

To belt, or not to belt?: Comparative methodologies for teaching musical theater singing

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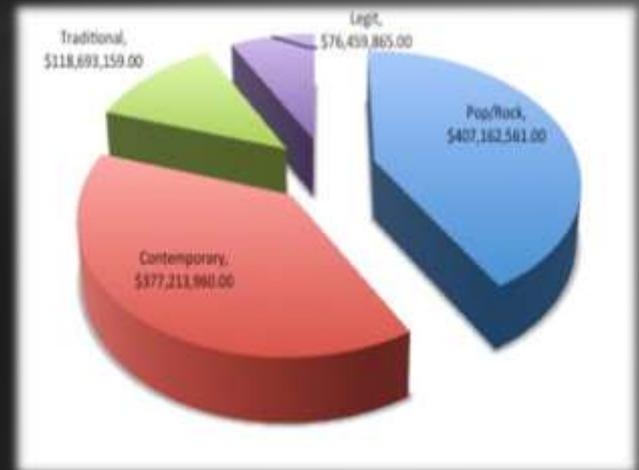
**BOSTON
UNIVERSITY**

Introduction: "The Music of Americana"



Belter Judy
Garland and
Lyric Soprano
Deanna Durbin,
(2:50) "Every
Sunday"

- Within recent decades, the traditional dichotomy of "high-brow," "**legitimate**" singing (the domain of the upper classes, classical/opera) and "low-brow" **commercial** singing (working-class entertainments, jazz, Broadway, pop, etc.) are evolving into a less stratified system (Edwin, 2007, p. 213).
- Jeannette LoVetri's creation of the term "**CCM**" (**Contemporary Commercial Music**) bequeathed "non-classical" repertoire with a non-pejorative title; changed how such styles, particularly musical theater, were discussed in academic circles (LoVetri, 2006).
- In 2012, shows requiring "legit" singing 8% of Broadway grosses compared to 27% in 2009-2010; in preparing young singers to WORK in a rapidly changing market, it is critical that the develop competitive (i.e., CCM) singing skills (www.auditioningforcollege.com).



What is the current “sound of music(al)” theater?

- Unlike other popular genres, Broadway music has ***no specific stylistic perimeters*** (Causey, 2012), although usually a cleaner onset/lighter overall registration is employed for vocal health.
- *Once*, singer/songwriter Glen Hansard in original 2006 film, “Leave”
- Actor Steve Kazee Broadway adaptation of *Once*, 2012, “Leave”
- A show’s “sound” is generally based upon 3 influences:
 - The time period represented in the story
 - The time period of the score’s composition (i.e., vogue styles in the period of the show’s production)
 - The time of the show’s production (revivals)



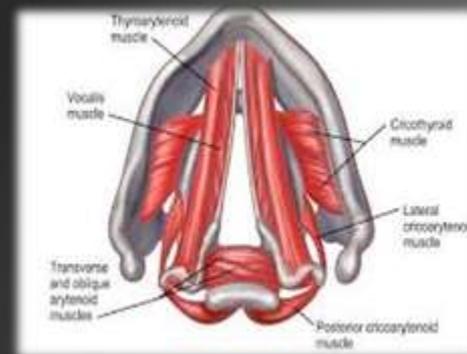
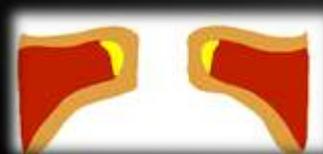
The dominant vocal characteristic of the era in which the show is produced nearly always influences the vocal production.

(Recent example: Lowering the keys of ingénue/legit roles (1996 *Once Upon a Mattress*, 1999 *Kiss Me Kate* revival) to maximize commercial appeal)

Today most performers use a more forward, brighter, brassier timbre with an overall speech-like character rather than a “head voice-dominant/non-speech” sound (Popeil, 2007).... In other words, they are **belting**.

