with less richness of the chest register than is favoured by the Italian school. This has been shared to some degree by the Russians while the English soprano was known for a purity that in turn appealed more in German than in Latin cultures. There also seem to have been different levels of tolerance and liking in matters of vibrato, tremolo, or "wobble." Earlier in the century Italy . . . produced many sopranos whose quick recitative
vibrato was welcomed in their home countries . . .
Germans seemed to find it easier to accept the
slower kind of vibrato -- the "beat" or "wobble."
(Jander, 1992, p. 460)

Maintaining that the quick vibrato disappeared in the late
twentieth century, he believes that the majority of the
record buying public did not accept this feature, which did
not record well. He also contends that the emergence of
American singers as world leaders has reduced national
differences, because these singers are products of mixed
schools and ethnic backgrounds and that it would be
difficult to identify any national method in American
artists such as Grace Bumbry, Jessye Norman, Cheryl Studer,
Carol Vaness or Barbara Bonney (Jander, 1992, 4: p. 460).

Pleasants traces the beginnings of internationalism in
opera back to the career of Lilli Lehmann:

But many German singers, following the precedent
set by Lehmann, have been less prone than their
French and Italian colleagues to restrict their
careers to the native repertoire or the native
language. (Pleasants, 1966, p. 242)

He also contends that there was clear evidence of emerging
international standards:

The institution of so-called German, French, and
Italian wings in major English and American houses
persisted until just before the last war, but this
very coexistence in a single house was evidence
that the earlier dichotomy was being bridged, if
not ultimately healed. In the past twenty years
modern air travel has given new incentive to
linguistic accomplishments and to the mastery of
diverse idioms. The singer, today, who confines
himself to one language and one repertoire is a
provincial. (Pleasants, 1966, p. 242)
Newton believes that, despite the national differences in modern pedagogies articulated in *English, French, German and Italian Techniques of Singing* (Miller, 1977), striving for size of tone is a common thread (Newton, 1984, p. 130). He writes:

There is one characteristic of today's operatic singing that seems to know no boundaries: No matter how large the voice, the possessor of it seems impelled to make it larger . . . the result . . . is an increase in the vibrato . . . Even worse is the loss of tonal beauty which comes from pressing and not allowing the tone to float. By now the audience is so conditioned to hearing this effortful sound that any singer who does not appear to be "giving his all" is dismissed as not having an operatic voice. The unusually large voice has become the expected norm, and those whose voices are of ordinary size are simply not engaged to sing opera. (Newton, 1984, pp. 130-131)

**Performance Environment**

**The American Opera House**

In consideration of the foregoing suggestions that American singers have set the international vocal standards in the twentieth century and that the universal priority in operatic singing is largeness of tone, it may be worthwhile to ask about the reasons for this striving for volume by American artists. One such determining factor might be the sheer size of American opera theaters.

Table 5 presents a representative sampling of the seating capacities in North American opera houses. The relatively large size of these structures is a result of the
Table 5

Sample of seating capacities of North American Opera Houses.

<table>
<thead>
<tr>
<th>Opera House</th>
<th>Capacity</th>
</tr>
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<tbody>
<tr>
<td>Boston Opera Company</td>
<td>2,500</td>
</tr>
<tr>
<td>Lyric Opera of Chicago</td>
<td>3,636</td>
</tr>
<tr>
<td>Cincinnati Opera Association</td>
<td>3,632</td>
</tr>
<tr>
<td>Dallas Opera House</td>
<td>3,420</td>
</tr>
<tr>
<td>Fort Worth Opera</td>
<td>3,420</td>
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<tr>
<td>Houston Grand Opera</td>
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<tr>
<td>Los Angeles Opera</td>
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</tr>
<tr>
<td>Montreal Opera House</td>
<td>3,000</td>
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<tr>
<td>New Orleans Opera</td>
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</tr>
<tr>
<td>New York City Opera</td>
<td>2,779</td>
</tr>
<tr>
<td>Metropolitan</td>
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<tr>
<td>Opera Company of Philadelphia</td>
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</tr>
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<td>Pittsburgh Opera</td>
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<tr>
<td>San Diego Opera</td>
<td>3,000</td>
</tr>
<tr>
<td>San Francisco Opera</td>
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<tr>
<td>Santa Fe Opera</td>
<td>1,773</td>
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<tr>
<td>Seattle Opera Association</td>
<td>3,000</td>
</tr>
<tr>
<td>The Canadian Opera Company (Toronto)</td>
<td>3,200</td>
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<tr>
<td>Vancouver Opera</td>
<td>2,800</td>
</tr>
<tr>
<td>The Washington Opera (D.C.)</td>
<td>2,200</td>
</tr>
</tbody>
</table>

