# Healthy Belting for the Classically Trained Singer

by

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**Treatise** 

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The University of Texas at Austin, 2020

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This treatise explores the history of belting, the differences in types of belting, belting registers, exploring a methodology of healthy, and stylistically correct belt. The ability to sing musical theatre style has become high in demand from both Broadway and Opera companies. About more than half of Young Artist Programs, pay to sings, and apprenticeships put on at least one musical theater show a season. Those on the audition panel now ask in the audition requirements for at least one musical theatre piece to perform for them. Having the knowledge of how to properly belt will help the performer have more opportunities than other singers who only know how to sing bel canto style.

This treatise will include a new methodology that will address a belting technique through the lens of a classically trained singer and how to transfer elements from bel canto technique into a belting technique. The questions that will be addressed in this treatise are as follows: 1. What quality and stylistic elements does belting require? 2. What is the difference between the contemporary commercial music methodology (CCM) and musical theatre methodology on belting? 3. Why is it important to learn how to belt as a classical singer? The author will answer these questions by providing information from sources of both professional teachers in the classical singer industry as well as professional teachers in the musical theater

industry. Proper vocal exercises with detailed instructions are also provided to help the classically trained singer navigate their voice in belting.

The relevance of this topic is very strong right now, this is a need that people are trying to educate themselves by watching Youtube tutorials, reading inaccurate literature on belting, and trying to do it on their own with no proper knowledge on the subject. If belting improperly, a singer is susceptible to injuring their voice. It is time to break the myths and cautions on belting and make it known that there is a healthy and stylistically appropriate way to belt.

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#### **CHAPTER 1**

#### WHY IS BELTING IMPORTANT?

#### What is belting?

Belting is a term that is a topic of discussion for many teachers and singers. According to Rachel Lebon, belting "must be regarded and presented as high-efficiency phonation – that is, it exacts tremendous energy, sustained projection and support, and thus optimal vocal technique, control, and efficiency. An integral part of belting pedagogy must therefore include explanations that foster knowledge of the vocal mechanism, awareness of what constitutes vocal abuse and misuse, and strategies to produce the vocal sounds that are demanded, efficiently, with the objective of vocal endurance." One main myth of belting is that it is detrimental to the voice when the chest register is brought up into the middle and higher register of a female voice. Even the best vocal pedagogues have differing opinions on belting technique. Richard Miller states that "Belting carried into the middle and upper regions of the range must surely induce physical conflict." This is something that is proven to be true; however, other pedagogues such as William Vennard state that "forcing the female chest voice upward is dangerous if not actually malpractice." This means that bringing the female chest voice up could potentially be detrimental if not done in the correct way, which is suggesting that there is a correct way of doing so. Even more vocal pedagogues continue to question whether that is actually damaging to the vocal folds to do so, or if there is another way to belt by not having to only bring the female chest voice into the middle and upper registers of the voice. One way of safely bringing the chest

<sup>&</sup>lt;sup>1</sup> Rachel Lebon, *The Professional Vocalist: A Handbook for Commercial Singers and Teachers*. (Lanham, Md. and London: The Scarecrow Press, 1999), 117.

<sup>&</sup>lt;sup>2</sup> Richard Miller, Solutions for Singers (New York: Oxford University Press, 2004), 151-2.

<sup>&</sup>lt;sup>3</sup> William Vennard, *Singing: The Mechanism and the Technic* (New York: Carl Fischer, 1967), 76.

voice into the middle and chest registers is by mixing which is allowing some head voice to come into the voice. "Legit" (short for *legitimate*) singing is a slang term that defines a technique often used so that the vocal quality is not so brassy as in belting. "Legit' songs developed out of the operetta tradition and require the singer to integrate elements of classical technique." "Legit" shows are musical theatre pieces that have more bel canto/classical technique required vocally. Musicals that require "legit" musical theatre singing include *A Gentleman's Guide to Love and Murder, The Light in the Piazza,* and *The Phantom of The Opera*.

### The importance of belting as a classical singer

Musical theatre and opera are two diverse musical genres that both combine dramatic literature with music. While there are vocal stylistic differences between singing musical theatre and opera, there are also similarities that a classically trained singer might not realize. Recognizing these differences and similarities may not only change the way someone belts, but can also bring the adoption of some of these ideas and their use in bel canto styled singing. One of the major subjects that striving young artists in the opera world focus on is how to be a more marketable performer. Learning how to properly belt not only helps a singer accurately perform the style of a piece in musical theatre, but it also may keep one's vocal folds healthy, and will help a singer's chances of getting more jobs. Classical singers spend a great deal of time and money learning how to properly sing with a bel canto style technique, so much so that approaching a musical theatre song can seem straightforward. The problem is that there are many

<sup>&</sup>lt;sup>4</sup> Matthew Edwards and Matthew Hoch, "CCM versus Music Theater: A Comparison," *Journal of Singing* 75, no. 2 (November/December 2018): 183.

classical singers who do not learn how to accurately produce a musical theatre belt and therefore do not get hired by many opera companies and musical theatre companies.

A classically trained singer should want to be a versatile singer. Opera companies frequently ask singers to include a musical theatre piece in their audition book, and many are even producing musicals in their seasons. An article by David Belcher in *The New York Times* stated that "Musicals are drawing in audiences who have never attended a traditional opera — 50 percent of the audience at the recent [Chicago] Lyric Opera production of Oklahoma! were seeing their first production at the opera house." Opera companies are trying to get a larger audience due to the mainstream popularity of musical theatre and if singers want to perform with those companies, they need to be able to both belt and sing bel canto styled technique. The myth that belting can ruin an opera singer's voice is not true, unless someone does not learn how to properly belt. However, there are always going to be some risk factors related to the amount that a person could belt without proper training. According to voice teacher Wendy DeLeo LeBorgne, "Not everything a singer does is vocally healthy. But cross-training the instrument (which can mean singing in both high and low registers with varying intensities and resonance options) is likely a vital component to minimizing vocal injury." Classical singers should want to learn how to belt healthily for this reason alone. It is possible for a classically trained singer to be able to learn how to navigate belting in a healthy way.

<sup>&</sup>lt;sup>5</sup> David Belcher, "Musicals or Opera? Stage Companies Are Drawing on Both Art Forms" *New York Times*, March 26, 2014.

<sup>&</sup>lt;sup>6</sup> Karen Hall, *So You Want to Sing Musical Theater: A Guide for Professionals* (Lanham, MD: Rowman & Littlefield, 2014): 53.

# The business of opera vs. musical theatre

The business of opera and musical theatre today are changing. The industry of musical theatre is quickly turning to the vocal production of pop and rock. With every new musical that requires this type of singing (such as *Waitress the musical* written by Sara Bareilles and *Dear Evan Hansen* written by Pasek and Paul), there are songs that have a folk/pop quality to them and requires a pop styled vocal technique. The majority of auditions for Broadway or touring companies are for people who prepare two contrasting 16- or 32-bar cuts of a pop/rock song. Casting directors expect aspiring performers to have an audition binder that contain a couple of contrasting pop, rock, folk, country, 1950s, 1960/70s pieces as well as golden age musical theatre (songs written before 1950) and musical theatre pieces written after 2000. This already shows that the industry is moving from having singers perform just two cuts of contrasting musical theatre pieces to singing a song that was recently on the top Billboard 100 recently or a song written by any popular band or singer/songwriter. (See Figure 1 for an example).



Figure 1. "Dear Evan Hansen" open casting call

Since the top casting directors and agencies are changing their requirements auditions, performers need to vocally train and prepare for these types of auditions. Broadway is continuing to change what they expect out of a singer's voice; they also expect more out of the aspiring Broadway performer than just singing. According to Broadway Music Director Oscar Kosarin, "The singer auditioning today for a Broadway show or a reputable summer stock company is expected not only to sing well. He must also move like a dancer and be able to perform the most difficult choreographic routines." This is an element that performers who focus only on opera will struggle with or will underestimate: just how important it is to be a triple threat in the Broadway industry. It varies widely with what role you would perform; for example, if you were cast as Bloody Mary in South Pacific, you would not need to have the same dance training as someone playing Cassie in A Chorus Line. If an opera singer would like to be versatile enough to audition for many different roles in both Broadway companies and in opera, however, taking multiple, different styled, dance classes a week is advised. There is also the element of acting that comes to play. Some classical voice instructors want their singers to focus on the voice because that is the most important aspect, even if the singer is not showing their emotions as fully as they could through their facial expressions or appropriately portraying a character. This will not work for an audition for Broadway. The voice is extremely important for casting directors, but it is just as important to be fully in character and portraying the moment of the piece, as well as, accurately dancing the choreographed combination learned that same day. The Broadway industry has cut-throat competition and requires years of training in singing, dancing, and acting.

<sup>&</sup>lt;sup>7</sup> Oscar Kosarin, *The Singing Actor* (Englewood, NJ: Prentice-Hall, 1983).

In the opera industry there have also been shifts in repertoire choices as well as audition requirements for top opera companies. The usual required audition repertoire consists of four contrasting arias each in a different language. What has started to happen recently, depending on the company and their season, is that companies will ask for three arias in French, German, and Italian as well as an English operetta/musical theatre selection. If an opera singer does bring a traditional musical theatre selection and can sing it with the correct stylized technique for musical theatre rather than sounding like an opera singer performing a musical theatre piece, then that will impress the company and will make the singer stand out. Because opera companies are starting to add more musical theatre shows to their seasons, performers should be well versed in both styles of singing. (See Figure 2 and 3 for examples of audition requirements).

#### **Audition Requirements**

**Audition Requirements** 

- An excerpt from an opera (preferably in Italian).
- · An additional aria of choice
- · An excerpt from musical theater.
- · Headshot and Resume

#### **Pianist Provided**

Yes. May bring own

Pianist fee is included in the \$30 nonrefundable application fee.

#### **Opportunity Information**

#### Location

Charlottesville, VA USA

#### **Season Information**

2019-2020

Summer 2020 Season

- 1) Giacomo Puccini's La bohème
- 2) Disney's Beauty and The Beast

Figure 2: Charlottesville Opera Apprentice Audition Requirements

#### **Audition Requirements**

For either live or recorded auditions, you must submit the following:

#### **DEVELOPING SINGER & PROFESSIONAL FELLOW APPLICANTS:**

- ·Baroque Aria (Handel, preferred)
- ·Classical Musical Theatre Selection (Kurt Weil or R&H, preferred)
- ·Contemporary American Aria (only for baritones & mezzos wishing to be considered for As One)
- ·Contrasting Aria of Choice

# DEVELOPING SINGER & PROFESSIONAL FELLOW APPLICANTS (who are only auditioning for *Carousel* and/or *Threepenny*):

- ·Classical Musical Ballad Up-Tempo
- ·Classical Musical Theatre Ballad
- ·Contrasting Selection of Choice
  - \* Kurt Weill or R&H is strongly encouraged for at least one selection.
  - \* No musical theatre cuts will be permitted. Full selections, only.
  - \* Legit sopranos specifically auditioning for the role of Lucy in *Threepenny* should showcase a sustained High C in their offerings.

Figure 3: Hawaii Lyric Opera Program Audition Requirements

Even for operas, opera companies now expect that singers can act as well as sing, highlighting the importance of being able to express and act the character fittingly. This calls for a singer who not only has the vocal training required, but also, just as much acting training. This is a reason why more Broadway stars are being cast in operas or musical theatre productions and are preferred over someone who is already in the company. Brian Zeger, artistic director of the vocal arts program at Juilliard, said in *The New York Times*, "I think opera singers have a more diverse set of skills than the average singers had 20 or 30 or 40 years ago. And they have to. I think it unlikely that a singer could make a major career today ignoring any of the facets of performing. All the skills have to be there."

<sup>&</sup>lt;sup>8</sup> Charles Isherwood, "Operatic Acting? Oxymoron No More" *New York Times*, September 9, 2007.

