

## 1: Vocal pedagogy - Wikipedia

*The Science and Sensations of Vocal Tone [E. Herbert-Caesari] on [www.enganchecubano.com](http://www.enganchecubano.com) \*FREE\* shipping on qualifying offers. If you are a singing teacher, this volume is absolutely the most comprehensive exploration of internal sensations in the upper vocal tract that exists.*

We asked speech therapist and singing teacher Joan Lader to explain just what is going on when singers produce different qualities with their voices. She credits this work as her basic foundation in both the training and the rehabilitation of many types of singers: Achieve The Tone You Want Your vocal folds produce the sound, but tone can be altered by manipulating the different structures of your vocal tract. These structures allow you to change your tone to create a speech-like quality on an R and B tune or an operatic ringing sound on an Italian art song. Whether subconscious or deliberate, the subtle movements of these structures give your voice its range of pitch and tonal quality. When your thyroid cartilage tilts slightly forward, your vocal folds become longer, thinner and tenser, affecting both pitch raises pitch and the sweetness of a sound. Your various voice qualities are determined by the structures in your vocal tract: For each voice quality, Jo described the movement of the larynx, the muscles surrounding the larynx, the sensation of space in the larynx and throat, and tongue position in the mouth. Each quality is comfortable in a particular range, but the brilliance of the EVT system is that you can train to produce these qualities throughout your entire range. Learning to control the cricoid, therefore, is a part of her teaching and is essential when learning to belt. There were other aspects of belt she described: She then observed the changes in the anatomical structures of the vocal tract. Empower Yourself Through Control Just as there are many genres of vocal music, there are many qualities and styles of singing. With control over the structures of the voice, the singer is empowered to make choices. In other words, the goal is to provide confident use of the voice in a vocally healthful manner. Longevity is the long-term goal! Voice Research Continues In the decades after Jo conducted her research, our understanding of the human voice has continued to evolve. Today, great teachers across the world rely on the scientific understanding of the voice that researchers like Jo Estill and others forged. In fact, many seemingly different vocal methods across different genres are rooted in this same foundation of science and art. Jo referred to it as craft, artistry and performance magic! With the help of a skilled teacher, knowledgeable in current voice research, you can harness the physical structures of your vocal tract to produce all the qualities you desire in a healthy way. Read More About Joan Lader.

## 2: Singwise - Singwise - Good Tone Production for Singing

*Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.*

When freedom of breath application, unhampered laryngeal response, and resonator configurations are in accord with each other, desirable tonal balances exist. This combination of ideal characteristics is what defines flow phonation. Although we do not hear our voices as others hear them, most singers are capable of differentiating among sounds and thus analyzing the quality of their own vocal tone. Sensation associated with the chiaroscuro tonal balance is identifiable, repeatable, and above all, freedom-inducing. The student of voice needs to consider how the voice sounds, how it feels and how it looks e. All singers are individuals. Therefore the sensations that one singer might experience during singing may not be felt in the same manner by another singer. Technical complications could arise within my students if they strive to achieve the sensations that I do. Learning to recognize the new sensations experienced during well balanced singing ideally leads to a replacement of previous faulty perceptions. Sometimes, students need a little extra help in learning to recognize when they are singing with good, balanced tone. Generally, after students achieve and identify a tone with ideal resonance balance, I will ask them to describe the sensations, including the locations at which they occur. Describing these sensations in their own words helps them to memorize where and how sensations are felt. They then gain an effective self-monitoring checklist that will later help them to repeat the same methods for creating the same, ideal balanced tone. In time, the students learn to both recognize and reproduce this balanced tone immediately at the onset of sound, without having to make adjustments mid-way. The results of correct, healthy tone production and correct and effective use of the resonating cavities of the body include a more pleasant sound or tone, an extended range, especially in the higher end, better control of breath and thus more vocal stamina e. Flow Phonation The most desirable regime for singers involves singing with a flow phonation, sometimes called free-flow phonation , which enables them to generate the maximum sound without risk of damaging the voice. Flow phonation refers to appropriate levels of airflow - breath is never consciously held back at the laryngeal level, the vocal folds offer sufficient resistance to the exiting breath, etc. Flow phonation describes the process that permits the chiaroscuro tone. In addition, it is characterized by a high level of upper partials in the voice source spectrum. Without them, the voice sounds almost one-dimensional and dull or shrill, depending on the pitch. In the case of flow phonation, for which a relatively low sub-glottal pressure is combined with a strong flow pulse and a high overall energy level, the maximum energy can be transferred to the voice. Flow phonation encourages a higher fundamental frequency amplitude in the voice source spectrum than pressed phonation. Timbre Vocal timbre refers to the quality or colour of tone being produced by a singer. Often qualities of timbre are described by analogy to colour or texture e. Vocal timbre can be effected or influenced by numerous factors. What the ear perceives as colour or quality is really a Gestalt impression of the voice that is reflective of the entire sound, and seldom as a function of its analytic or separate components all the properties of tone. The physical characteristics of sound that affect and create the perception of timbre include spectrum the richness of the sound or tone, sometimes described in terms of a sum of a number of distinct frequencies, or overtones and envelope the overall amplitude structure of a sound, which includes attack time, decay, sustain, release, transients, etc. Vocal timbre is part of what makes some voices suitable for soloing or lead singing and other voices more suited to singing in groups or choirs, while still other voices are more suited to shower stalls. Chiaroscuro timbre is a voice-pedagogy term that is used universally to refer to the balancing of the light or clear chiaro and dark oscuro aspects of timbre, or balancing tonal brilliance and depth of the resonance. In vocalism, it specifically refers to the equilibrium of acoustic strength manifested by an ideal distribution of lower and upper harmonic partials overtones , clustered in formants. Specific balances among the formants are characteristic of the resonant voice of premier singers, regardless of vocal category. That is to say, the chiaroscuro timbre of the classic international school demands balance among the prominent areas of acoustic strength, the fundamental