A working definition of the belt voice

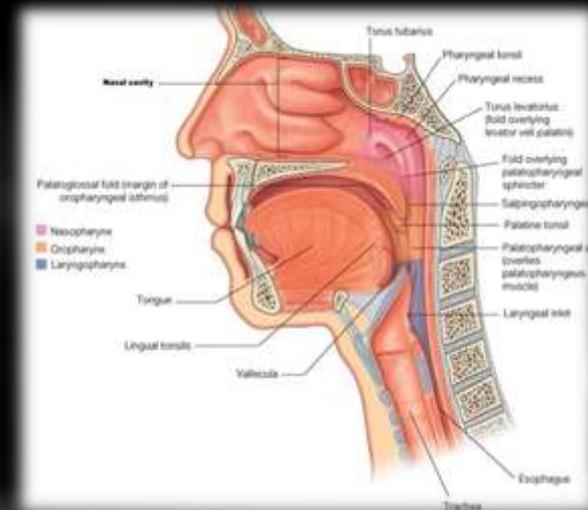
- Still quite controversial, a full survey of the contrasting definitions of what constitutes the belt voice is beyond the scope of this presentation.
- There is not one way to teach belting, exactly as multiple effective classical schools of singing co-exist with distinct strengths (LoVetri, 2002, p.250). However, the following are generally ascribed to produce aesthetic qualities of professional belting:
 - Mechanically, the **cricothyroid (CT)** muscle continues to activate, but as pitch rises, the **thyroarytenoid muscle (TA)**, which shortens and thickens the folds, becomes increasingly active (Popeil, 2007).
 - A glottal **closed-quotient ratio (CQ) of over 50%**, thus creating very high harmonic partials (as high as 10 kHz, while classical sounds rarely exceed 4 kHz) (Edwin, 2007, p.214).
- **Vocal cord animation**
- **Interactive Larynx- CU**



- **Demonstrate** 

Other physical/acoustic criteria

- A higher laryngeal position, creating an acoustic distinction from the “classical chest voice.”
- The first formant and second harmonic rise in tandem on open vowels (around G₄ to D₅ in women) allowing H₂ to dominate harmonic spectrum (Craig, 2003).
- Brightness is paramount, which is created by reduced space, much like opera singers trying to achieve greater *“squillo”* and character effects also requiring a heightened larynx; this must be achieved through some degree of anterior-posterior pharyngeal constriction (Estill, 1988).
- *“CHIARO/SCURO”*
- An overall “speech-like” quality, distinct from the CT dominant head voice of classical singing (Popeil, 2007), although the exact acoustic envelope may be quite variable (LoVetri, 2002, p.250).



Traditional vs. contemporary belt requirements



- [C5 in Musical Theatre – YouTube](#) Montage video by composer Peter Hilliard presenting a chronological (1946-2006) “evolution” of the belted C5 from its more variable origins (could be long or brief, brassy or velvety, or even sung in a heady mix) to its current focused, forward, brilliant (and often epically long) manifestation.
- Contemporary examples (forward-focused, chest-dominant, very bright) now largely defines the “Broadway sound” regardless of specific genre or even voice type!
 - [Sutton Foster \(mezzo-soprano\), 2011 Revival \(Tony Awards\), Anything Goes](#)
 - [Sutton Foster, Chess \(2003 concert reading\)](#)
 - [Andrew Rannells \(tenor\), The Book of Mormon](#)
 - [Marin Mazzie \(soprano\) and Jere Shea \(baritone\); “contemporary legit” Passion](#)
- Also, ranges have expanded exponentially; Traditional beltors were character performers (mostly women) who rarely needed to exceed a C5; now, the chest voice/chest mix is taken as high as the score demands... sometimes to G or G#5 for women, and A/A#4 for men...
 - [“Extreme” belting: Eden Espinosa, “Once Upon a Time”](#)
 - Raul Esparza, Rocky Horror “Floor Show”