Kristin Chenoweth is an example of a famous Broadway actress who started off pursuing a career in opera. She majored in vocal performance at Oklahoma City University for her Master of Music degree and learned how to sing classically first. During her time there she also learned how to properly belt, then went to audition for an Off-Broadway show called Animal Crackers and booked it; after that she continued on her path to a career in musical theatre. She is an example of an artist who happened to find more opportunities in musical theatre than in opera. The industry of opera has started to have a crossover of artists who do mostly musical theatre, but have been also asked to perform various roles in an opera house. For example, in April 2015, Laura Osnes, who is mostly known for playing Cinderella in Rodgers and Hammerstein's Cinderella on Broadway, played Julie Jordan in a production of Carousel at the Lyric Opera of Chicago. In March 2018, Kelli O'Hara, who is known for playing Clara in *The Light in the* Piazza on Broadway, played Despina in Cosi Fan Tutte at the Metropolitan Opera. These opera houses who are hiring artists who perform mainly on Broadway are selecting them because of their diverse skill set. This shows that being a marketable performer opens up more jobs for people who can sing both musical theatre and opera.

# Being a marketable performer

Being a marketable performer is crucial if performing is the career path someone wants to take. There are different performing venues that a singer can try to book, "cruise ships pay as much as \$1,000 a week and often provide free room and board. Performers in Broadway shows...earn \$1,807 per week (Minimum salaries-production agreement [Broadway & National

tours], 2013)," according to Matthew Edwards. Depending on which unions a singer can join (Actors Equity Association or American Guild of Musical Artists), these professional guilds can also help an artist gain other types of benefits, even health insurance. However, to be able to join some of these unions, an artist needs to be good enough to book a job for which the union would be willing to give you a contract.

Being able to have versatility in singing techniques may mean you can not only crossover between opera and musical theatre, but also among different genres in musical theatre (from "legit" musical theatre to belting). According to Joan Melton, "the demands on the musical theatre performer are greater than ever. For auditions, a singer may be required to sing an operatic aria one day and a rock song the next. But I believe we are heading back to some form of specialization in musical theatre, since there are so many styles being presented in new shows and revivals." Having the skill to sing "My White Knight" from *The Music Man* requires a completely different type of technique than being able to sing "World Burn" from *Mean Girls*. If a singer learns how to properly sing with a classical technique to sing "My White Knight" and they learn how to belt "World Burn" in a healthy manner, then that singer is more marketable than the singer who can only sing one or the other.

Not only do performers need to be able to perform both styles correctly, but also more importantly, they need to do so in a healthy way. According to noted belt teacher Mary Saunders Barton:

One of our recent graduates has been told to suit up for the matinee performance as Elphaba in *Wicked* on Broadway!...If and when she is asked to take over the role on a permanent basis, she will have to have the vocal stamina to perform it eight times a week

<sup>&</sup>lt;sup>9</sup> Matthew Edwards, *So You Want To Sing Rock N' Roll* (Lanham, MD: Rowman & Littlefield, 2014): 50

<sup>&</sup>lt;sup>10</sup> Joan Melton, *Singing in Musical Theatre: The Training of Singers and Actors* (New York, NY: Allworth Press, 2007): 20

without fatigue. All of us who teach singing for musical theater know we are training vocal athletes in the same way we would train a runner or a football player. Endurance and healthy technique are paramount.<sup>11</sup>

Learning how to pace yourself to sing eight times a week, which is what Broadway performers need to do, is the most important skill for a performer. If someone belts without the proper technique, perhaps it could pass for that one audition; however, it is not going to be sustainable for the vocal folds. It is crucial that the performer who plans to crossover into musical theatre learns a healthy technique that can last for multiple performances a week.

# Being a marketable teacher

In addition to wanting to learn how to produce a healthy belt for the purpose of performing, it is also crucial to know how to teach it. There is no doubt that the musical theatre industry is mainstream right now, and this is especially true among those who are younger. With live T.V. and movie musicals that keep appearing, it is hard not to get a taste for musical theatre. This does influence the students that want to take voice lessons, especially if you teach private voice lessons. The number of students who take voice lessons because they want to learn how to sing classically is far smaller than those who want to learn how to sing pop, rock, and musical theatre. While it is extremely important for every student to learn bel canto techniques in order to have a good foundation, if a teacher only teaches classical pieces and none of the other types of music each student wants to learn how to sing, students may leave the voice studio and find another teacher.

<sup>&</sup>lt;sup>11</sup> Mary Saunders Barton, "Broadway Bound: Teaching Young Musical Theatre Singers in a College Training Program," *Journal of the National Association of Singing Teachers'* Association, (2013): 4-5.

In order to be a teacher with a large and profitable studio, it would be wise to learn to teach how to belt in a healthy way. Not only could a voice teacher be able to cater to their students' needs, but also being able to teach that technique could create a specialty of teaching that will attract other types of students, such as those who perform in rock bands around the city or community/touring performers in the city. This could create revenue for the private studio teacher who knows how to teach healthy belt over a teacher who does not. It can also expand the types of jobs one is qualified for if you would like to teach at the academic level. A large number of schools have both classical voice and musical theatre programs combined. (e.g.: Oklahoma City University, Cincinnati Conservatory of Music, Shenandoah Conservatory, Penn State University, New York University, etc.).

Liz Caplan is one of Broadway's most popular vocal teachers. Some of her current students include: Ben Platt, Caissie Levy, Neil Patrick Harris, and Lin Manuel Miranda. Beside teaching privately, she has also taught other instructors her specific teaching style and belting techniques so that they can in turn teach others, since her studio is constantly full. With this in mind, we can imagine how much revenue she is getting from teaching these successful artists.

According to Suzy Evans, "Her voice lessons are intimate experiences. It's part physical therapy, part yoga class, part counseling. During Platt's session, she runs around the room — in heels — positioning him, massaging his vocal cords, even leading him through seated exercises." Liz Caplan clearly has a holistic approach teaching her students how to be able to sing for eight shows a week. She is the perfect example of a marketable teacher. Everyone should strive to be one in order to have a sustainable wage as a teacher.

<sup>&</sup>lt;sup>12</sup> Suzy Evans, "How Vocal Coach Liz Caplan Makes Both Hollywood and Broadway Sing" *Variety*, January 4, 2018: 2

Performers will most likely have to teach at some point in their lives, and being able to belt will help singers to learn how to teach it to others. There are teachers who make a good living off of just teaching classical voice. However, with the popularity of musical theatre and pop today, the new generation of people in the world are more interested in performing these styles of music rather than opera. This is not to say that a teacher should not teach bel canto techniques in addition to healthy belting, but this can help grow a teacher's voice studio. In addition, the job options in academia and the amount of money that a teacher can earn from teaching both styles in their vocal studio can be far greater than that of someone who is just teaching classical voice.

#### **CHAPTER 2**

#### THE EVOLUTION OF BELTING

Golden Age vocal style: 1920s – 50s

It is helpful for any opera singer who is interested in learning how to crossover to know when, where and how belting started and the stylistic evolution of belting in the history of American Musical Theatre. Belting existed long before musical theatre and dates back to African working songs and music from other countries. Belting was simply adapted into the musical theatre genre. However, there has not been one specific style of belting; rather, it has actually developed in different ways over time.

In the 1920s, vaudeville was a popular style of entertainment in the United States. The style of singing found in vaudeville was more like a cabaret style or jazz vocal technique, which was quite different than the operatic styled singing that was popular before. The orchestra in the pit for Romberg and Victor Herbert shows at the turn of the 20th century became a band that included more woodwind and brass instruments. As time went on, belting arose as a way for the singers to be heard unamplified over this accompaniment. In 1927, the musical *Show Boat* became a great success and represented a turning point for musical theatre. *Show Boat* which was very successful at its time, is commonly considered to be the first integrated musical on Broadway. This show not only had operatic styled singing characters but also had characters that sang with a chest voice production most of the time. An example of this is the song, "Can't

<sup>&</sup>lt;sup>13</sup> John Bush Jones, *Our Musicals, Ourselves* (Lebanon, NH: Brandeis University Press, 2003): 76.

Help Lovin' Dat' Man," which is sung by the character Queenie. <sup>14</sup> This piece does not go very high and stays in the female chest register (see Figure 4).



Figure 4: "Can't Help Lovin' dat' Man" mm. 15-22 from Show Boat<sup>15</sup>

After *Show Boat*, more iconic musicals were written and premiered, and *Mermania!* began to emerge with the rise of Ethel Merman. In 1930 Ethel Merman starred in *Girl Crazy*, which was written by George and Ira Gershwin and opened at the Alvin Theatre. Merman took the theatre world by storm and was especially known for her belting, brassy voice that was so different from other performers in theatre at the time. Other composers started to take notice and began to write shows that had more than one belting character. In 1934, *Anything Goes* was composed by Cole Porter. The characters of Reno Sweeney and Erma have songs that require the brassy belting voice. "Buddie Beware" requires the character of Erma to sing in the lower

<sup>&</sup>lt;sup>14</sup> Ava Gardner, "I can't help lovin' dat' man," from *Show Boat* Filmed 1951, movie clip, https://youtu.be/rGOyycNqiWA.

<sup>&</sup>lt;sup>15</sup> Jerome Kern, *Showboat*, New York: NY T.B. Harms Company, 1927.

register of her voice (see Figure 5). Erma is a comic role, meaning the brassy/belting voice style is necessary in order to attribute to the comedic acting.



Figure 5: "Buddie, Beware" mm. 11-18 from Anything Goes<sup>16</sup>

Oklahoma! by Rodgers and Hammerstein premiered in 1943. This work was a huge turning point for musical theatre. With a story that is filled with conflict and beauty, the score required actors who were able to create a character through their voice in the songs. Lee Dixon was the original Will Parker, who is a comedic character that falls for another comic character, Ado Annie. Lee Dixon was previously a vaudeville performer and did not have formal vocal training. Since the role of Will Parker is a comedic one, the vocal line in Will Parker's songs required a belt vocal quality as well, which was a turning point for belting in the male voice. Ado

<sup>&</sup>lt;sup>16</sup> Cole Porter, Anything Goes, New York: NY Chappell & Co., 1936.

Annie's character is similar, as her song "I can't say no," is sung with a country twang and belt. Laurie, who is the other female lead, in the show, is a "legit" soprano character who has songs that require a more classically-based vocal technique. Musicals during this time typically contain an equal number of characters that require belting as well as characters that require a "legit" technique. Another example of a musical with a similar distribution of belt to "legit" characters is *Kiss Me Kate* (1945) by Cole Porter. With the advent of musicals with both belt and "legit" character types, microphones began to be introduced on stage. The introduction of amplification made it easier for musical theatre performers who did not have a voice that could carry in a large concert hall to sing on stage. *Carousel* (1945) was the last major production to not use mics; after it, floor mics began to be used in almost every theatre.

*Gypsy*, composed by Styne and Sondheim, was written in 1959. It is another show that great belters such as Ethel Merman (who created the role of Mama Rose), Angela Lansbury, Bernadette Peters, and Patti Lupone have all excelled in, in the role of Mama Rose. Rose's songs in that production are very loud, brassy and belty. The character of Mama Rose requires a "force of nature" – type voice to portray her big personality. While the tessitura is not necessarily in a low register of the voice (the main range is between C4 and D5 as can be seen in Figure 6), the character requires the singer to sing with belt, mainly bringing chest register up to the middle part of the female range.

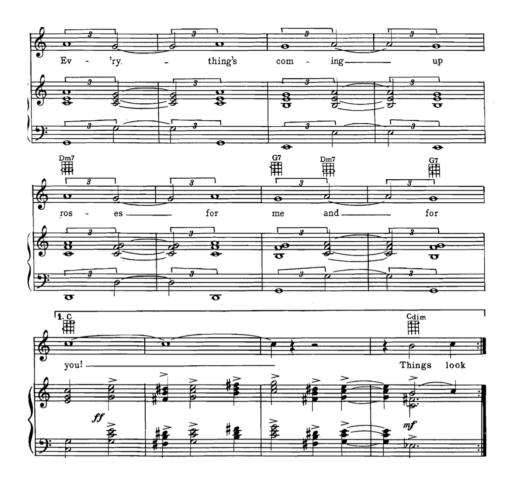


Figure 6: "Everything's Coming up Roses" mm. 33-44 from *Gypsy*<sup>17</sup>

The vocal style of the Golden Age (1920s-50s) is still known today as predominantly "legit" singing. However, this was the time when belting started to emerge and when there were musicals that did require belting at some level. This belting vocal style depends on the musical. In the example of *Show Boat* there is not necessarily the type of belting that we associate with more contemporary music, but some roles in the piece required sustained singing in a lower range of the female voice. If the character that the performer is portraying in a musical of this period is comedic, it is usually sung with a belt production that requires the brassy, wide vowels, twang, and bright sound.