(Turnbull, 1988, p. 3 ff)
need to sell tickets: American theaters are not tax-
subsidized as are their European counterparts (Rich, 1976,
p. 16). The American democratic spirit inspired the desire
for each ticket-holder to have the best seat in the house, a
policy which often resulted in sprawling, single-level
auditoria. A dramatic example of this is Music Hall in
Purdue, Indiana, which seats 5,000 in one huge orchestra
section. The seating section is fan-shaped with a low
ceiling, a great distance between the front row and the
footlights, and a greater width than the stage. Of course,
buildings such as this one are not designed expressly for
opera; they often serve as sources of municipal revenue
through conventions, shows, political events, etc.

The difficulty of projecting the voice in such huge,
acoustically unfriendly structures has led to some
controversy over the issue of electronic amplification. The
mezzo-soprano Marilyn Horne lectures widely about the
possible ill-effects of miking, believing that "it has
ruined Broadway, and it is doing the same to opera" (Horne
in Newman, 1990, p. 18). There is some evidence, on the
other hand, that the Metropolitan Opera has miked singers
for some time. Zucker writes, for example, of two famous
singers who revealed the practice (Zucker, 1990, p. 23).
The tenor James McCracken is quoted as having said "I spent
my life learning to project my voice, and now it's
irrelevant, because the Met mikes singers" (Zucker, 1990, p.
Jeanette MacDonald, concerned about the size of her voice when she offered to finance Met productions of La Traviata and Faust for herself, was told by Lily Pons: "Don't worry if you don't carry. They'll mike you, just like they do me" (Zucker, 1990, p. 23). New York City Opera routinely mikes operettas and musicals, and contemporary composers such as David Del Tredici specifically call for amplification in their scores (Rockwell, 1987, Sec. II, p. 19).

At a 1976 meeting of theater designers, architect Russel N. Johnson expressed the widespread interest to pattern new opera theater facilities after those built between 1710 and 1910, with three or four stacked tiers wrapped around the audience chamber (Rich, 1976, p. 19). He believes that a seating capacity of 1,600 to 1,700 is optimal, because the visual and auditory experience of opera deteriorates at 1,900 to 2,000 seats. Also, there will be more heed given to other acoustical details, such as the number of rows in each balcony, the shaping and size of balcony fronts, the faceting of walls, the height of the ceiling, and building materials used.

Orchestra/Concert Pitch

Because the performance of opera in the twentieth century has been dominated by nineteenth-century repertoire, the twentieth century orchestra has largely held to
nineteenth century patterns in its size, composition and proportions (Spitzer, 1992, 3: p. 732). The only section to be significantly expanded has been the percussion, with the addition of xylophones, vibraphones, marimbas, gongs, bells and an assortment of non-Western instruments. There have been examples of lighter orchestral scoring in the composition of "chamber operas." For example, in Ariadne auf Naxos (1912) Richard Strauss specifies an orchestra of only six violins, four violas, four cellos and two basses, along with pairs of woodwind and horns, trumpet, piano and two harps.

An issue of greater importance in the twentieth century relationship of singer and orchestra may be the question of rising concert pitch. A number of noted singers have expressed concern that orchestras are tuning higher than the level of A=440; among these artists are Alfredo Kraus, Placido Domingo, Luciano Pavarotti, Montserrat Caballé, Christa Ludwig, and Frederica von Stade (Holland, 1989, Sec. II, p. 23). Some are questioning whether conductors, or instrumentalists, or both in collusion, are indulging in the taste for a more brilliant sound, and whether some impresarios are encouraging a higher pitch to attract jaded listeners. Ms. von Stade states: "What's happening is against the laws of nature, and it's threatening the art of singing" (Holland, 1989, Sec. II, p. 23).
One of the worst offenders is the Vienna State Opera, where visiting tenors have acquired the habit of testing their voices against the Viennese pitch before deciding whether to cancel or go through with performances (Holland, 1989, Sec. II, p. 23). Conductor James Levine remembers the musicians in one central European orchestra tuning to A=444 because they knew they would arrive at that point halfway through the rehearsal or concert (Levine, 1991, p. 18). While agreeing that pitch has been rising over the past hundred years, Levine believes that the problem is not a conspiracy and that the rise has not been uniform from place to place:

With all the jet-hopping among singers in the past dozen years, it is a smaller world, and discrepancies create havoc with the performers' aural and physical impressions of what certain music ought to sound and feel like. Today when I conduct Moses und Aron in Salzburg, I hear parts of it a whole tone above what my ear says it ought to be. (Levine, 1991, p. 18)

A subtler point about concert pitch is that the stability of A=440 assumes a constant temperature of approximately 70° Fahrenheit (Stratton, 1990, p. 49 ff). When a theater is filled with warm bodies, it becomes hotter; with the handling and playing of instruments, they become hotter. The pitch simply climbs with the temperature (Stratton, 1990, p. 49 ff). The degree of pitch elevation in an evening performance is usually about four or five cps, or about one-eighth of a semitone (Stratton, 1990, p. 49 ff).
If indeed there are instances of rising concert pitch which may be causing singers some discomfort and strain, what steps could be taken to remedy the problem? In 1974, The American Academy of Teachers of Singing published a report on the singing of music which was originally written to be sung at a lower pitch (American Academy of Teachers of Singing, 1978, p. 1). Included in their report is the following recommendation:

The American Academy of Teachers of Singing recommends that in concert singers be allowed to perform in the pitch for which the music was written. We emphatically suggest that they transpose their arias down one half-step if it is to their musical-vocal advantage. We also recommend to conductors that operas and oratorios of the early composers be performed with instruments of original pitch, even if it is a matter of securing different instruments. Where this is difficult, we urge conductors to have the scores transposed one half-step down. We recommend that Music Publishers re-issue music of this period in the original pitch. This procedure will create an authenticity of performance that will replace the false brittleness of many of the performances of music of that period. (American Academy of Teachers of Singing, 1978, p. 1)

In 1989 the Lubo Opera Company of Guttenberg, New Jersey performed 19 concert-version selections from Verdi operas at their original pitch of C=256 (Holland, 1989, Sec. XII, p. 1). The singers reported that at the lower pitch the lower tones were fuller, richer, easier, and that the top tones were less strenuous (Holland, 1989, Sec. XII, p. 1).

Are these attitudes to be isolated exceptions? Or, do they foresee a new sensibility in the art of singing?
Authority

As singers and conductors continue to collaborate near the end of the twentieth century, it is the artist on the podium who seems to remain in control of some important musical parameters in performance. For example, as soprano Kiri te Kanawa generalizes in strong words

... the orchestras are so loud ... So I don't do much opera, or I do it with a conductor I know I can talk to. If you're singing with an orchestra that's too loud, and you're doing eight performances ... you're using up the capital of your voice. You go to the conductor, and you say every forte should be knocked down to a mezzoforte, through the whole score! And I often say to the conductor "I haven't heard a pianissimo yet! I've heard mezzopiano and maybe piano, but not the pianissimo that is written ..." and I try to explain to them that if I sing a pianissimo, then I'd like to have the orchestra play a pianissimo too. There aren't many conductors who can, and will do it. (Te Kanawa, 1990, p. 8)

While this quote hardly represents the feeling held for conductors by all singers, it does illustrate the sensitivity needed by those in charge of large instrumental forces which easily overwhelm a single voice.

The late twentieth century has also been an era in which the stage director has emerged as a dominant power in opera production. Whereas reference was made formerly to the "Price Aida" or the "Bjoerling La Bohème," for instance, it is not uncommon now to speak of "the Zeffirelli La Bohème" or "the Sellars Don Giovanni." Soprano Dawn Upshaw offers her opinion on the matter:
Now the incredible egos that used to belong to singers and conductors have been passed on to directors. I really look forward to the day when we can all work together a bit more. I won't point a finger at anyone, but some people in the opera business have decided that huge productions are the important thing right now. (Upshaw, 1991, p. 18)

There is concern about the effects on the singing art of daring contrivances by stage directors (Henahan, 1987, sec. II, p. 21). In the Peter Sellars televised version of Don Giovanni, for example, Donna Elvira rolls back and forth across the stage like a bowling ball for "Mi tradì." In another Sellars production, Giulio Cesare by Handel (at Covent Garden), Cleopatra sings "V'adoro pupille" while being lowered from the flies on a hook.