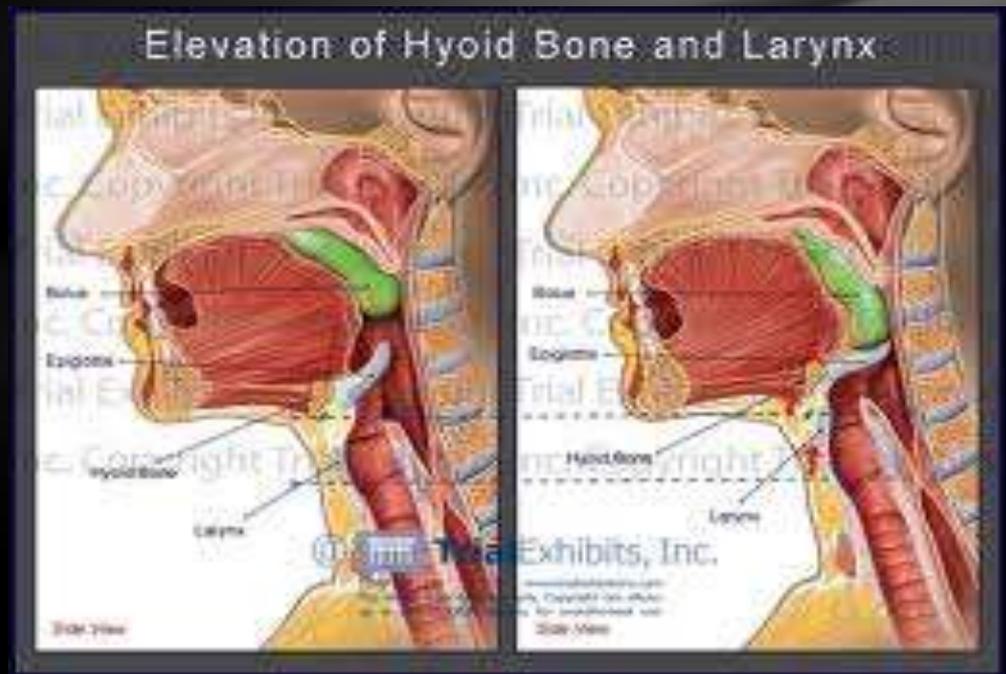
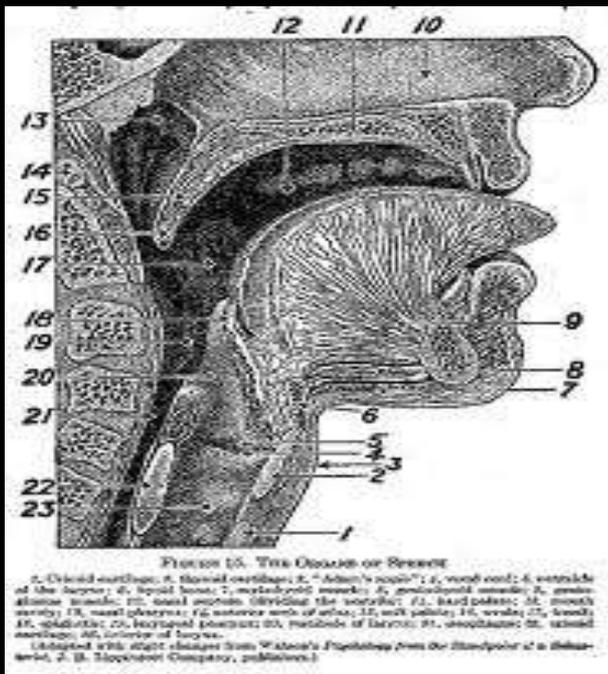


Is belting safe?



- The question of belting being dangerous has more to do with RELATIVE danger; like any high-intensity activity (triathalons, ballet, Formula One Racing School... or, for that matter, opera singing) the principal questions are NOT whether there is potentiality of injury in the practice, period, but:
- Can the activity generally be done safely if done with appropriate instruction, including appropriate warm-up/cool down routines and attention to hygiene?
 - ✓ Answer: Yes! A clear inverse relationship has been established between the incidence of pathology and the amount and quality of previous training (Craig, 2003), and many non-classical singers until recently have not had access to skilled instruction (Melton, 2007); **this indicates that is lack of traditional or available training in musical theater singing, not necessarily the act itself.**
- Is the firmer vocal fold closure dangerous to the voice due to the tensor TA muscle, higher CQ, and increased subglottic pressure?
 - ✓ Answer: Yes, but, again, only if the singer is belting with poor technique! This fine line between belting and pressed vocalization is why the conscientious instructor must be on “press control” to make sure there is no “over-squeezing” of the folds which can create hoarseness and possible vocal fold lesions over time (Popeil, 2007); Belting does likely place additional tension on the vocalis muscle, and singers should employ a “pop” mix approach **using a light mechanism whenever possible** (LoVetri, 2006)

- [Popeil short video on "pressing"](#)
- (Most controversially) Does an elevated larynx, which is antithetical to most classical pedagogy, cause vocal problems?
 - ✓ Not directly.... If handled gently, preventing the hyoid bone from crowding the tongue, jaw, and other organs of articulation. **There are acoustic advantages to slightly raised larynx**, namely, the raising of first formant frequencies in a shortened vocal tract; accommodations including using high F1 vowels (/a/ and /ae/) and modifying consonants to promote free enunciation (Titze, 2007, p. 557-8)



“But....”