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<sup>&</sup>lt;sup>17</sup> Jule Styne and Stephen Sondheim, *Gypsy*, New York: NY Hal Leonard, 1959.

# "Rock Opera" vocal style: late 1960s – 80s

At the end of the 1960s shows started to emerge that contained only belting characters. The musicals of the time were influenced by the socioeconomic conditions of the country, such as the Civil Rights Movement and the Cold War, as well as the popular style of music that was emerging. *Hair* (1968), composed by Galt MacDermot, *Jesus Christ Superstar* (1971), composed by Andrew Lloyd Webber, and *Pippin* (1972), composed by Stephen Schwartz, are prime examples of this new style. The characters have belt styled vocal lines which probably help portray the passion and conditions that the characters were feeling in the context of these shows.

After being off-Broadway for a limited run, *Hair* opened at The Biltmore Theatre in 1968. This show is iconic for its portrayal of the hippie movement that occurred during the 1960s and '70s. This musical not only portrays this through its subject matter, sets, and costumes (or lack thereof), but also thanks to the folk/rock styled songs that it includes. The show has several characters that are all featured at some point of the show. From the iconic songs of the show to the ensemble numbers, all require belting from each character in the show. One of the songs that is an example of this (see Figure 7) is "Easy to be hard."



# Figure 7: "Easy to be hard" mm. 12-17 from Hair<sup>18</sup>

In the 2009 revival, Caissie Levy played Shiela Franklin, the character who sings this song. 19 The piece has a high point in the bridge of the song where she belts to a D5. This is higher than the previous example of belting to a C5 in "Everything's coming up roses." (See Figure 6). There are examples of even higher belting in songs like "Hair," "Let the sunshine," and "Aquarius." The popular music during this time influenced some of the pieces, and some songs were even taken from popular bands and put into the musical. The stylistic elements of the vocal lines, such as vocal slides, belting, and gospel elements, are what popularized this musical.

Jesus Christ Superstar (1971) is another example of musicals where contemporaneous popular music influences the composition of the piece. This musical is one example of Andrew Lloyd Webber's vocal writing which features extreme vocal ranges for singers (another example are the roles of Christine and Carlotta in The Phantom of The Opera). The male characters of Jesus and Judas both have extremely high vocal ranges. This musical is termed a "rock opera," which usually is a term for an album of rock songs with music centered around a specific theme; another example of this is the musical The Who's Tommy. In this case, Andrew Lloyd Webber and Tim Rice originally released this work as an album with Rock singer Ian Gillian, lead singer of Deep Purple, who sang the role of Jesus.<sup>20</sup>

Webber uses the rock sound throughout the show and requires the singers to use the same stylistic tone. Vocal rasp in the sound, growling, high belting (almost to the point of screaming) is used throughout the show as a matter of style but also for the dramatic interpretation of the

<sup>&</sup>lt;sup>18</sup> Galt MacDermot, *Hair*, New York: NY Hal Leonard, 1995.

<sup>&</sup>lt;sup>19</sup> Caissie Levy, "Easy to be hard," Ghostlight Records, 2009, soundtrack recording, https://youtu.be/p5qKrYbFe44.

<sup>&</sup>lt;sup>20</sup> Matthew Edwards and Matthew Hoch, "CCM versus Music Theater: A Comparison," *Journal of Singing* 75, no. 2 (November/December 2018): 183.

musical itself. An example of this vocal style is one of Jesus' songs, "Gethsemane." (See Figure 8). In this song the singer belts to a G5 which is extremely high for any male voice. It is written as "ad lib." on the sheet music but every person who has played Jesus has sang some version of holding a high note on the word "why" for at least 4 beats, and then adding their own vocal riffs until the end of the line. In some versions the performer would even sing up to an A5. The technique of spreading the lips and extending the larynx is something used in this style.



Figure 8: "Gethsemane" mm. 59-65 from Jesus Christ Superstar<sup>21</sup>

There were other popular musicals during this time that were similarly influenced by popular music and contained high belt singing. According to Scott Miller: "A rock musical could

<sup>&</sup>lt;sup>21</sup> Andrew Lloyd Webber, *Jesus Christ Superstar*, New York: NY The Really Useful Group, 1971.

be Jesus Christ Superstar, Two Gentlemen of Verona, The Rocky Horror Show or Grease. None of which sounded anything like the others; yet they all shared a disdain for authority and a taste for rebellion to which only the language of rock and roll could give full voice."<sup>22</sup> These extreme vocal demands define why these musicals are designated as "rock musicals/operas."

Two shows by Stephen Schwartz from the early 1970s also feature belting. *Godspell*, composed by Schwartz in 1970 and premiered in 1971, is another example of a musical which also took on religious themes and was popular for the style of music that had this upbeat, modernistic, and gospel elements throughout the show. *Pippin* premiered in 1972. This show has a different plot line and themes as well as more simplistic/vaudeville musical elements that will help with Bob Fosse's iconic choreography written for the dance breaks. The characters in this show are all belting, the title role Pippin does have an example off belting in the song "Corner of the sky," in which the vocal range stays in a high tessitura for any male singer.

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<sup>&</sup>lt;sup>22</sup> Scott Miller, *Strike Up The Band: A New History of Musical Theatre* (Portsmouth, NH: Heinemann, 1964).



Figure 9: "Corner of the Sky" mm. 21-26 from *Pippin*<sup>23</sup>

At the end of "Corner of the Sky," Pippin belts a high C5. Another notable character that belts throughout this musical is the role called the Leading Player, which was originally sung by Ben Vereen, but in the 2013 revival was sung by Patina Miller, who won a Tony for her performance. The ensemble pieces in this show also require belting, as can been seen in such chorus numbers like "Glory" and "Magic to do."

The musical vaudeville style of the show leads us into the musical *Chicago* (1975), composed by Kander and Ebb. This show has jazzy vaudeville elements in the music and requires powerful vocal belting by all leads, but especially the ladies in the show. "All that Jazz," which is sung by the character Velma Kelly, "Roxie Hart," sung by the character Roxie and "When you're good to mama" which is sung by the character Mama Morton are all examples of this powerful belt style. The ensemble also has a few belting numbers, one iconic song being

<sup>&</sup>lt;sup>23</sup> Stephen Schwartz, *Pippin*, New York: NY Hal Leonard, 1972.

"Cell Block Tango," which is sung by the women in the ensemble. The belting is brassy and loud, which portrays the character's anger/frustration and passion in the show.

Going into the 1980s and 90s, Broadway musicals tended to have similar writing, with all of the characters singing songs with belting within the show. European shows that were popular during this time (such as Les Miserables, Miss Saigon, and The Phantom of The Opera), had at least a few "legit" singing roles. In America, however, shows like Little Shop of Horrors and Rent were starting to gain popularity. In 1994, Johnathon Larson's Rent became a hit on Broadway. With powerhouse voices such as Idina Menzel and Adam Pascal, the music was able to make an impact on audience members and change musical theatre. The music in Rent has rock qualities. The accompaniment is more of a rock band, featuring electric guitar solos and percussion rather than an orchestra with string instruments that most musicals before the 1970s would require. The use of amplification allowed for the characters to belt and dance at the same time. At this point, amplification was a necessity for the singer to be heard over the band. Characters in *Rent* like Roger, Mimi, Maureen, and Joanne have songs that require belting. Other vocal effects that are used are vocal riffs and growling that are added to provide "rock-like" qualities. An example of this is the song "Take Me or Leave Me" which is a duet sung by both Maureen and Joanne in *Rent*. (See Figure 10 below):



Figure 10: "Take Me or Leave Me" mm. 42-47 from Rent<sup>24</sup>

The excerpt shows the end of the song, in which Maureen and Joanne sing a very tense emotional scene where the characters break off their relationship. Maureen has to belt from a sustained G4 to C5, then extending to D5, which can be extremely difficult for a female belter (the potential danger would be to carry all the weight from that G4 into the D5 and the larynx is in an extremely high position). This type of vocal writing starts to become the norm in musical theatre songs of the 2000s; *Rent* was a rock musical, and as such it was a good stepping stone into the new millennium.

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<sup>&</sup>lt;sup>24</sup> Johnathon Larson, *Rent*, New York: NY Hal Leonard, 1994.

# Contemporary vocal style: post 2000s

In the new millennium, Broadway was filled with both revivals, pastiche-styled shows, and some new musicals. One that has changed Broadway forever is *Wicked* (2003), composed by Stephen Schwartz. Not only did this musical change history because of the great appeal of its music, stage effects, and of the well-known story line it is based off of, but it also changed the game for belting for the female voice. Idina Menzel created the role of Elphaba, who is the Wicked Witch of the West in the show. Her vocal range is F3 to F5, which is a range that had not previously been seen in a role with belting throughout the show. For a performer who has to sing the role of Elphaba eight times a week, this can be extremely taxing if not using the correct belting technique.



Figure 11: "Defying Gravity" mm. 63-71 from Wicked<sup>25</sup>

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<sup>&</sup>lt;sup>25</sup> Stephen Schwartz, *Wicked*, New York: NY Hal Leonard, 2003.

This song (see figure 11) is at the end of Act 2 of the musical. At this point in the show, Elphaba has decided to be on her own and is held by a cherry picker in the air while she belts out her final notes of the piece. The score has a fermata on E5 in m. 64, but it is important to note that subsequent performers have sung variations where they ad lib. at this spot where the orchestra has a fermata. Usually, these added improvisations are more difficult and involve higher belting than what is actually written. The vocal quality of Elphaba is usually a bright, piercing vocal belt with agility, while the character of Glinda has the opposite vocal quality and it has "legit" styled singing. The ensemble members in the show also belt throughout the show. While Elphaba has an extreme vocal range for a female belter on Broadway during this time, this became the new standard for other popular shows which followed for both female and male voices.

The new musicals produced after *Wicked* have ornamentation such as riffs and runs that are composed into the scores as well as added by performers, very high belting for both female and male voices, and singing that is similar to pop singing during this time. Some of these musicals include: *Avenue Q* (2004), *Legally Blonde: The Musical* (2007), *Spring Awakening* (2007), *In the Heights* (2008), and *The Book of Mormon* (2011). Although each one of these musicals have vastly different music stylistically, they are all vocally influenced by popular music, all have belting characters, and push vocal ranges for both female and male singers. The Tony Award winning musicals for "Best Musical" following 2011 are each continuing examples of the need for contemporary singing/belting, with the exception of the pastiche-styled *A Gentleman's Guide to Love and Murder* in 2014.

2016 was a big year for musicals that were vocally influenced by popular music and artists. Sara Bareilles is a singer-songwriter who is known for her folk/pop styled music. In 2015

she wrote *Waitress the Musical*, in which all songs are folk-styled and pop that require the singers to be able to produce a strong contemporary belt as well as a folk sound. In 2016 *Hamilton* written by Lin Manuel Miranda, won the Tony award for "Best Musical." *Hamilton* is iconic for bringing rap/hip-hop to Broadway, as well as contemporary belting for the performers. These shows, and others like them, started the new wave of Broadway casting directors requiring singers to audition with 16-32 bars of pop music similar to the style of the show rather than asking for 16-32 bars of a song from a musical. Not only do singers have to know how to properly belt, but they also have to produce a vocal quality that is similar to pop singers, folk singers and rock singers.

The most recent musicals that have been popular on Broadway continue to push the vocal limits for singers. *Dear Evan Hansen* (2017), composed by Pasek and Paul, is one that truly pushes the vocal range for male singers. The character of Evan Hansen was created by Ben Platt whose voice is effortless belting high notes for a Broadway tenor. Figure 12 shows the high range that the character Evan Hansen has to sing. Not only does he have to belt these notes, but the vowels create an additional difficulty. In the song "For Forever (Figure 12), the G4 on the word "way" is usually sung in falsetto for vocal effect. This piece also starts almost like recitative, then the tempo picks up and the vocal range gets higher as the song continues. The agility in this song can be extremely difficult for anyone, especially beginning tenors who often request songs like this one from their voice teachers.



