Breathing Technique for Jazz/Pop Singers

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NE BREATHING TECHNIQUE DOES NOT SERVE all kinds of singers, and that is certainly true for jazz/pop singers. Although much has been written by singing pedagogues as well as scientists on the subject of breathing technique for singers, there still is a paucity of literature that focuses on the relationship between breathing technique and the style of singing. Reading through a great deal of scientific literature regarding breathing technique and over 30 years of experience in the field of jazz and pop, have led to the conclusion that there is a clear relationship between the efficiency of a chosen breathing technique and the singing style. This relationship partly determines where the focus should lie when developing an efficient breathing technique.

In order to discuss proper breathing technique for singers, it is important first to define what proper breathing technique is. The Swedish researcher Monica Thomasson lists the primary requirements as:

- The ability to inhale quickly and efficiently. A singer uses a larger part of
 vital lung capacity than does someone speaking, especially when singing
 loudly and/or singing long phrases, particularly with limited time to breathe
 between phrases.
- While singing (and thus exhaling), a singer needs to have precise and consistent control over the constantly changing subglottal pressure. This is the breath pressure exerted on the vocal folds from below. Besides being the most important factor in volume control, it also affects the pitch and resonances in the vocal tract.¹

Proper coordination between breath, voice, and body is important for developing an efficient breathing technique. The basis of this coordination should be a well balanced posture with stability in the torso.

Although Thomasson's research was conducted on opera singers, the requirements above also apply to jazz/pop singers. They, too, need to be able to inhale quickly and efficiently, and to control their subglottal pressure. There are, however, some style-specific aspects related to breathing technique that are important and deserve our attention.

INHALATION

Silent Inhalation?

A silent inhalation is by no means required in jazz/pop singing, but rather is an artistic choice that can be part of the interpretation of a song. Nevertheless, training a silent inhalation is also recommended as an efficient and healthy

Journal of Singing, November/December 2021 Volume 78, No. 2, pp. 247–253 https://doi.org/10.53830/LJMT7188 Copyright © 2021 National Association of Teachers of Singing "default setting" for jazz/pop singers: It facilitates rapid inhalation through the mouth with an open throat, promotes a relaxed larynx position, and supports a good connection with the body.

Pulse and Timing

Jazz/pop singers have a great deal of freedom in timing and phrasing: when and for how long a note is sung. In addition, the ability independently to keep to a steady pulse is an essential skill for jazz and pop musicians. For singers this means that not only are the timing of onsets and the ends of notes important, but also that the inhalation must be carefully timed so as not to interrupt the pulse. In this way, inhalation can even reinforce and accentuate the pulse.

To acquire a well timed, rapid, and low inhalation, the singer needs to be able to quickly release the muscles that are activated to generate support, while at the same time activating the diaphragm quickly and strongly. The result is an inhalation with a rapid reflexive outward movement of the abdominal wall. This technique is part of the Accent Method used by speech therapists. Janice Chapman has adapted the Accent Method for singers and calls this technique SPLAT. ² A similar technique is also described in my book Singing from the Inside Out.3 Its usefulness has been proven scientifically. 4 Watson and Hixon⁵ and Hixon⁶ also have written about this technique, used by many singers from a range of styles at points when there is little time to take even a shallow breath, for example, in fast pieces or passages and in music where timing and pulse are important.

A Low Inhalation: Belly In or Out?

Voice professionals agree that while singing, the breath must not occur too high in the chest, and that the shoulders should stay relaxed during inhalation. Accordingly, the most commonly used strategies for breathing are abdominal breathing (belly out) and breathing from the ribs (belly in). A consultation of the scientific studies, all done with opera singers, does not unequivocally tell us which of the two strategies is the more efficient. No significant difference was found between them in subglottal pressure, the vertical position of the larynx, or the basic sound at larynx level.⁷

Because of its effect on breath control, the strategy used during inhalation mostly has an indirect influence

on vocal function. In abdominal breathing, exhalation is mainly driven by the abdominal muscles, while in breathing from the ribs it is mainly from the intercostals. For this reason Janice Chapman prefers abdominal breathing. Abdominal muscles are voluntary muscles, unlike the intercostals, and thus can be consciously controlled, which according to Chapman gives the singer better breath control.

Breathing Strategy and Sound

Although there is almost no scientific literature on the subject, it is important to look specifically at the relationship between the jazz/pop singer's breathing strategy and sound. That this relationship must exist is the conclusion of Herbst when he writes that in training the voice, the various parts of the vocal apparatus (breath, voiced sound, resonance) cannot be looked at in isolation from each other: Input in one part will always have an effect on the other parts. Inhalation movements, for example, to a large extent determine the shape and thereby the resonance in the vocal tract. In addition, the larynx regulates the air flow and acoustics in the glottis through the degree of closure of the vocal folds.⁹

After years of experience as a singer and singing teacher, I, along with many of my colleagues, have come to the conclusion that there is definitely a relationship between the way in which singers inhale and the sound of their voice. If the desired sound is that typical warm and powerful jazz/pop timbre, loud and high in the modal register, sung with a low larynx and an open throat (thus without twang and/or belting), then the singer must use abdominal breathing. I call this way of singing "heavy modal." Making this sound requires high subglottal pressure and firmly closing, thicker vocal folds. Descriptions of this sound can be found in several studies.