- Heeding the potential dangers of too much, too soon (or too late!), vocal pedagogues who condone belting generally do so in a qualified manner; however, upon closer examination of the literature, **the “caveats” speak to singing as a general practice rather than belting as a specialty!**
- Dr. Scott McCoy (Former NATS President Elect, author of *Your Voice: An Inside View*), “I had expected [in my study of belting] to see obvious physical signs of distress... I was wrong. Clenched jaws, wobbling tongues, tight neck muscles, heaving chests, and elevated larynges were not to be found. I now understand these manifestations are found in **incorrect belting, just as they are found in incorrect classical singing**” (McCoy, 2007).
- Dr. Robert Sataloff (Chairman, Board of Directors, Voice Foundation) “[While *bel canto* is my preferred approach]... a good singer should be able to create whatever sounds he or she wants- opera, legit, belt, or whatever- with no unnecessary muscular or physical effort... belting is not yelling...” He adds, however, that **singers who do not have adequate training for the stresses of Broadway (or ANY professional performing are more prone to vocal injury (Causey, 2012).**

Healthful belting in the long run



- ***"Light and Nimble:" use the lightest vocal mechanism possible!***
 - "The CT muscle (responsible for stretching and thinning the vocal folds) must remain active during belting to keep folds from over-thickening and producing a heavily weighted vocal fold posture which could cause excessive tension and strain, particularly in higher pitch ranges...Each issues ate as critical in belting as they are in classical singing. **Healthy, efficient belting is the result of keeping the TA-CT muscle interaction properly balanced in each individual voice.... A lyric soprano has to be a lyric belter with thinner TA activity than a mezzo soprano might use...**" (Edwin, 2007, p. 214)
- ***Vocal "Cross Training:" strengthening ALL aspects of the voice***
 - Dr. Robert Sataloff: "If you want to belt, study with an expert and listen to great belters, all of whom display extraordinary variation when singing. **Vocal variation and flexibility in belting require good technique and are as essential during belt as they are in opera or lieder**" (Causey, 2012)
 - Dr. Wendy LeBorgne: "Maintain a well-produced, resonant speaking voice... **keep the voice flexible and agile throughout the frequency range and dynamic control despite the vocal or physical demands of any given role...Cross-train the voice, train like an athlete, practice smart. Allow for rest and recovery**" (Causey, 2012)



Typical problems faced by young musical theater singers

- Unevenness in register balance to prior overuse of either CT or TA muscles (commonly, classical performers will have relied upon CT, popular/CCM performers on TA) and lack of flexibility/consistency of timbre
- General inefficiency in production (hyper- or hypo-function)
- Style-specific affectation/expressive phrasing
- Pitch problems at register shifts/vibrato issues (less vibrato to conceal the “sins” of pitch inaccuracy!)
- Difficulty in obtaining the “right” balance of pharyngeal constriction
- Excessive tension in tongue/accessory muscles of the jaw and neck
- General alignment issues (sometimes exacerbated by dance or athletic training, or lack thereof)
- Vocal fatigue in rehearsal and performance from lack of strength and endurance training
- Occupational hazards (unrealistic scheduling, casting against *fach*, difficult or dangerous staging demands, physical and psychological fatigue)



In other words... the same problems classical singers encounter, which also require time, patience, and solid training to overcome!

Problems with classical instruction for musical theater performers

"Beau Soir"



- Historically, MT singers have been integrated into conservatory studios where instructors overwhelmingly have not have practical CCM training or experience. (LoVetri and Weekly, 2002)
- MT presents radically different aesthetic criteria, which often contradict desirable acoustic and physiological aspects of classical performance (high versus low larynx, linear rather than vertical "Italiante" vowels, stylistic use of vibrato, twang versus loft, etc.). Techniques enabling self-amplified sound with tall, round vowels, a CT dominant production, a vibrato initiated at onset and continued until offset can and will not produce a contemporary belt (Edwin, 2007)
- MT singers need *SPECIFIED TRAINING* promoting both efficient phonation AND appropriate aesthetic choices for musical theater styles, which do not ALWAYS uphold vocal beauty above other goals (as in *bel canto*).
- In MT, the dramatic and authentic presentation of compelling, dramatic characters is paramount; "projection," and relevant resonance strategies (formant tuning, etc.) are no longer a priority, or even required (LoVetri, 2002, p. 249); CCM singers need occupational training with microphones, so that singers learn to belt with relatively light volume.