Figure 12: "For Forever" mm. 98-102 from Dear Evan Hansen<sup>26</sup>

In 2018 *Mean Girls* composed by Jeff Richmond, became another popular musical on Broadway. This musical became popular not only because of the cult following for the movie and the affection for the characters, but also because the music includes pop and contemporary belting. The character Regina George has one of the hardest songs in the show which requires a strong belting technique (see Figure 13). This excerpt shows a difficult pop run then belting and holding a C5 and E5 above the orchestra and ensemble singing underneath. These kinds of skills are expected from female singers who are auditioning for the newest shows on Broadway.

Other shows that also require this type of vocal stamina and technique are: *Come from Away* (2017), *Beetlejuice* (2019), *Jagged Little Pill* (2019), and *Hadestown* (2019). These shows are heavily influenced by popular music and continue to push the vocal boundaries for aspiring Broadway performers. Strong vocal technique in various styles of music, belting, and how to

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<sup>&</sup>lt;sup>26</sup> Pasek and Paul, *Dear Evan Hansen*, New York: NY Hal Leonard, 2017.

healthily produce certain vocal effects like runs and growls that can be done eight times a week have therefore become a necessity.



Figure 13: "World Burn" mm. 65-70 from Mean Girls<sup>27</sup>

<sup>27</sup> Jeff Richmond and Neil Benjamin, *Mean Girls*, New York: NY Hal Leonard, 2018.

## Contemporary Commercial Music vs. bel canto

Contemporary Commercial Music is a term that was first coined by Jeanette LoVetri:

Contemporary commercial music (CCM) is the new term for what we used to call non-classical music. This is a generic term created to cover everything including music theater, pop, rock, gospel, R&B, soul, hip hop, rap, country, folk, experimental music, and all other styles that are not considered classical.<sup>28</sup>

Bel canto is the term most commonly used for operatic styled singing. Voice teachers in the bel canto background use the term CCM when discussing the healthy training of vocal styles that are not bel canto and mostly pertain to the training of belting and musical theatre. The term CCM can be a very general term for learning how to belt for musical theatre; however, it is helpful to indicate the other styles that a singer needs to be able to master for the new musicals on Broadway. There are some major differences between CCM and bel canto but also some similarities that would make the transfer of singing bel canto to belting a lot easier.

The following are pedagogical suggestions that could facilitate the transition from bel canto to belting. When preparing to sing both musical theatre and bel canto songs, it is beneficial to use bright, and "forward" vowels such as [a] [ae] [e] [i] with both the musical theatre solo and the art song so that there will be a similar timbre in both styles. Singers often find that a more horizontal mouth opening works better rather than a vertical orientation when singing a belting musical theater piece in order to get a sound that has the brassy timbre required in belting (for example, think of the song "I can't say no" from *Oklahoma*). For art song, vertical mouth space

<sup>&</sup>lt;sup>28</sup> Jeanette LoVetri, "Editorial: Contemporary Commercial Music," *Journal of Voice* 22, no. 3 (2008): 260.

is often sought, in order to achieve the "chiaroscuro" effect of having the brightness in the vowel choices but also a warmth and depth to the sound with tall vowels. If the musical theatre piece is a "legit" one, (such as "Green finch and linnet bird" from *Sweeney Todd*), the vowel and space approach would be the same as an art song. There are similarities in the vocal techniques that are used in both an art song (bel canto style) and musical theatre (CCM) piece.

Another element that, depending on the piece, can be used in both styles is dynamic contrast and *messa di voce*. Even when performing a musical theatre solo, dynamic contrast and *messa di voce* are required. Although the term *messa di voce* is not necessarily used in musical theatre, it is indeed often applied to these songs; if a performance is uniformly loud belt, it might not necessarily be very enjoyable. With any bel canto piece, it is important to use *messa di voce* and other dynamic contrasts as well as to have good musicality.

Another vocal technique that can be used in both styles is using a legato line, depending on the piece. For "I can't say no" it may not be used, but in pieces such as "Green finch and linnet bird," "Sylvia's Lullaby" from *Finding Neverland*, and even "Defying Gravity" from *Wicked*, legato singing is appropriate. The use of quickly articulated consonants and elongating the vowel for more time helps create a legato line.

Vibrato is also used in both vocal styles. Depending on the style of the musical theatre piece singers might use more vibrato in one song than another. For example, if someone sings "On the steps of the palace" from *Into the Woods*, they will use more vibrato than would be used in "Buenos Aires" from *Evita*. This would be done because the character Cinderella (who sings "On the steps of the palace") is a character that is normally sung with a more "legit" musical theatre voice, and in that type of singing performers will use more vibrato. The character of Evita does use a slower rate of vibrato because of the amount of belting that is required in the musical.

The term Contemporary Commercial Music can be too general when discussing a vocal technique that should be used for non-classical styled singing. Broadway is looking for performers who are vocal chameleons who can go from one style to another. It is unwise to believe that the same technique can be used for singing jazz and rock; there are similarities, but each genre has specific differences and it is important for singers to learn how to produce each one of these styles effectively.

#### **CHAPTER 3**

#### METHODOLOGY OF BELTING

#### The vocal quality

What is vocal quality? The National Center for Voice and Speech defines vocal quality as "Voice quality = vocal tract configuration + laryngeal anatomy + learned component." <sup>29</sup> In both bel canto and musical theatre, the learned component will differ slightly, which will affect the vocal quality. However, it is not as different as someone might think, especially for the musicals that are from the Golden Age of musical theatre. In the bel canto style, the vocal quality that is strived for is to have a consistent vocal sound throughout the entire range, such that all vocal registers still sound like the same voice. There needs to be a resonant sound that rings throughout the performance space which can carry over an orchestra and fill a large house full with an audience. It is essential that the singer has rounded vowels and a free mechanism so that the air will spin with ease and produce a full vocal quality. The sound must cut at all times because of the power and clarity in the vocal tone, however, there will not be a full resonance as in bel canto singing. Without mics, opera singers must be able to be heard over an orchestra regardless of size, which depends upon the opera that is being performed, to the back of the hall. With regards to professional theaters and Broadway, mics are used for the performers who are belting. The vocal quality for belting does not have the same demands as bel canto. However, there will be a brassy vocal quality due to the vowel choice, the note that is being sung, where the note is in the singer's range, and the way it is being produced.

<sup>&</sup>lt;sup>29</sup> "Voice Qualities," National Center for Voice and Speech, accessed January 13, 2020, http://www.ncvs.org/ncvs/tutorials/voiceprod/tutorial/quality.html

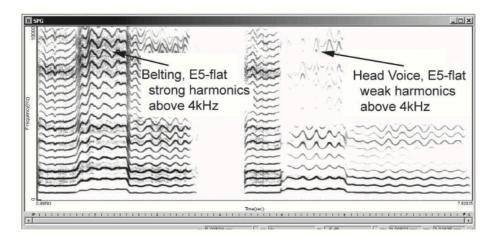
One of the hardest parts for a classically trained singer to do when belting is to produce the correct vocal quality. A give-away for being a classically trained singer singing a musical theatre piece is singing with full resonance and quality in the sound even when singing without much vibrato. It can be extremely difficult because the classically trained singer has spent so much time learning how to produce a full and open sound. For belting, she or he needs to produce a more speech-like and brassy vocal quality. The change of vowel production shaping is the first step in learning to belt. (Some of the ways to help with this are to not let the singer's mouth be too open, depending where the singer is in their range). Bel canto requires vertical shaped vowels that give space in the mouth for a resonant tone. While belting should have tall vowels in order to let there also be resonance in the sound, the vocal quality will need to be focused and bright and will be that way because bringing the chest register higher will produce that sound. This is what distinguishes a belt from "legit" or mix singing and is impressive when someone produces that sound. According to Richard Lissemore, "The singing needs to be very conversational in a lyrical context, with a colloquial use of the language."<sup>30</sup> The beautiful bel canto tone quality that classical singers strive to create is not stylistically correct for singing musical theatre or when trying to achieve a proper belt. The vocal quality of belting should be more natural and similar to talking rather than the ringing full quality of singing bel canto. This is a factor that would show a casting agent that the singer is a classically trained singer who does not know how to properly sing musical theatre, and therefore, is not one who should be hired.

According to John Henny, Lissemore has branded some of the typical mechanisms of the classical singer as "classical voice technique syndrome" or CVTS. "It can come in many forms:

<sup>&</sup>lt;sup>30</sup> John Henny, "How to Transition from Opera to Broadway," Backstage, accessed February 10, 2020, https://www.backstage.com/magazine/article/transitioning-opera-broadway-57056/.

overly shaped mouths, tight jaws, retracted tongues. It could be lifted eyebrows or funny faces."<sup>31</sup> There are many different techniques that classical singers learn for the sake of bel canto styled singing and assume that they will translate well to musical theatre, but unfortunately, they will not. The bel canto vocal quality of a full ringing sound is not only incorrect stylistically for musical theatre, but it also does not help the performer accurately portray the natural authenticity of their character. This is why it is important that the singer who wants to sing musical theatre and belt use a vocal quality that is similar to their speaking voice. The singer should think about speaking on pitch (speak singing, a term for speech level singing trademarked by Seth Riggs) in order to not "over sing" or produce too much vibrato on each pitch. This will relate more to that "colloquial use of language" that Lissemore was discussing. In musical theatre, mics are used, and this also helps the singer not to have to use a full vocal quality when singing. The classically trained singer should try to create a more natural vocal quality by speak singing, not using their full resonance, and decreasing the amount of vibrato to little or none.

Observing the acoustic spectrum of both a classical singer and a belter can also help show what frequencies are strongest in both styles of singing (Figure 14).



<sup>&</sup>lt;sup>31</sup> John Henny, "How to Transition from Opera to Broadway," Backstage, accessed February 10, 2020, https://www.backstage.com/magazine/article/transitioning-opera-broadway-57056/.

Figure 14: Acoustic spectrum of belt and head voice

Figure 14 shows that when this singer was belting E-flat 5, there were strong harmonics above 4kHz, when the same singer sang the same note using head voice, there were weak harmonics in that range. A way to analyze if a singer is actually belting rather than using head resonance, which would be the case for most opera singers, is to look at what harmonics are stronger. A singer can still produce these harmonics by belting incorrectly and the acoustic spectrum would not be able to show whether the belt is healthy or not. However, this is a good system to use when checking if the correct vocal quality is occurring.

## **Breathing**

The breathing for belting is easier to use when using the same school of breathing used for learning bel canto styled music. While there are multiple ways that breathing is taught when singing bel canto; the *appoggio* technique is one of the popular breathing techniques. The *appoggio* technique is what is will be used when discussing the similarities between singing both bel canto and belting. Scott McCoy states that "In appoggio, inhalation occurs through contraction of the diaphragm and external intercostals, accompanied by relaxation in the abdominal musculature."<sup>32</sup> There is a balance between abdominal breathing as well as thoracic breathing and the singer's goal is to have this lean supported feeling during respiration. Figure 15 shows the direction in which the contraction should occur in the singer's body. The process of

<sup>&</sup>lt;sup>32</sup> Scott McCoy. Your Voice: An Inside View (Delaware, OH: Inside View Press, 2012): 90.

inhalation should still remain the same when preparing to sing bel canto or belt; however, the way that the air is released will be slightly different when belting.

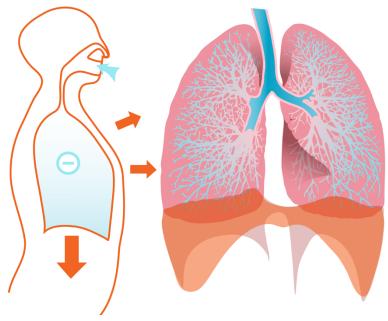


Figure 15: Diagram of Appoggio technique<sup>33</sup>

Jeanine LoVetri, an esteemed belting voice teacher, states that "it takes a good amount of breath support generated by a strong, deliberate use of the abdominal muscles while singing, but it does not use air in the same way that a good classical sound does."<sup>34</sup> The easiest way to think about how to properly support when belting is to think about contracting the abdominal muscles a little more than when using the *appoggio* technique. Inspiration will still be the same when belting: the external intercostal muscles will expand the ribcage, the abdomen will release, and the pelvic floor should descend. When belting the support will feel more between a leaning feeling and pushing feeling in the abdomen. The abdominal muscles will feel slightly more

<sup>&</sup>lt;sup>33</sup> "Appoggio: The Vocal Technique with benefits to body health," Healthy Magazine, accessed March 5, 2020, http://healthymagazine.com/appoggio-the-vocal-technique-with-benefits-to-body-health/.