The link between breathing strategy and sound as I have made it above is also described by other colleagues. Chapman, for example, writes that it is possible to sing high in the modal register with strong support from the abdominal muscles. As a classically trained singer, she observed that "the middle voice will have a thick and unwieldy sound . . . as the vocal folds need too much breath pressure to operate efficiently." ¹²

The most explicit are Gillyanne Kayes and Jeremy Fisher when they write that breathing in the ribs works best in classical singing, which uses thin vocal folds and somewhat lower subglottal pressure.¹³ This is also because of the long phrases and because more use is made of resonance in the vocal tract to amplify the sound (singer's formant, twang). In abdominal breathing the subglottal pressure is kept high during exhalation, which is useful when singing with thicker vocal folds and when the phrases are somewhat shorter, as in jazz/pop styles.

That abdominal breathing is beneficial for singing with a high subglottal pressure and firmly closing thick vocal folds can be found in the standard reference work *Respiratory Function in Singing*. Here, Hixon writes that in abdominal breathing the abdominal muscles can generate much more power, which is good for generating high subglottal pressure, than in breathing from the ribs.

Breathing Strategy and Sound: Belting

Another example of the sound requiring a particular breathing strategy is belting. Since the combination of thick, firmly closed vocal folds and contracted aryepiglottic folds already results in high subglottal pressure, G. Kayes recommends working with smaller lung volumes and breathing in the ribs when belting. ¹⁵ This prevents strain and has the additional advantages that the larynx comes into a higher position more easily and that it is easier to sing with twang. ¹⁶ The Complete Vocal Technique (CVT) method features a lot of work with metallic sounds and twang with the larynx in a higher position, especially in the middle voice. ¹⁷ The method also uses a wide rib cage and a somewhat drawn-in upper abdomen while singing as a starting point.

Although it is my experience as well that breathing in the ribs makes it easier to belt, I have been unable to find any research comparing the various breathing strategies during belting. Sundberg and Thalén conclude that there is not one single type of breathing behavior that singers exhibit either when singing "in neutral" or belting. Although their study does make it clear that five of the six singers studied widened their ribs more while belting than during neutral singing, the study did not compare the efficiency of the different behaviors.

EXHALATION

Breathing and Style

Various stylistic traits also influence breathing technique of jazz and pop singers while singing.

- Using a microphone gives a singer a great amount of vocal freedom; it is as easy to sing in a whisper as in a scream. This results in a singing style with wide variation in subglottal pressure.
- Jazz/pop singing can greatly resemble speaking since there is less use of legato. For example, Cleveland et al. conclude that country singers use the same subglottal pressure when singing as when speaking at a similar volume.¹⁹
- In general, jazz/pop singing emphasizes consonants, which creates minor interruptions and changes in the breath flow.
- Jazz/pop singers usually have an immediate onset, while classical singers more often start a note softly, and slowly let it develop.
- On average, there is less use of vibrato in jazz/pop singing, and the vibrato is smaller. Usually vibrato is not constant, and often begins at the end of a long note.
- Rhythm and timing play a large part in jazz and pop.
 This results in a style of singing with many accents, which mostly originate with the diaphragm and leads to variation in subglottal pressure.²⁰

Volume

A breathing strategy can have different results or be less useful when singing softly and/or with strongly varying subglottal pressure than when singing continuously at a higher volume. This has been insufficiently explored, in my opinion. Over the years I have taken many singing courses about different methods and attended many congresses. It has struck me that the average volume of the exercises sung during the courses and workshops was virtually always greater than the average volume with which, for example, a jazz singer or singer-songwriter sings, without this ever being addressed. Jo Estill (founder of EVT) even called the soft singing of one of the jazz singers participating in her course "not real singing." ²¹

The average volume with which jazz and pop singers sing is lower than that of classical singers. At the same time, the extremes are farther apart: Since they use microphones, jazz and pop singers can choose to sing at a whisper volume, while their belting volume is considerably higher than in neutrally sung passages.²² The volume can also differ greatly within the same piece because of the interpretation and buildup, change

in groove, emphasized consonants or the many more pulse-related accents. These fluctuations in volume are accompanied by corresponding fluctuations in subglottal pressure.

Herbst writes that input in one part of the vocal apparatus will always affect the other parts.²³ Accordingly, the volume with which we sing will not only influence the breathing strategy but also the sound production and resonance. The body will also adjust itself to make the necessary effort. Volume is thereby an important aspect to keep in mind, also when training breathing technique.