and the first, third, fourth, and fifth formants. This balance has been confirmed by spectrographic analysis. Every vocal instrument has its own individual quality, but all timbres must adhere to the chiaroscuro principle. Acceptable timbre will display predictable relationships between the first, second, third, fourth and fifth formants, without by-noises. Please read the article on Vocal Tract Shaping for more information on how to adjust the formants of the voice in order to achieve better tone. The nature of the vocal instrument itself does not need to be altered to produce advantageous harmonic integration. False manipulation of a voice to either augment or diminish the balance between breath application, laryngeal response, and resonator configurations will not produce a commendable outcome. Instead, the quality of the tone will be diminished.

**Formants** The term formant refers to peaks in the harmonic spectrum of a complex sound, such as the human voice, that is produced by some sort of resonance. This area of acoustic strength results from the cumulative distribution of upper harmonic partials, which are also known as harmonics integer or whole number multiples of the fundamental frequency of a tone - the lowest frequency of a complex sound, which corresponds to the unique pitch heard in such a complex tone or overtones. Partial that are not multiples of the fundamental frequency produce what is called noise in the singing voice. Formant regions are not directly related to the pitch of the fundamental frequency and may remain more or less constant even as the fundamental changes. If the fundamental is well below or low in the formant range, the quality of the sound is rich. However, if the fundamental is above the formant regions the sound is thin and often shrill in quality and, in the case of vowels, may make them impossible to produce accurately. This is part of the reason why singers often seem to have poor diction, or their vowels are indistinguishable, on very high notes. Formants are essential components in the intelligibility of speech. In other words, formants define, or help us to distinguish between, vowels. Resonance balance will pertain throughout the scale. Formant frequencies are determined largely by the shape of the vocal tract the cavity where the sound that is produced at the sound source - the larynx - is filtered, which is able to produce a highly variable structure of overtones. For instance, opening the jaw, which constricts the vocal tract toward the glottal end and expands it toward the lip end, is the deciding factor for the first formant. This formant frequency rises as the jaw is opens wider. The second formant is most sensitive to the shape of the body of the tongue, and the third formant is most sensitive to the tip of the tongue. Therefore, as the tongue shape changes to produce a different vowel, the formant frequencies will also change. It is produced by the frequencies of the third, fourth and fifth formants of the singing voice moving so close to each other that the resulting cluster appears as a prominent, consolidated region in the frequency spectrum of the voice. Additionally, it has a different shape, being higher and wider as compared to that of the alto, and is split into two peaks - one in the range of 2. This happens if a dilated pharynx is combined with a low laryngeal position. The science seems too complicated, and they are under the impression that the information will help them little in their singing. They would rather have their teachers use different, more seemingly practical methods. Although scientifically based, the concept of formants can be learned by anyone of average intelligence. It may not be necessary to memorize the frequencies of pitches numerical values and the specific harmonic content of each vowel, but it is beneficial to the student of voice to be equipped with a basic understanding of what formants are and how they affect overall tone. One especially important reason for studying formants is to gain a better understanding of, and thus be able to take advantage of, the relationship between articulation and vocal tract resonance. Information will enhance, not detract from, learning. I will explain the relationship of vowel formation to formants a little more in-depth in my upcoming article on *Singing With An Open Throat: My article Anatomy of the Voice* on this site has additional information about formants, as well. Resonance, therefore, is voiced sound that is amplified and modified by the vocal tract resonators the throat, mouth cavity, and nasal passages, and is the result of an acoustic alliance between vibrating bodies at an identical fundamental pitch. The strength of tone must be gained not only by good, steady breath pressure see *The Role of Breathing in Tone Production* below but also by the focal point on the palate, by the complete utilization of the palatal resonance. In other words, tone quality is determined or enhanced by the way in which a singer uses his or her vocal resonance. The end result of resonance is, or should be, to make a better sound. Therefore, a key factor in achieving good, balanced tone is mastering use of resonance. Every singer needs to train the voice to distribute the sound into the three cavities in a balanced