<sup>&</sup>lt;sup>34</sup> Jeanine LoVetri, "Voice Students: What is Healthy Belting?" Majoring in Music, accessed March 5, 2020, https://majoringinmusic.com/voice-students-what-is-healthy-belting/.

engaged when belting which will result in not as much movement in the abdomen during respiration.

An example of this is Laura Osnes performing "How 'bout a dance" from *Bonnie and Clyde the Musical*.<sup>35</sup> In this clip, you can see the *appoggio* technique when she inhales before a phrase and when she is belting, her abdomen is solid and contracted. For this author, the feeling is similar to the feeling of having a strong engaged core when dancing, which may be an easy reason that this is why Broadway performers use this technique. The contraction helps keep the breath steady when belting any note and since there is no need to have a ringy and free resonance like in classical singing, the abdomen needs to stay engaged (more so than in the *appoggio* technique).

Liz Caplan is one of Broadway's finest voice teachers. She coaches Broadway stars and Hollywood stars throughout their careers when they are taking on new singing roles. One of her students, Ben Platt, won a Tony Award for Best Actor in a Musical for playing Evan Hansen in *Dear Evan Hansen* in 2016. He is another example of someone who keeps his abdomen solid while belting. He mixes more in the beginning of "Waving through a window" but towards the last half he begins to belt out some high notes. <sup>36</sup> Throughout the end of the song he even starts to bend his body in while sustaining these notes, which would be almost impossible to do if you were trying to keep a softer, less contracted abdomen. In classical training, singers learn to keep a posture where the torso remains upright and the body is tall in order to let the air freely come through the body and in order to get as much air into the body and expansion as possible. For

<sup>&</sup>lt;sup>35</sup> Laura Osnes, "How 'bout a dance," from *Bonnie and Clyde the Musical* Filmed 2011, show clip, https://youtu.be/NYtknprFvxE.

<sup>&</sup>lt;sup>36</sup> Ben Platt, "Waving through a window," from *Dear Evan Hansen* Filmed 2016, 2016 Tony Awards performance, https://youtu.be/h9rf5wFq3zk.

Broadway performers, this is not as much of a concern and they need to be able to twist their bodies in different positions and dance at the same time as trying to maintain a sustained belt. However, opera singers also must be active in case they are required to bend or lie down while they are singing.

#### **Vowels**

An important factor in deciding which vowels to use for belt is to note which ones have the strongest harmonics over the fundamental frequency when looking at the acoustic spectrum. The vowels that have been proven to be the strongest are /i/ and /e/ (Figure 16). While singers can modify other vowels to get close to those dominant harmonics, it is important to note each vowel, how they are learned to be produced in bel canto styled singing and the similarities or differences in producing the vowels for belting. In belt, both female and male singers favor vowels which enable them to keep the  $2^{nd}$  harmonic ( $2f_0$ ) strong. That and strong harmonics above 4kHz are the defining factors of belt singing.

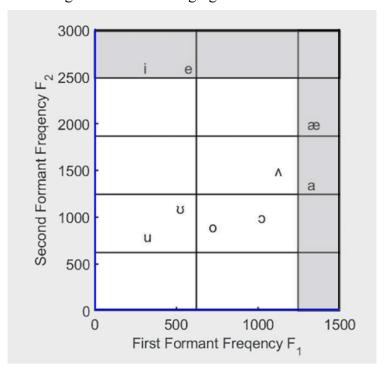


Figure 16: Acoustic spectrum chart with vowels on E-flat 5<sup>37</sup>

Since each singer is different from the other, this will change what type of modification is needed depending on the vowel and the pitch being sung. In a general discussion of vowels and their formants based off of the chart (see Figure 16), /i/ and /e/ will have the strongest high harmonics and the weakest fundamental frequency for the pitch E-flat 5. In bel canto styled singing, the goal is to have many frequencies in the sound and depending on the range, the fundamental may be strong.

In bel canto singing the /i/ vowel can be useful to keep brightness in the sound but it can be hard to sing in certain portions of both male and female higher ranges. The modification to go to depending on the song would be an /I/ or / E/. The vowel must not be too brassy; rounded lips with the vowel may help as another modification strategy so that the phrase is within the musical line of the song. In belting, the /i/ vowel should be created with a more horizontal mouth opening and as "brassy as it can be." In the song "The Wizard and I" from Wicked, Elphaba sings an /i/ vowel on an E5 on the word "team" (See Figure 17). An example of an /i/ vowel and how it is in a performance by Jessica Vosk, a former Elphaba on Broadway.<sup>38</sup> Vosk has a horizontal shape and the sound is brassy and bright on the /i/ vowel. This vowel is helpful to her because it naturally brings out higher harmonics than any other vowel and does not sound like it was modified to a different vowel. The note on the word "team" is high to be belting and is most likely in Vosk's passaggio which makes it even more difficult to sing. The

<sup>&</sup>lt;sup>37</sup> Ingo Titze, "Why /i/ and /e/ Can Be Effective Belting Vowels," *Journal of Singing* 74, no. 5 (May/June 2018): 543.

<sup>&</sup>lt;sup>38</sup> Jessica Vosk, "The Wizard and I" from *Wicked* Filmed 2018, clip of rehearsal, https://youtu.be/KxdjZOuQRnY.

vowel choice along with the strong technique she uses for belting both help contribute to the successful result of her performance (See Figure 18).



Figure 17: "The Wizard and I" mm. 135-139 from Wicked<sup>39</sup>

The vowel /e/ is similar to the vowel /i/ in which they both have a high 2<sup>nd</sup> formant and they can be used somewhat interchangeably for that reason. The sound that the /e/ vowel produces can come off as too bright and brassy for a bel canto sound but can be used in lower ranges with some minor adjustments to the mouth shape. The typical modifications of the /e/ vowel for bel canto would be to change to an /E/. With musical theatre belting, the /e/ vowel can

<sup>&</sup>lt;sup>39</sup> Stephen Schwartz, *Wicked*, New York: NY Hal Leonard, 2003.

be used as the true vowel with no modifications except the slight drop of the jaw depending on the range of the piece. In the song "World Burn" from *Mean Girls*, Renee Rapp, who is currently playing Regina George on Broadway, modifies the vowel in the word "mean" from /i/ to /e/ and still gets a successful outcome. <sup>40</sup> (See Figure 18).

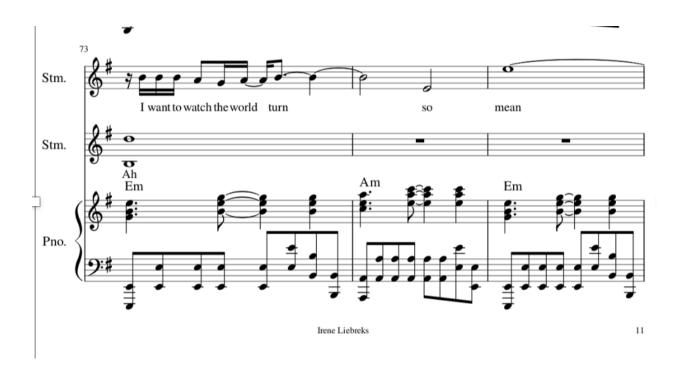


Figure 18: "World Burn" mm. 73-75 from Mean Girls<sup>41</sup>

There are modifications for the /a/ vowel and they are used depending on the range of the piece and the context of the word. In bel canto music, the vowel typically modifies to /ae/ or /ɔ/. When belting on an /a/ staying on the /a/ will work, but modifying to an /ae/ would be even better acoustically. The /ae/ vowel has a higher second resonance than an /a/ vowel, and would help boost the intensity of higher harmonics. In the song "She used to be mine" from *Waitress*,

<sup>&</sup>lt;sup>40</sup> Renee Rapp, "World Burn" from *Mean Girls* Filmed 2019, music video, https://youtu.be/H8bn4w3mMrI.

<sup>&</sup>lt;sup>41</sup> Jeff Richmond and Neil Benjamin, *Mean Girls*, New York: NY Hal Leonard, 2018.

the word "mine" is a diphthong which has both an /a/ and an /i/ vowel in it. The singer should stay on the /a/ for as long as possible in order to produce a strong sustained belt. Allison Luff, a former Jenna (the character who sings this song) on Broadway, sings the word "mine" on a vowel that is somewhere between an /a/ and an /ae/.<sup>42</sup> This is helpful to her because it still sounds like the word "mine" but also brings some more ring to the note by going towards the /ae/ shape rather than a vertical shaped /a/ vowel (See Figure 19).



Figure 19: "She used to be mine" mm. 62-72 from Waitress<sup>43</sup>

The vowel /o/ is used purely in bel canto singing and is also modified to an /o/ or/ a/ depending on the context and the range. Rounding the lips while singing /o/ is also helpful when

<sup>&</sup>lt;sup>42</sup> Allison Luff, "She used to be mine" from *Waitress* Filmed 2019, music video, https://youtu.be/3c7NUyhNuEs.

<sup>&</sup>lt;sup>43</sup> Sara Bareilles, *Waitress*, New York: NY Hal Leonard, 2016.

singing bel canto in order to further extend the vocal tract, as this lowers all resonance frequencies. When belting, the vowel does not need to be the pure /o/ but can also be modified depending on the piece. The /o/ vowel already does not have as many strong high harmonics as the /i/ and /e/ vowels, so in order to retain the higher 2<sup>nd</sup> formant, the singer can modify to /a/. In the song, "'Til I hear you sing" from *Love Never Dies*, (See Figure 20). Ramin Karimloo, who originated the role of The Phantom, modifies the /o/ in the last word of the song "more" to /ɔ/ in the beginning and towards the end of the note modifies to an /a/.<sup>44</sup>

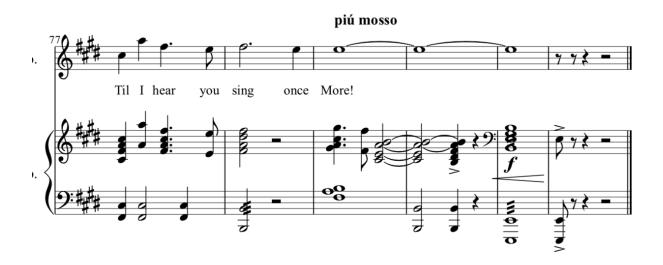


Figure 20: "Til I hear you sing" mm. 77–82 from Love Never Dies<sup>45</sup>

In bel canto singing the /u/ vowel is shaped with rounded lips and to the true vowel unless the singer is in a higher part of her range that requires more space in the opening of the mouth. With belting there will also need to be some space but the /u/ vowel will not have as much space as in bel canto singing. In the song, "With you" from *Ghost the Musical*, Caissie

<sup>&</sup>lt;sup>44</sup> Ramin Karimloo, "'Til I hear you sing" from *Love Never Dies* Filmed 2010, music video, https://youtu.be/47dUc4iMAvQ.

<sup>&</sup>lt;sup>45</sup> Andrew Lloyd Webber, *Love Never Dies*, New York: NY The Really Useful Group 2010.

Levy, the original performer of the character Molly, sings the word "you" throughout the song on different pitches first in head voice and then belting on the note B4 (See Figure 21). 46 When looking at her mouth shape in the video, it seems to be very open and more like the opening for an /a/ but the vowel resembles an /u/. There is not any rounding of the lips but the vowel remains the same. The vowels that are modified are adjusted in a similar manner to ones in bel canto singing however, the direction that it will be modified toward is going to depend on which vowel provides stronger harmonics.