The basis of much hyperactivity and "updated" staging concepts of traditional works would seem to be an assumption on the part of directors that what already exists in the form of an operatic masterpiece is insufficient for today's audiences (Pleasants, 1989, pp. 38-39). Some directors feel that the music and the written stage directions in the score can no longer be effective without visual and interpretive assistance. Now there is frequently stage activity of some sort during the overture or in instrumental interludes, and there often has to be some visual diversion during an aria or ensemble number to keep the attention of the audience.
Conclusion

Since the operatic singing art began around the beginning of the seventeenth century, there has been increasing value placed on amplitude, or loudness of tone (Newton, 1984, p. 130). The "bel canto" priorities of musical and dynamic flexibility, clear enunciation of the text, expressive improvisation, ornamentation and beauty of tone have been supplanted through the nineteenth and twentieth centuries by the desire for an "important" voice which fills large spaces. Until a revival in the 1960's, there had been less emphasis on florid singing, though the two contrasting repertories and approaches have co-existed since the early nineteenth century. In the "bel canto" era there was broad general agreement about what was desirable in singing and singing technique, though the French subordinated these principles to the importance of the text (Duey, 1984, p. 71). Beginning in the nineteenth century, there has been an increasing diversity of techniques and pedagogies, and in the late twentieth century there has been an increase in the sharing of knowledge by pedagogues and researchers (Burgin, 1973, p. 8). The success and progress of the singing art in the future surely hinges in great part on how the vocal pedagogy profession and emerging operatic artists will respond to the persistent demand for louder tone production. Will vocal health and tonal beauty continue to be sacrificed for the loudest possible sound, or
will voice teachers, coaches, and singers themselves work, to influence those who shape the future of opera production towards a more realistic standard?

In the span of nearly four centuries expression in operatic singing has progressed to ever further degrees of realism. What once had been a matter of "improvised" musical rhetoric gave way, in the operas of Meyerbeer, Verdi, Wagner, Puccini and others to direct, humanistic projection of emotions. In the late twentieth century age of electronic media, "realistic" has replaced "expressive," with great emphasis placed on the visual aspects of performance. It seems that audiences in the age of television and videocassettes depend more on accessible surface realism not requiring an active thought process on the part of the listener. Balk elaborates:

Every young person in our country seems to have acquired either educationally or osmotically an unconscious but voracious appetite for realism-naturalism, whether from films, television, or acting classes . . . The average person in this country finds the technique and stylization of opera difficult to deal with precisely because of a trained appetite for realism, and that realism can be traced directly back to Stanislavski and his influence on actor training throughout the world . . . All one had to do was be honest, natural, and show what one felt! No special training was necessary, no voice work, no body work, no acting technique, just unvarnished truth. Down with aristocratic notions of special talent and training -- express yourself openly and art would be born. (Balk, 1977, pp. 25-26)

While the idea of the classification or category of a voice for the purposes of vocal characterization would have
been an alien concept in the age of "bel canto," the evolution of musical style for the operatic voice led to a high degree of nineteenth century specialization which has continued into the last decades of the twentieth century. While few have undertaken the breadth of repertory of Maria Callas, many sopranos have incorporated roles of varied categories beginning in the 1950's (Jander, 1991, 4: p. 732). Does this new mobility imply that vocal technique has begun to master the array of varied demands presented by composers such as Wagner, Verdi and Puccini? Or, is singing perceived to be in decline because too many artists are singing roles for which they are unsuited (Crutchfield, 1986, Sec. II, p. 51 ff)?