manner. Singing involves the utilization of more of the supraglottic above the glottis spaces for resonance than does speaking, and the vowels are prolonged. Otherwise, speaking and singing are almost identical. Resonance can be either sympathetic or forced. The sounds of singing are the result of sympathetic resonance. This sympathetic vibration is not to be confused with resonance, which is restricted to the vocal tract - the open chambers, not the bony structures - conjoined with the nasal cavities only for nasal phonemes. For instance, the cartilaginous external nose, as well as the bony structures of the skull sinuses, cheeks, foreheads, occipital bones, etc. However, the resonator filtering of laryngeal tone includes only the areas that are open cavities. For example, although a misnomer, chest voice is named such because many singers feel a sensation of resonance in the chest cavity. In this case, sympathetic vibration is conveyed by bony and cartilaginous parts of the sternum and rib cage. Of course, it is not resonance itself that is felt in the face or head. Rather, it is sympathetic vibrations that are felt, since the bones of the face conduct the vibrations of sound bouncing off the hard surfaces. This does not preclude the fact that singers often feel sympathetic vibratory responses in one or more areas of the body. Indeed, the sensations that are produced by sympathetic vibrations are realistic to the singer, and they may become reliable indicators of resonance balance. However, the registering of sympathetic vibration, or the perception of resonance, is highly individual and can be experienced only personally. Sympathetic vibration during singing varies greatly from person to person. Therefore, to expect everyone to experience the same sensations while singing is both unrealistic and unwise. Placement of the voice generally describes both how the vibration of the air column interacts with the resonating structures of the body to accentuate or diminish the size of the formant and where one feels the augmented vibration due to the change in the relationship of the formants to areas of the body. For most singers, placement is used to describe where they feel the sympathetic vibrations most. For example, head voice is so-named because most of the resonance is felt on the bony surfaces of the face or head. Much of what singers may describe as placement is really sympathetic vibration. The sensations associated with sympathetic vibration help the performer monitor the sounds of singing. When the spectral balance is complete, a singer is aware of sensations in the bony structures of the head, throat or chest that are quite different than those of imbalanced phonation. Once an association with ideal sound has been established, these proprioceptive sensations become dependable indicators of tonal balance. For some singers, the notion of placement suggests that they can direct the resonance of their voices. These same instructors may also fear that their students will focus too much on producing the buzz of resonance and, in turn, induce tensions. Furthermore, teaching the concept of forwardness may also be somewhat counterproductive, if not dangerous, because certain forms of sympathetic vibration felt in the mask are actually the product of undesirable timbres. Hypernasality, for example, may produce a great deal of sensation in the nasal cavity, but it is not representative of good, balanced tone. Being instructed to place tone may exacerbate existing technical problems, if not create new ones.

## 3: Vocal Tone For Singers

*The Science And Sensations Of Vocal Tone Pdf Document for The Science And Sensations Of Vocal Tone Pdf is available in various format such as PDF, DOC and ePUB which you can directly download.*