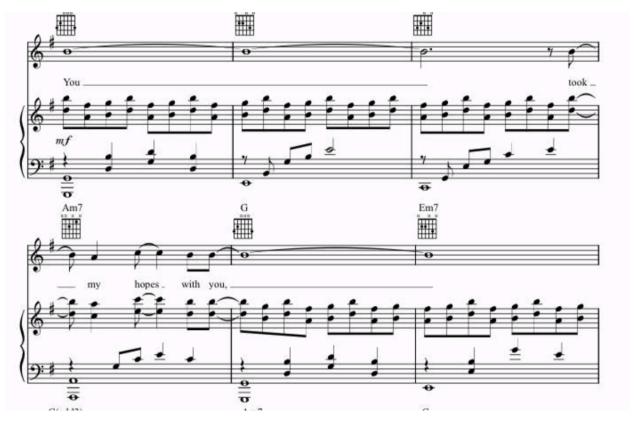


Figure 21: "With you" mm. 30-35 from Ghost the Musical<sup>47</sup>

<sup>&</sup>lt;sup>46</sup> Caissie Levy, "With you" from *Ghost the Musical* Filmed 2013, clip from concert, 2:44, https://youtu.be/JLqd1imYWvA.

<sup>&</sup>lt;sup>47</sup> Bruce Joel Ruben, *Ghost The Musical*, New York: NY Hal Leonard, 2011.

## Laryngeal and palate position

The articulators that singers have all affect the way that the voice will sound. The way that the lips, the tongue, the larynx and the soft palate are positioned will create either the bel canto sound or belting sound based off of how they are positioned. A myth of belting is that the larynx has to be raised in order to produce a belt. This has been challenged through a study by the vocal pedagogue Scott McCoy. In his study, he measured the height of the larynx by using Electroglottography (EGG) where the transducers are placed on the neck. He states that "In our testing, a reliable EGG signal was maintained at all times with all test subjects, indicating a relatively stable laryngeal position with little or no elevation above the resting point. Based on this observation, belting does not require laryngeal elevation."48 McCoy states that there does not need to be elevated laryngeal positions in order to produce a belt and if the larynx does start to rise that means that there is a problem with the technique. However, this is not necessarily the case. The larynx is often in a higher position when belting. It is hard to raise the first resonance of many vowels high enough to keep second harmonic 2f<sub>0</sub> near or above R1 without raising the larynx. Researchers Ingo Titze and Albert S. Worley discuss the difference in operatic singing and musical theatre belting and how it is affected by the larynx.

"The two styles were differentiated acoustically mainly by the way the second harmonic was reinforced by vocal tract inertance. For belt production, the first formant frequency of the vocal tract (F1) was kept above the second harmonic of the source  $(2f_0)$  by a high larynx position and extreme mouth opening, whereas in operatic production the first formant was lowered by pharyngeal throat widening, larynx lowering, and lesser mouth opening to allow the second harmonic to be well above the first formant."<sup>49</sup>

<sup>&</sup>lt;sup>48</sup> Scott McCoy, "A Classical Pedagogue Explores Belting," *Journal of Singing* 63, no. 5 (2007), p. 547.

<sup>&</sup>lt;sup>49</sup> I.R. Titze, A. S. Worley, and B. H. Story. "Source-VocalTract Interaction in Female Operatic Singing and Theater Belting," Journal of Singing 67, no. 5 (May/June 2011), p. 561–572.

While McCoy states otherwise, the science proves that it is difficult to raise first resonance of vowels without raising the larynx.

Dr. Matthew Edwards is a voice professor at Shenandoah University and is a leading educator on CCM styled singing. One of his goals is to convey to everyone that the vocal technique used for musical theatre belting should not be taught as a technique to use for all other contemporary styles of singing. Musical theatre and rock are going to require different vocal and stylistic techniques rather than learning one way of belting and using that for all other types of singing that is not bel canto. He discusses the height of the larynx differently than Scott McCoy, who says that there needs to be little to no rise in the larynx to belt. Edwards states "If breath pressure beneath the folds builds to a high levels the larynx tilts, the larynx may rise up toward the root of the tongue."50 He further adds that this can actually help someone belt: "Research suggests that contemporary commercial music singers can benefit from the resonance changes that accompany slightly elevated larynx." He uses the word "slightly" and does further state that if the larynx is in an already high position to begin with then the singer should reevaluate their technique. Speaking "gee gee gee" using a hard "g" makes a singer aware of the larynx raising. Speaking "ha ha ha" like an evil cartoon character will help the singer be aware of the lowering of the larynx.

The position of the soft palate for bel canto singing is generally elevated to create space in the mouth and allow for full resonance of sound in the voice. It helps keep a low laryngeal position and for vertical space in the mouth for round vowels. With certain vowels the palate is going to be lower in order to form the vowel such as in the forward frontal vowels: /i/, /e/, and

<sup>&</sup>lt;sup>50</sup> Matthew Edwards, *So You Want To Sing Rock N' Roll* (Lanham, MD: Rowman & Littlefield, 2014): 101.

/ae/. However, vowel modification will try to work against this by modifying to an open vowel so that there can be more space in the mouth for bel canto singing. In belting, the soft palate will be in either a neutral middle position or lower in order for air to enter the nasal cavity. If there is want for a warmer tone in the voice (as if a singer were to sing a ballad) then raising the soft palate will help with this. Producing the consonant "ng" as in the word "sing" will help with being aware of the raising and lowering of the soft palate (See Figure 22).

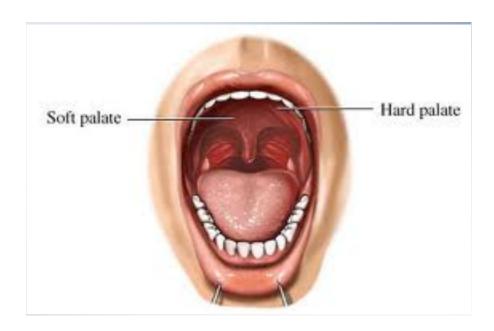


Figure 22: Soft vs. Hard Palate Diagram

Other articulators such as the tongue will also affect belting. Raising the hump of the tongue will also brighten the tone which will contribute with creating a belting sound versus lowering the tongue if wanting a warm tone. Raising the tongue raises F2 and tends to lower F1. The lips also have a big impact on the timbre of the sound. Spread lips will keep a horizontal shape and help the tone be perceived as bright. If the singer wants a warmer tone, the rounding of

the lips will help extend the vocal tract, lowering all resonance frequencies. Spreading lips raises all resonance frequencies and rounding lips lowers them all.

## The methodology

A register of the voice is a group of consecutive notes that are produced in a similar way and share a similar quality, and are distinct from other group of notes which are produced in a different manner and have a different quality. In the female voice the notes that define different registers vary between singers. A general comment that can be made about what notes are typically in the range for sopranos or mezzos can be made from Figure 23.



Figure 23: Vocal ranges for Soprano and Mezzo<sup>51</sup>

<sup>&</sup>lt;sup>51</sup> Matthew Edwards, *So You Want To Sing Rock N' Roll* (Lanham, MD: Rowman & Littlefield, 2014): 101

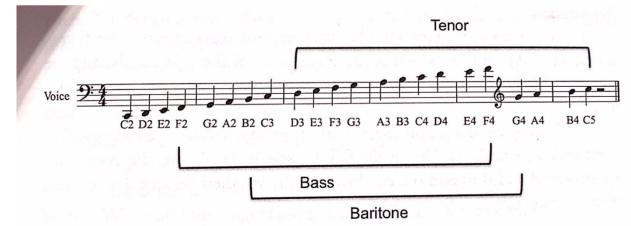


Figure 24: Vocal ranges for Tenor, Baritone and Bass<sup>52</sup>

The typical names of registers for female singers are "vocal fry, chest voice, middle/modal voice, head voice and whistle." For male singers, the registers are vocal fry, chest voice, head voice and falsetto (See Figure 24). In bel canto singing, the goal of training is to try to make the voice sound consistent when navigating through each register. When it comes to singing musical theatre, it is important to think about there being three major registers for both female and male voices: chest voice, mix voice, and head voice. These three registers will be helpful to think about when learning how to belt. There are several different muscles that control the registers. Two of the most important are the thyroarytenoid (TA) muscle and the cricothyroid (CT) muscle. The TA muscle makes up the bulk of the vocal fold and can contract, shorten and thicken the vocal fold to lower the pitch or increase intensity. The CT muscle opposes the TA muscle and stretches the vocal fold longways to raise pitch. These muscles will be dominant or weak depending on what register the singer is using. The amount of adduction is very important,

<sup>&</sup>lt;sup>52</sup> Matthew Edwards, *So You Want To Sing Rock N' Roll* (Lanham, MD: Rowman & Littlefield, 2014): 102

<sup>&</sup>lt;sup>53</sup> Scott McCoy. *Your Voice: An Inside View* (Delaware, OH: Inside View Press, 2012): 143.

the TA is also a secondary adductor: Furthermore, activity in the TA tends to loosen the cover of the vocal fold (lamina propria), while CT activity tends to increase tension in the cover.

In chest voice, the TA muscle is dominant and the vocal quality is buzzy; and this occurs naturally on lower notes in the singer's range. The mix register uses both CT and TA muscles in order to create a small buzz with head voice qualities to the sound. Head voice is CT dominant and the vocal quality is softer; for men this is falsetto. Belting is known to stem from chest voice, and how belting is usually taught is that the singer just brings chest voice into higher notes in their range. Figure 25 shows the thickening and thinning of the vocal folds in chest voice and head voice. Rather than just thinking the TA muscle is only involved with belting, it is important to think about both the TA and CT muscle being involved throughout chest, mix, and head voice (See Figure 25). Otherwise, this will create an imbalanced system and make it difficult to belt. Classically trained singers monitoring systems (aural and kinesthetic) are confused because they focus so much on having an operatic vocal quality that when they start to sing a vocal style that requires a different type of resonance they are unable to do it correctly. Muscle memory is a huge factor in the transition between bel canto technique into belting.

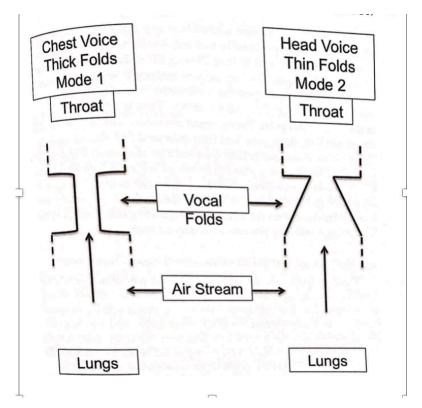


Figure 25: Vocal fold thickness from chest to head register<sup>54</sup>

When learning to belt, start with chest voice and slowly slide up to a perfect 5<sup>th</sup> above trying to keep the second note in chest voice as well. If it starts to feel like the singer is hitting a ceiling that is when the singer will need to switch into mix. Vowels to use on this exercise are /a/, /ae/, and /o/ because they have a high first resonance so it is easy to keep F2 above R1. When learning how to mix, think about the still using mix but slightly lifting the soft palate and opening up space in the sinuses to let head voice come in. One example to help with mixing is by speaking "hey guys!" in a higher pitch and forward placement. Be careful not to get nasal but let the target of the air be in the mask (behind the eyes and right above the cheek bones). The goal is to get a narrow pharynx with gentle contractions of the TA and CT muscles. This means that the

 $<sup>^{54}</sup>$  Matthew Edwards, So You Want To Sing Rock N' Roll (Lanham, MD: Rowman & Littlefield, 2014): 103

singer will feel a smaller space than a wide loud sound which is what is assumed belting feels like. A myth is that a lot of belters fully belt on higher notes (above A5) but they are most likely in mix register but because of that slight TA contraction it can be hard to tell. Head voice is usually used as a vocal effect in musical theatre songs, unless this is a "legit" styled musical theatre piece which would require strong head voice. The effect is usually as a yodel that quickly goes from chest or mix to head voice on one note or from one note to the other.

## Belting exercises:

- Call out "oh, no!" or "no." This should have a placement in the mask and there should be no tension in the neck. Sing on a 1-5-1 interval the bottom note starting on /o/ and sliding up to the second note on the word /no/ and slide back down to the starting note.
- On /a/ slide from note to note on 1-5-1 pattern keeping every note in chest voice.