Video: What Broadway singers sound like, "unplugged"

"Tonight"

"Nessun Dorma"

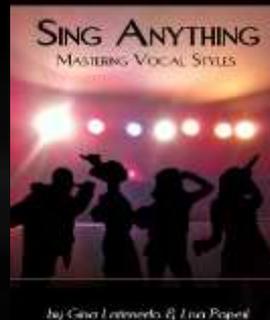


Jo Estill



- Established in 1988 by SVS Jo Estill, was the first individual to participate in extensive testing to identify which vocal tract phenomena occurred with different popular singing styles; described belting as “loud, brassy, twangy, and sometimes nasal” (Estill, 1988)
- **Craft**- study of the subject; **artistry**- interpretation of that craft; **performance magic**- how the performer connects with the audience, or the “magic in performance of that task”; Estill work believes that these elements may be worked upon in isolation
- Employs a series of vocal exercises (13 “figures,” like the “school figures” used in figure skating) intended to develop specific control over individual muscle groups within the vocal mechanism; in essence, to create intended timbres by consciously manipulating the larynx, pharynx, etc. (Estill Voice International, LLC).
- Based on source-filter model of production (ignores “power,” or breath management)
- Six vocal qualities defined by different degrees of glottal closure, “opera” being the most open, and “belt” and “speech” being the most closed, respectively (Craig, 2003)
- [Estill Youtube Channel](#)

Lisa Popeil



- Creator of the Voiceworks® method, which assumes (similar to Estill) that your **resonance chambers** can be consciously manipulated to achieve desired vocal tone in any style of music (Popeil 2013, p.29); this is accomplished by adjusting nasality, ring, and brightness (p.22-23).
- Uses **5 larynx positions** (1, “strainy,” 2, “country, rock,” 3, “pop/musical theater,” 4, “opera/ R&B,” 5, “extreme low notes” and **3 pharyngeal positions** (wide for classical/R&B, constricted for country and rock, and neutral for musical theater, jazz, and pop) (p.19-21)
 - Musical theater style: “Jaw...similar to exaggerated talking....tounge....in a high, forward position...larynx... position #3....soft palate...nasality commonly heard....pharynx....neutral... resonance feel... vibrate in nose, sinuses, and teeth...style shape ‘molar mouth’...” (p. 38-40)
- Method cultivates a “multiplicity” of belted timbres (Speech-like belt as baseline, nasal belt for “heightened projection/matter-of-fact conviction,” heavy belt for “age and world-weariness,” twangy belt for its “strong ring and nasality,” brassy belt as the “traditional Merman sound”) to better depict the full spectrum of characters and sentiments portrayed on the stage (Popeil, 2007; Popeil’s examples hyperlinked) (Sundberg and Popeil, 2010)

Somatic VoiceworkSM



- Jeanette LoVetri, The Voice WorkshopTM
- [CCM Vocal Pedagogy Institute at Shenandoah University](#)
- Doesn't ascribe to "set" vocalises, but employs singer-specific, dynamic exercises to divide and conquer individual registers, "Functional Voice Training" (FVT) (Causey, 2012)
- Certified instructors taught a Solution Sequence[®] which identifies vocal weaknesses (No head register, lack of coordination in-between registers, excessive breathiness/nasality, etc.) and allows the instructor to craft personalized, simple "remedy" vocalises.

Example (excerpted from course materials):

NO CHEST REGISTER

Location of problem: vocal folds

Remedies: **Vowels** /a/, dark "ah," /o/ **Tone Quality** dark, low, thick, "fog horn," "growly"
Musical Patterns single notes, 2 note slides, short scales done slowly **Physical Body**
dropped jaw, loose tongue, rounded lips, moderate breath pressure **Possible Problems**
little response, roughness, flattening, heaviness, vowel distortion, shortening of range at top (LoVetri, 2006)

Concluding thoughts



- To effectively train performers to be as marketable as possible in a rapidly changing musical culture, **it is critical that students be well acquainted with vogue genres and means of vocal production**; as regrettable as it is that classical institutions in the United States are struggling to remain culturally relevant, musical theater is more popular than ever; the successful crossover singer is likely to **have access to more gainful employment than their classical-specialist peers in the coming decades**
- Vocal pedagogues should examine preconceived notions about **what constitutes aesthetically pleasing** (Popeil, 2007) **as well as HEALTHFUL vocalization**, not confusing their distaste for the belted quality as it being innately undesirable or dangerous!
- ALL vocal training, regardless of genre, should **include development of the whole vocal mechanism** (from lowest TA-dominant sound to highest CT) **as well as a multitude of resonance strategies so that entire apparatus gains strength, flexibility, and endurance....** “one vocal fold source or limiting resonance options is simply bad voice pedagogy!” (Edwin, 2007)

Training Resources:

- [Estill Voice International](#)
- [Voice works® \(Lisa Pupil\)](#)
- [The Voice Workshop™ \(Jeannette LoVetri\)](#)
- [Robert Edwin](#)
- [The College Audition Blog \(Matt Edwards\)](#)

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