Pythagoras, the man in the center with the book, teaching music, in The School of Athens by Raphael. Within Western culture, the study of vocal pedagogy began in Ancient Greece. Scholars such as Alypius and Pythagoras studied and made observations on the art of singing. It is unclear, however, whether the Greeks ever developed a systematic approach to teaching singing as little writing on the subject survives today. As with other fields of study, the monasteries were the center of musical intellectual life during the medieval period and many men within the monasteries devoted their time to the study of music and the art of singing. Highly influential in the development of a vocal pedagogical system were monks Johannes de Garlandia and Jerome of Moravia who were the first to develop a concept of vocal registers. These men identified three registers: Their concept of head voice, however, is much more similar to the modern pedagogists' understanding of the falsetto register. Other concepts discussed in the monastic system included vocal resonance, voice classification, breath support, diction, and tone quality to name a few. The ideas developed within the monastic system highly influenced the development of vocal pedagogy over the next several centuries including the Bel Canto style of singing. The courts of rich patrons, such as the Dukes of Burgundy who supported the Burgundian School and the Franco-Flemish School, became secular centers of study for singing and all other areas of musical study. The vocal pedagogical methods taught in these schools, however, were based on the concepts developed within the monastic system. Many of the teachers within these schools had their initial musical training from singing in church choirs as children. The church also remained at the forefront of musical composition at this time and remained highly influential in shaping musical tastes and practices both in and outside the church. It was the Catholic Church that first popularized the use of castrato singers in the 16th century, which ultimately led to the popularity of castrato voices in Baroque and Classical operas. It was also during this time, that noted voice teachers began to emerge. Giulio Caccini is an example of an important early Italian voice teacher. This style of singing had a huge impact on the development of opera and the development of vocal pedagogy during the Classical and Romantic periods. It was during this time, that teachers and composers first began to identify singers by and write roles for more specific voice types. Within these systems, more descriptive terms were used in classifying voices such as coloratura soprano and lyric soprano. Mathilde Marchesi was both an important singer and teacher of singing at the turn of the 20th century. The field of voice pedagogy became more fully developed in the middle of the 20th century. This shift in approach to the study of singing led to the rejection of many of the assertions of the bel canto singing method, most particularly in the areas of vocal registration and vocal resonance. There are also those teachers who borrow ideas from both perspectives, creating a hybrid of the two. In addition, the creation of organizations such as the National Association of Teachers of Singing now an international organization of Vocal Instructors has enabled voice teachers to establish more of a consensus about their work, and has expanded the understanding of what singing teachers do. Some voice instructors advocate an extreme mechanistic approach that believes that singing is largely a matter of getting the right physical parts in the right places at the right time, and that correcting vocal faults is accomplished by calling direct attention to the parts which are not working well. On the other extreme, is the school of thought that believes that attention should never be directed to any part of the vocal mechanism—that singing is a matter of producing the right mental images of the desired tone, and that correcting vocal faults is achieved by learning to think the right thoughts and by releasing the emotions through interpretation of the music. Most voice teachers, however, believe that the truth lies somewhere in between the two extremes and adopt a composite of those two approaches. These processes occur in the following sequence: Breath is taken Sound is initiated in the larynx The vocal resonators receive the sound and influence it The articulators shape the sound into recognizable units Although these four processes are to be considered separately, in actual practice they merge into one coordinated function. With an effective singer or speaker, one should rarely be reminded of the process