#### Mix voice exercises:

- Sing a five note scale on /i/ or /u/ with the top note being in head voice and the bottom note being in chest. Be aware of what you are feeling and how the notes in between the top and bottom are sounding. Once this is comfortable try on other vowels such as /a/, /ae/, and /e/.
- If the problem is that the chest voice will still not come in and there is too much head voice, then start in chest voice and sing on a pattern 1-3-5-3-1 on "/na/-/ni/-/na/"; try to add some head voice by opening up and creating some vertical space for the top note. The goal is to not feel like the top note is stemming from a low place but each note in the pattern is getting higher in the mask.

The closed quotient is also an important difference between belting and singing bel canto. Closed quotient is the percentage of time the glottis is closed during each cycle. When belting the closed quotient will be higher than in singing in head voice due to the TA being a secondary adductor. Figure 26 shows that these closed quotient numbers are vastly different from each other.

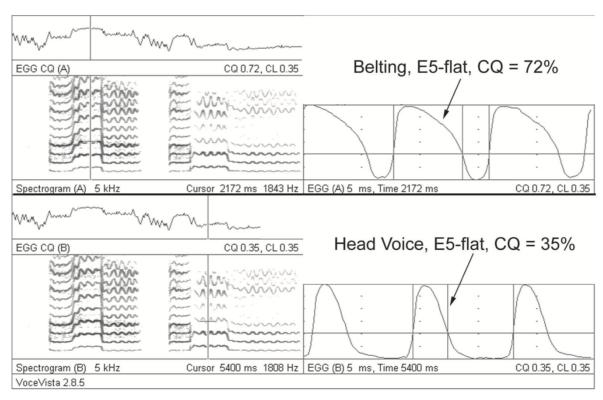


Figure 26: CQ when belting versus using head voice<sup>55</sup>

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<sup>&</sup>lt;sup>55</sup> Scott McCoy, "A Classical Pedagogue Explores Belting," *Journal of Singing* 63, no. 5 (2007): 547.

## **Teaching comparison on belting**

The previously mentioned belting and mixing exercises should be used to teach how to belt and mix. Jeanie LoVetri and Liz Caplan are successful teachers of belt and both have their own way of teaching how to belt (See Figure 27). Mary Saunders Barton is a recognized teacher of contemporary commercial music and discusses how it is important to get opera singers to understand that their singing voice and speaking voice are the same instrument. She suggests that "a combination of speaking and speech-to-singing exercises creates a kind of 'circuit training' for the vocal muscles." This will help energize the breath and extend the singers range. Barton suggests that focusing on teaching her students how to speak on pitch and then using calling out exercises will help achieve belting.

#### Liz Caplan studio summary:

- Strives to take away all body tension and focus the mind.
- "Ben Platt, the Tony-winning original star of "Dear Evan Hansen," is leaning backward over a piano and singing scales. His head's cradled in one hand and she's playing piano with the other. It looks awkward and uncomfortable for both actor and teacher, but something about the position opens up Platt's sound as he vocalizes into a higher register."57

#### Jeanie LoVetri studio summary:

- Creates effective body posture.
- Teaches deliberate use of breath.
- "Exercises such as a triad on "AH" on staccato to help wake up head register, to coordinate breath and body, to help clear up a breathy tone, to increase musical virtuosity, and in several other ways." 59
- The intention of the exercises must be clear in the mind of the teacher in order for it to do what it is supposed to do in the throat of the student/singer.

<sup>&</sup>lt;sup>56</sup> Mary Saunders Barton, *Cross – Training in the Voice Studio* (San Diego, CA: Plural Publishing, 2018): 44.

<sup>&</sup>lt;sup>57</sup> Suzy Evans, "How Vocal Coach Liz Caplan Makes Both Hollywood and Broadway Sing" *Variety*, January 4, 2018: 2

<sup>&</sup>lt;sup>59</sup> Jeanie LoVetri, "Using Exercises Effectively" *Somatic VoiceWork Teachers Association*, October 30, 2006: 1

- Uses a mix of physical, vocal and spiritual techniques
- "She reaches right down your throat, past your lungs, and just grabs you by the spine. She loosens what's too tight, and she tightens what's too loose." 58
- Spends time working on where to place certain vowels and how to chew up the consonants.
- Gain strength in both vocal mechanism and body overtime to produce high belting for beginners.<sup>60</sup>
- Uses compensatory exercises that allow the mechanism to recalibrate itself and gradually release tension.

Figure 27: Teaching belt comparison

## Rate of vibrato

The rate of vibrato is a stylistic element that shows the difference between a classically trained singer and a belter. An aspiring musical theatre singer can use all the correct technical elements, the proper vowels, using chest voice, etc., but if there is vibrato used on every note and if the rate is too fast than that which is stylistically correct for belting, it shows that the singer is a classically trained singer who does not know how to properly sing musical theatre. Every Broadway performer uses vibrato at some point. The typical style is to start a long note sung with minimal vibrato and at the end of the note the singer will slowly let the vibrato expand and the note to speed and speed up before the cut off. This happens because the extra TA activity tends to damp out the normal variation of activity by the CT.

<sup>&</sup>lt;sup>58</sup> Suzy Evans, "How Vocal Coach Liz Caplan Makes Both Hollywood and Broadway Sing" *Variety*, January 4, 2018: 2

<sup>&</sup>lt;sup>60</sup> Jeanie LoVetri, "Episode 49 – Jeanie LoVetri on Belting, Functional Voice Training, Somatic Voice Work." The Naked Vocalist TV, Filmed 2017, interview, 29:09, https://youtu.be/BiLWl8jWvUo

Figure 27 is an acoustic spectrum taken from PRAAT which is a computer software for speech analysis. In this I have sung using the bel canto technique the last two notes from "The Wizard and I" from *Wicked*. The words are "and I" and they are on the notes C5 and D5. The hills that show throughout the shaded area are a representation of the rate of vibrato. The height of the hill represents how wide the vibrato is. The figure shows that every note has a fairly consistent rate and extent of vibrato occurring. In figure 28 I have sung the same notes (C5 and D5) on the same words but belting. There are not visible hills in the shaded area of the spectrum until the end of the note, otherwise, the levels look straight.

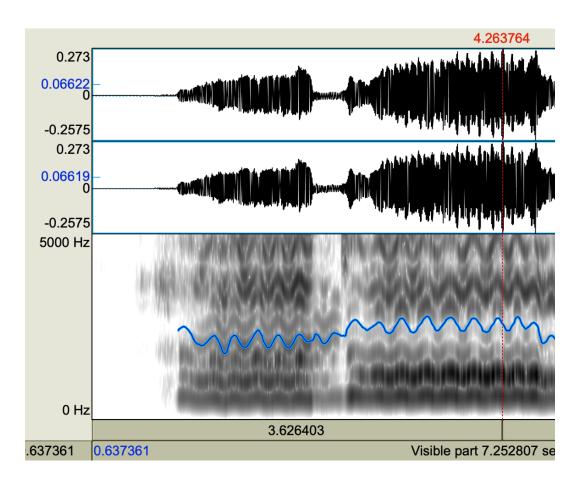


Figure 28: Classical vibrato sung on word "and I" from "The Wizard and I" from Wicked

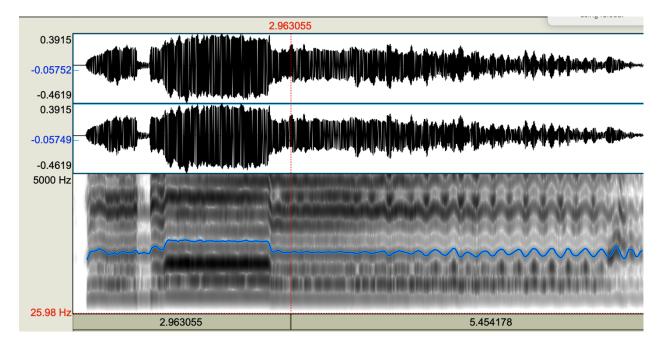


Figure 29: Belting with musical theatre vibrato on word "and I" from "The Wizard and I from *Wicked* 

## Signs of improper belting

It is important to know what signs to look out for when learning how to belt to know when to stop. One of the obvious things to look out for is extreme tension in the neck. If veins are popping out and there is extreme tension in the face, there is something wrong. The voice will also sound strained, although there are times when it will not be as easy to tell. If there is hoarseness after singing and extreme vocal fatigue or a raspy voice, this is a sure sign that there is misuse. Improper technique and overuse causes the vocal folds to become inflamed. Thus, there is limited movement in the cover of the vocal folds, causing there to be an abnormal mucosal wave. There can also be limited range in speaking and singing soon after improper belting. Another sign is that there is a constant feeling of a lump in the throat and requires a need

to want to clear the throat in order to get rid of the lump. If a singer ever feels any of these symptoms during singing or soon after they need to stop and consult an ENT.

An example of how a strained voice sounds when belting improperly is Tony Award winner Idina Menzel, who performed "Let it go" live at the New Year's Rockin' Eve concert in 2015<sup>61</sup> The higher register of her belt is noticeably raspy and flat, which shows that she was already struggling to produce the belt that high in her range. The last note on the word "on" from the last line, "let the storm rage on" is almost a complete yell with no true vocal pitch besides it being flatter than the note that is supposed to be sung. While Menzel does not come out to say she has had vocal damage, it was obvious by viewers that she had started to endure vocal damage towards the end of her run as Elphaba in *Wicked*. It is important to note what to look out for when learning how to belt so that there will be no complications that may be lifelong.

## **Dangers of improper belting**

There can be different implications for long-term unhealthy belting. Broadway performers belt eight times a week, and depending on the role, might need to belt in a high tessitura for two hours straight. This means that the vocal folds are contracting against each other due to the high amplitude of vibration, which can cause calluses to form on the vocal folds also known as vocal nodules. Another danger is that vocal hemorrhaging may occur because of extreme pressure to the vocal folds in order to try and produce a belting sound. Dr. Paul Kwak, a laryngologist at NYU-Langone states, "If you look at force and energy that transmits through the vocal folds during the course of any given performance in a week on Broadway and multiply it

<sup>&</sup>lt;sup>61</sup> Idina Menzel, "Let it go" from *Frozen* Filmed 2015, New Year's Rockin' Eve performance, https://youtu.be/YiIgSh4MQ6Q.

by eight shows a week, it's absolutely equivalent to what football players do on the field."<sup>62</sup> Not only does belting require a high closed quotient for a long period of time, doing this for eight shows a week can put even more strain on the performer.

Alex Brightman starred as Dewey Finn in *The School of Rock the Musical* on Broadway in 2015. In the middle of a performance, he suffered a vocal hemorrhage. According to Caitlin Huston, a writer for *Broadway News*, "Alex Brightman was performing the particularly raucous and improvisational song 'The Legend of the Rent' when he yelled out a word and then felt the next note come out an octave lower." Brightman had to go on steroids and vocal rest as well as decrease the amount of shows that he performed in a week. After this, Brightman went on to perform the role of Beetlejuice in *Beetlejuice* on Broadway in 2019. Prior to this he studied with a speech language pathologist on how to produce a raspy voice without hurting himself to prevent further injury. The results of improper belting can be long lasting and detrimental to a performer's career.

<sup>&</sup>lt;sup>62</sup> Caitlin Huston, "Speaking out about vocal injuries on Broadway," Broadway News, accessed March 5, 2020, https://broadwaynews.com/2019/09/19/speaking-out-about-vocal-injuries-on-broadway/.

#### **CONCLUSION**

Belting is a stylistic technique used in musical theatre when a singer contracts the TA muscle throughout chest, mix, and head voice. The importance of knowing how to healthily belt has become vital for both opera and musical theatre singers. The opera industry demands more variety including musical theatre. Therefore, opera administrators expect their hired singers to be able to sing stylistically correctly. If a singer is never taught to healthily belt then there are risks, and this could lead to lifelong vocal issues. Knowing how to belt will strengthen the singer's marketability and knowing how to teach belting is becoming a necessity in voice lessons.

Students often want to learn how to sing CCM styled techniques instead of or in addition to bel canto styled singing. The voice teacher must know how to teach proper belting. Lacking the understanding of what belt is and how to safely belt will affect the voices of younger generations.