Operatic singing has been an integral facet of Western cultural and artistic trends, adapting itself to the changing requirements of various movements -- Baroque virtuosity, Classical sensibility, Romantic excess and realistic vehemence. Although these changes occurred in coincidence with evolutions in compositional style for the operatic voice, it is uncertain whether singers were always attempting to respond to the music or composers were writing to accommodate new fashions of singing. For example, after Wagner had heard the declamatory singing of Wilhelmine Schröder-Devrient, he wrote for her the parts of Adriana in Rienzi, Senta in Der Fliegende Holländer and Venus in Tannhäuser (Pleasants, 1966, p. 155). Conversely, Verdi
believed that his music overcame the idiosyncrasies of individual performers, as evidenced by a sarcastic letter to Franco Faccio, the conductor of the second production of *Otello*:

Well, well, so *Otello* is making out without the great singers who created the principal roles. I was so used to hearing of their glory that I thought *Otello* was ascribable to them alone. You are stripping me of an illusion when you say that the Moor can go over without the benefit of stars. (Verdi in Pleasants, 1966, p. 211)

Today, as before, the operas of a given cultural era, or "style period" exist simultaneously with those of other styles. No singer seems to have enjoyed equal success in all of the operatic styles.

To this day marked differences in approach to vocal pedagogy still exist in Western cultures, yet the belief is held that standards of singing are becoming international (Miller, 1977, p. 195 ff). Curiously, there seem to be fewer French singers of world-class stature than among their American, German, Italian and English counterparts.

It may be taken as encouraging that some American cities have already begun to scale down the physical challenge to singers by constructing smaller facilities for opera. The Metropolitan in New York has plans for a 500-seat "chamber-theater" for baroque works and contemporary "chamber operas" (Levine, 1991, p. 16). Theaters with fewer than 2,000 seats, built expressly for opera, have already been erected in St. Louis and Minneapolis-St. Paul.
The question of future authority for singers in the opera production process seems unclear, though it is doubtful that in an age of exacting film and video requirements and peripatetic, star conductors there would be anything resembling a return to the baroque hegemony of the singer. Today only the biggest superstars can influence repertory planning and the production schedule (Henahan, 1986, Sec. II, p. 51 ff). Pleasants believes that all singers should have, at least, some choice in the matter of transposition:

In the end, it is a question of vocal performance and vocal health against a violation of a composer's choice of keys, and I, for one, have no hesitation in choosing in favour of the singer, especially in music dating from a time when the orchestral pitch was a semitone or more lower than it is today. (Pleasants, 1989, p. 65)

It seems that each "golden age" controversy in opera history has been a syndrome of profound transition from one set of standards to another. In the late twentieth century there are those who admonish us to look to the past for lessons in better/healthier singing. At each historical juncture marked by a "golden age" argument, there was never a return to the practices of the past. What, then, is to make us believe that the present generation will ultimately do so? What is the future direction of operatic singing, and how will vocal pedagogy respond? Increased activity on the part of pedagogy and science may make healthier, longer-lasting singing more feasible for the future. The present
interest in re-issued recorded examples of a more lyrical singing style in the past and the current trends toward smaller theaters, chamber operas and Minimalism (and therefore a discernible tune) all portend the possibility of a new, though different, "Golden Age." The advance of opera into the multimedia realm of highly technological productions suggests that the form itself may again be changing, along with standards of tone production. The proliferation of smaller-scale opera companies throughout the U.S. is leading to the de-centralization of American opera, with the hiring of more local, less famous singers. As more artistic directors turn away from the expense of New York City agents, unions, and audition hall fees, the changes increase for the singing art to inch away from the "international standards" of the loudest possible tone at the expense of beauty and individuality. The use of multimedia in opera also bodes well for the survival of the form, and it is unclear what the changes in vocal standards will be, or how vocal pedagogy will respond. It is entirely thinkable, however, that there will be those who long for the glories of the previous "Golden Age."

Implicit in this study are several topics which suggest further investigation or development. Among these are: (a) whether historical singing trends have shaped vocal pedagogy, or vice-versa, (b) the relationship between vocal technique and musical composition, (c) the effects of
electronic amplification on operatic singing, (d) the relationship between national language and tone production, (e) the influences of recording technology on twentieth century operatic singing, and (f) the influences of other vocal genre on operatic singing.
LIST OF REFERENCES


Bontempi, Giovanni.  (No work, publisher or date cited.) Quoted in Henderson, W.J.  Early History of Singing.  New York:  Longmans, 1921.