involved as their mind and body are so coordinated that one only perceives the resulting unified function. Many vocal problems result from a lack of coordination within this process. In its most basic sense, respiration is the process of moving air in and out of the body—“inhalation and exhalation. Breathing for singing and speaking is a more controlled process than is the ordinary breathing used for sustaining life. The controls applied to exhalation are particularly important in good vocal technique. The vocal folds are brought together primarily by the action of the interarytenoid muscles, which pull the arytenoid cartilages together. Various terms related to the resonance process include amplification, enrichment, enlargement, improvement, intensification, and prolongation, although in strictly scientific usage acoustic authorities would question most of them. The main point to be drawn from these terms by a singer or speaker is that the end result of resonance is, or should be, to make a better sound. In sequence from the lowest within the body to the highest, these areas are the chest, the tracheal tree, the larynx itself, the pharynx, the oral cavity, the nasal cavity, and the sinuses. This main resonating space, from above the vocal folds to the lips is known as the vocal tract. Many voice users experience sensations in the sinuses that may be misconstrued as resonance. However, these sensations are caused by sympathetic vibrations, and are a result, rather than a cause, of efficient vocal resonance. Sub-apical Articulation is the process by which the joint product of the vibrator and the resonators is shaped into recognizable speech sounds through the muscular adjustments and movements of the speech organs. These adjustments and movements of the articulators result in verbal communication and thus form the essential difference between the human voice and other musical instruments. Singing without understandable words limits the voice to nonverbal communication. There are five basic active articulators: These articulators can act independently of each other, and two or more may work together in what is called coarticulation. Unlike active articulation, passive articulation is a continuum without many clear-cut boundaries. The places linguolabial and interdental, interdental and dental, dental and alveolar, alveolar and palatal, palatal and velar, velar and uvular merge into one another, and a consonant may be pronounced somewhere between the named places. In addition, when the front of the tongue is used, it may be the upper surface or blade of the tongue that makes contact "laminal consonants", the tip of the tongue "apical consonants", or the under surface "sub-apical consonants". These articulations also merge into one another without clear boundaries. Interpretation[ edit ] Interpretation is sometimes listed by voice teachers as a fifth physical process even though strictly speaking it is not a physical process. The reason for this is that interpretation does influence the kind of sound a singer makes which is ultimately achieved through a physical action the singer is doing. Although teachers may acquaint their students with musical styles and performance practices and suggest certain interpretive effects, most voice teachers agree that interpretation can not be taught. Students who lack a natural creative imagination and aesthetic sensibility can not learn it from someone else. Failure to interpret well is not a vocal fault, even though it may affect vocal sound significantly. Voice Teachers and serious voice students spend a great deal of time studying how the voice forms vowels and consonants, and studying the problems that certain consonants or vowels may cause while singing. The International Phonetic Alphabet is used frequently by voice teachers and their students. As a result, voice teachers often focus less on how it "sounds" and more on how it "feels". Vibratory sensations resulting from the closely related processes of phonation and resonance, and kinesthetic ones arising from muscle tension, movement, body position, and weight serve as a guide to the singer on correct vocal production. Another problem in describing vocal sound lies in the vocal vocabulary itself. There are many schools of thought within vocal pedagogy and different schools have adopted different terms, sometimes from other artistic disciplines. This has led to the use of a plethora of descriptive terms applied to the voice which are not always understood to mean the same thing. The ability to move air in and out of the body freely and to obtain the needed quantity of air can be seriously affected by the body alignment of the various parts of the breathing mechanism. A sunken chest position will limit the capacity of the lungs, and a tense abdominal wall will inhibit the downward travel of the diaphragm. Good body alignment allows the breathing mechanism to fulfill its basic function efficiently without any undue expenditure of energy. Good body alignment also makes it easier to initiate phonation and to tune the resonators as proper alignment prevents unnecessary tension in the body. Voice Instructors have also noted that when singers assume good body alignment it often provides them

with a greater sense of self-assurance and poise while performing. Audiences also tend to respond better to singers with good body alignment. Habitual good body alignment also ultimately improves the overall health of the body by enabling better blood circulation and preventing fatigue and stress on the body. White, who paraphrased a "Credo" for singing: And all singing was made by the Breath, and without Breath was not any Singing made that was made. All vocal sounds are created by vibrations in the larynx caused by air from the lungs. Breathing in everyday life is a subconscious bodily function which occurs naturally, however the singer must have control of the intake and exhalation of breath to achieve maximum results from their voice. Natural breathing has three stages: Within singing there are four stages of breathing: Many singers abandon conscious controls before their reflexes are fully conditioned which ultimately leads to chronic vocal problems.

In defense of the text Starting and operating a vintage clothing shop Journals of William A. Lindsay Women and Water Management Historic Albuquerque California legal ethics From coffee shop to coffee shop World of Ideas 6e and Working with Sources Inorganic Chemicals Handbook, vol. 1 Introduction to governmental and not-for-profit accounting 7th edition Upstream 4 students book Sermons on subjects connected with the Old Testament. Work in sixteenth-century England Voyage to Corea, and the island of Loo-Choo. II. Religious houses and other corporations, and Index locorum for acquisitions from 1882 to 1900. Rural life in nineteenth-century Quebec Information, randomness incompleteness Alice 19th, Volume 4 Morning and Evening Prayer, Baptism, Matrimony, Burial and Commination 7 Property, the underprivileged and reform 163 Indian summer of English chivalry Cabbage soup diet plan Report on the mound explorations of the Bureau of Ethnology Brides, Boots Booties (3 novels in 1) The Food of Israel Offers in compromise : step right up! Pay pennies on the dollar! Loan and debt in Islamic commercial law Import books into itunes Planning, Governance and Spatial Strategy in Britain 5 The Power of Customers International marketing books Lets look at earthworms Christian the lion story Revelation and Holy Scripture On the use of transparent formulae to allocate federal education transfers Report of the Fao/Danida/Cframp/Wecafc Regional Workshop on the Assessment of the An introduction to statistical methods and data analysis Tribute to Her Gracious Majesty Queen Mary Puente, the 50s, and mambo Trimethylamin Jeffrey Mehlman