Throughout the years of musical theatre history, the style of belting has evolved. This means that singers need to know how to sing different stylistic techniques within musical theatre. The songs throughout the "Golden Age" years of musical theatre should be sung with a "legit"-styled technique, aiming towards bel canto style but not too operatic. The vibrato will be more consistent throughout, the vowels should be rounder and open. The contemporary belt that is used in shows post 1980 is more pop styled and belting at a higher pitch level. Classically trained singers should learn how to sing these different styles rather than grouping one style of singing for musical theatre.

The methodology for belting can be difficult for the classically trained singer due to the muscle memory and amount of training that has gone into the classical singer's technique. When trying to learn how to engage the TA muscle throughout chest, mix and head voice, the singer

must be open to trying different exercises. Just as a light lyric soprano will not be able to sound like a contralto when singing an aria meant for a contralto, it will be difficult for a light soprano to sound like Patti Lupone when belting. The singer's anatomy and physiology will affect how they sound even when belting. Singers should not be discouraged if their belt does not sound as loud and powerful as someone else's. Belting is not harmful to sing when sung with the correct technique, and the classically trained singer should want to know how to use this technique to become a marketable singer and teacher.

#### **BIBLIOGRAPHY**

- Appleman, Ralph. *The Science of Vocal Pedagogy* Don Mills, ON: Fitzhenry & Whiteside Limited, 1976.
- Bareilles, Sara. Waitress. New York: NY Hal Leonard, 2016.
- Barton, Mary Saunders. "Broadway Bound: Teaching Young Musical Theatre Singers in a College Training Program." *Journal of the National Association of Singing Teachers'*Assocation, no. 3 (2013): 4-5.
  - Cross Training in the Voice Studio San Diego, CA: Plural Publishing, 2018.
- Belcher, David. "Musicals or Opera? Stage Companies Are Drawing on Both Art Forms" *New York Times*, March 26, 2014.
- Bourne, Tracy, Garnier, Maeva., and Diana Kenny. "Music Theater Voice: Production, Physiology and Pedagogy." *Journal of Singing* 67, no. 4 (2011): 437-444.
- Clark, Mark Ross. *The Broadway Song a Singer's Guide*. New York, NY: Oxford University Press, 2015.
- Earnest, Bruce. "Male Belting: An Exploration of Technique and Style from 1967 to Current" PhD diss., University of Southern Mississippi. May 2018.
- Edwards, Matthew. "CCM versus Musical Theater: A Comparison." In *So you want to sing CCM*(Contemporary Commercial Music) A Guide for Performers, edited by Matthew Hoch,
  15-33. Maryland: Rowman & Littlefield, 2018.

  So you want to sing Rock N' Roll. Lanham, MD: Rowman & Littlefield,
  2014.
- Evans, Suzy. "How Vocal Coach Liz Caplan Makes Both Hollywood and Broadway Sing" *Variety*, January 4, 2018.

- Gagné, Jeannie. Belting: A Guide to Healthy, Powerful Singing. Boston, MA: Berklee Press, 2015.
- Gardner, Ava. "I can't help lovin' dat' man," from Show Boat Filmed 1951, movie clip, https://youtu.be/rGOyycNqiWA. (accessed February 10, 2020).
- Hall, Karen. So you Want to Sing Musical Theater: A Guide for Professionals (Lanham, MD: Rowman & Littlefield, 2014).
- Henderson, W. J. *The Art of Singing*. New York, NY: The Dial Press, 1938.
- Henny, John. "How to Transition from Opera to Broadway," Backstage, accessed February 10, 2020, https://www.backstage.com/magazine/article/transitioning-opera-broadway-57056/
- Huston, Caitlin. "Speaking out about vocal injuries on Broadway." Broadway News, accessed March 5, 2020, https://broadwaynews.com/2019/09/19/speaking-out-about-vocal-injuries-on-broadway/.
- Isherwood, Charles. "Operatic Acting? Oxymoron No More" *New York Times*, September 9, 2007.
- Jones, John Bush. Our Musicals, Ourselves. Lebanon, NH: Brandeis University Press, 2003.
- Karimloo, Ramin "Til I hear you sing" from Love Never Dies Filmed 2010, music video, https://youtu.be/47dUc4iMAvQ. (accessed March 12, 2020).
- Kern, Jerome. Showboat. New York, NY: T.B. Harms Company, 1927.
- Kosarin, Oscar. The Singing Actor. Englewood, NJ: Prentice-Hall, 1983.
- Lebon, Rachel. *The Professional Vocalist: A Handbook for Commercial Singers and Teachers*.

  Lanham, Md. and London: The Scarecrow Press, 1999.
- Levy, Caissie. "Easy to be hard." Ghostlight Records, 2009, soundtrack recording, https://youtu.be/p5qKrYbFe44. (accessed March 12, 2020).

- "With you" from Ghost the Musical Filmed 2013, clip from concert, 2:44, https://youtu.be/JLqd1imYWvA. (accessed March 12, 2020).
- Lister, Linda. "The Broadway Soprano: The Lineage and Evolution from Julie Andrews to Kristin Chenoweth." *American Music Teacher* 62, no.5 (2013): 37-39.
- LoVetri, Jeannette L. "Editorial: Contemporary Commercial Music." *Journal of Voice 22*, no. 3 (2008): 260.
- LoVetri, Jeanie "Episode 49 Jeanie LoVetri on Belting, Functional Voice Training, Somatic Voice Work." The Naked Vocalist TV, Filmed 2017, interview, 29:09, https://youtu.be/BiLWl8jWvUo. (accessed April 16, 2020).
- LoVetri, Jeannette L., Saunders-Barton, Mary., and Edrie M. Weekly. "A Brief Overview of Approaches to Teaching the Music Theatre Song." In *Teaching Singing in the 21st Century*, edited by Scott D. Harrison and Jessica O. Bryan, 21-35. Illinois: Springer, 2014.
- LoVetri, Jeanie "Using Exercises Effectively" *Somatic VoiceWork Teachers Association*,
  October 30, 2006, p. 1
- Luff, Allison. "She used to be mine" from Waitress Filmed 2019, music video, https://youtu.be/3c7NUyhNuEs. (accessed March 12, 2020).
- MacDermot, Galt. Hair. New York, NY: Hal Leonard, 1995.
- Manén, Lucie. Bel Canto. New York, NY: Oxford University Press, 1987.
- McCoy, Scott. "A Classical Pedagogue Explores Belting." *Journal of Singing* 63, no. 5 (2007): 545-549.
  - Your Voice: An Inside View. Delaware, OH: Inside View Press, 2012.
- Melton, Joan. Singing in Musical Theatre The Training of Singers and Actors. New York, NY:

Allworth Press, 2007.

Menzel, Idina "Let it go" from *Frozen* Filmed 2015, New Year's Rockin' Eve performance, https://youtu.be/YiIgSh4MQ6Q. (accessed March 12, 2020).

Miller, Richard. Solutions for Singers. New York: Oxford University Press, 2004.

Miller, Scott. *Strike Up the Band: A New History of Musical Theatre*. Portsmouth, NH: Heinemann, 1964.

Osnes, Laura. "How 'bout a dance," from Bonnie and Clyde the Musical Filmed 2011, show clip, https://youtu.be/NYtknprFvxE. (accessed March 12, 2020).

Pasek and Paul. Dear Evan Hansen, New York, NY: Hal Leonard, 2017.

Platt, Ben. "Waving through a window," from *Dear Evan Hansen* Filmed 2016, 2016 Tony Awards performance, https://youtu.be/h9rf5wFq3zk. (accessed March 12, 2020).

Porter, Cole. Anything Goes. New York, NY: Chappell & Co., 1936.

Rapp, Renee. "World Burn" from Mean Girls Filmed 2019, music video, https://youtu.be/H8bn4w3mMrI. (accessed March 12, 2020).

Richmond, Jeff and Benjamin, Neil. Mean Girls. New York, NY: Hal Leonard, 2018.

Ruben, Bruce Joel. Ghost The Musical. New York, NY: Hal Leonard, 2011.

Schutte, Harm K., and Donald G. Miller. "Belting and Pop, Nonclassical Approaches to the Female Middle Voice: Some Preliminary Considerations," *Journal of Singing* 7, no. 2 (1993): 142-150.

Schwartz, Stephen. *Pippin*. New York, NY: Hal Leonard, 1972. *Wicked*. New York, NY: Hal Leonard, 2003.

Story, B. H., Titze, I.R., and Worley, A. S. "Source-VocalTract Interaction in Female Operatic Singing and Theater Belting." *Journal of Singing* 67, no. 5 (May/June 2011), 561–572.

Styne, Jule and Sondheim, Stephen. Wicked. New York, NY: Hal Leonard, 1959.

Vennard, William. Singing: The Mechanism and the Technic. New York: Carl Fischer, 1967).

Vosk, Jessica. "The Wizard and I" from Wicked Filmed 2018, clip of rehearsal,

https://youtu.be/KxdjZOuQRnY. (accessed March 12, 2020).

Webber, Andrew Lloyd. *Jesus Christ Superstar*. New York, NY: The Really Useful Group, 1971.

Love Never Dies. New York, NY: The Really Useful Group 2010.

Wells, Brad. "On the Voice: Belt Technique: Research, Acoustics, and Possible World Music Applications." The Choral Journal 46, no. 9 (2006): 65-77.

## APPENDIX A: LIST OF CROSSOVER ARTISTS

These artists all successfully had careers singing both musical theatre and classic styled theatre or opera. Not all of these performers have a degree in vocal performance but they do produce successful bel canto technique as well as belting.

Female crossover artists:
Kristin Chenoweth
Julie Andrews
Barbara Cook
Audra McDonald
Kelli O'Hara
Sierra Boggess
Megan Picerno
Amy Manford
Rebecca Caine
Male crossover artists:
Steven Pasquale
Norm Lewis
Ramin Karimloo
Colm Wilkinson
Brian Stokes Mitchell

Hugh Panaro

Matthew Morrison

Howard McGillan

# APPENDIX B: SONG EXAMPLES FOR THE BEGINNING FEMALE BELTER

"I can't say no"	Oklahoma	Rodgers and Hammerstein
"Can't help lovin' dat man"	Show Boat	Rodgers and Hammerstein
"I Got the Sun in the Morning"	Annie Get Your Gun	Irving Berlin
"A Change in Me"	Beauty and The Beast	Alan Menken
"I Enjoy being a Girl"	Flower Drum Song	Rodgers and Hammerstein
"How Lovely to be a Woman"	Bye Bye Birdie	Strouse and Green
"There are worst things I could do"	Grease	Jacobs and Casey
"I know things now"	Into the Woods	Stephen Sondheim
"Live out Loud"	A Little Princess	Andrew Lippa
"Shy"	Once Upon a Mattress	Mary Rodgers
"Honey Bun"	South Pacific	Rodgers and Hammerstein
"My New Philosophy"	You're a Good Man Charlie	Brown Clark Gesner
"Adelaide's Lament"	Guys and Dolls	Frank Loesser
"I Ain't Down Yet"	The Unsinkable Molly Brown	n Meredith Willson
"I Dreamed a Dream"	Les Miserables	Schönberg and Boublil
"I Don't Know How to Love Him"	Jesus Christ Superstar	Andrew Lloyd Webber

# APPENDIX C: SONG EXAMPLES FOR THE BEGINNING MALE BELTER

"Santa Fe"	Newsies	Alan Menken
"All That's Known"	Spring Awakening	Steven Sater
"What do I Need with Love"	Thoroughly Modern Millie	Jeanine Tesori
"Beethoven Day"	You're a Good Man Charlie	Brown Clark Gesner
"Kansas City"	Oklahoma	Rodgers and Hammerstein
"Beautiful City"	Godspell	Stephen Schwartz
"Anthem"	Chess	Andersson and Ulvaeus
"This is the Moment"	Jekyll and Hyde	Frank Wildhorn
"Sit Down You're Rockin' the Boat	"Guys and Dolls	Frank Loesser
"Make Them Hear You"	Ragtime	Stephen Flaherty
"Soliloquy"	Carousel	Rodgers and Hammerstein
"All I Need is The Girl"	Gypsy	Jule Styne and Sondheim
"Oh What a Beautiful Morning"	Oklahoma	Rodgers and Hammerstein
"Ten Minutes Ago"	Cinderella	Rodgers and Hammerstein
"On the Street Where you Live"	My Fair Lady	Lerner and Loewe