Strength vs. Flexibility

Traditionally the focus in breath training has often been on creating a high subglottal pressure with little variation that can be maintained when singing long phrases. Jazz and pop singing, however, are much closer to speaking and require a breathing technique geared to flexibility and coordination and less on strength.

In principle, every singer can benefit from a breathing apparatus that is both strong and flexible. At the same time, the two can get in each other's way: a gymnast will benefit from a different kind of training than a weight-lifter. The dilemma of whether to focus on developing strength or flexibility deserves more attention in breath training. This dilemma is also seen when considering the various methods. I will return to this aspect below.

Breath Follows Musical Intention

In our daily lives, we breathe unconsciously and our breathing is a reflex action. When we focus on training and becoming aware of the breathing technique, we are abandoning unconscious breathing for the moment. I say "for the moment" because the breathing must also be as reflexive as possible during singing. The whole process of adjusting breath pressure while speaking and singing goes so quickly that we cannot guide it cognitively. We only steer the breathing process while singing if necessary. Kristin Linklater emphasizes the importance of the reflex connection of breathing and emotional impulse in her work.²⁴ It is the emotional and musical intention that sets the reflexes in motion. This connection with musical and emotional intention thus needs to be included in the various kinds of breathing exercises, and is essential for any singer's breathing strategy.

TRAINING BREATHING TECHNIQUE

It is important for jazz and pop singers to be able to use a reflexive breathing technique to advantage. The freedom and spontaneity that they have in interpreting and performing their repertoire means that they must be able to use their breathing apparatus very flexibly. Much of the repertoire has a steady pulse that partly dictates the timing of the vocal onset and the length of the notes, which in turn often requires fast and well timed inhalation. This is why developing a good connection and coordination between breath, sound, emotion, and body when training breathing technique should be emphasized.

To cultivate anticipation as well, the body should be involved during exercises, using a wide arsenal of sounds, pitches, volumes, and rhythms, linking sound directly to emotion and intention (also see step 3 of the breath ladder below). Integrating breathing exercises in the sung repertoire also plays an important part. By practicing breathing technique in the right stylistic context the singer creates a connection between technique and interpretation from the start, which promotes reflexive breathing. It also works well to train breathing technique in combination with other skills such as improvisation and ear training.

THE BREATH LADDER

When working on breathing technique a distinction can be made among four kinds of exercises, each of which trains a different skill. If necessary or desired, these exercises can be used in the order below, like a ladder with four rungs. This makes it easier to choose more consciously which skill to work on, and as a teacher, to adapt the choice of exercises to the teaching situation.

- Becoming aware of the breath: observing.
 The aim of the exercises in this step is to increase awareness of one's breathing patterns by observation.
 This step can easily be combined with movement or postures like yoga poses. These exercises can also promote physical and mental relaxation.
- 2. Breath control: low exhalation/inhalation.

 These exercises revolve around developing a fast, low, and silent inhalation. In general it is best to start practicing from the exhalation, in which the abdominal muscles are tightened. Then the abdomi-

- nal muscles are quickly released so that the air flows into the body almost automatically. In this step there is also focus on inhalation through the mouth with an open throat and on maintaining good posture, especially during exhalation.
- 3. Connecting the breath and the voice: coordination and flexibility.
 - These exercises focus on developing proper coordination between the various muscles involved in breathing and phonating, on the flexibility and timing of the breathing muscles and on creating resonance. This is a crucial step for jazz and pop singers. The connection is made by using movement and text, different pitches, volumes, timbres, onsets, and emotions. Most exercises are speaking exercises, short sounds and glissandos with a constantly changing subglottal pressure in which the sound is directly linked to the emotion and intention. This category also includes singing exercises and phrases with accents and great differences in volume.
- 4. From speaking to singing: breath support.

 These exercises focus on developing breath control during exhalation, controlling the air flow and creating a subglottal pressure with little variation. This step has exercises for legato singing, using vibrato, glissando exercises, singing long tones, exercises for learning to inhale quickly and silently with an open throat while singing a piece, and practicing swell tones. It is very useful to connect these exercises to phrasing, since the decision of when to inhale will automatically affect the interpretation of the piece. Legato singing must never become a contest to get through a phrase or piece in as few breaths as possible.

Exercises from steps 3 and 4 can also be applied to repertoire.

VOCAL METHODS

The four steps in breath training are also found as focal points of the various voice/singing methods. Although it is often thought that some of these methods contradict each other regarding breathing strategy, in reality their main difference is that each focuses on a different one (or two) of the four steps. This should be kept in mind when choosing a given voice/singing method. Below are a few examples.

- Methods for breath therapy focus on step 1: breath awareness.
- Theater methods such as Linklater Voice²⁵ and Roy Hart Voice²⁶ focus mainly on steps 2 and 3, and mainly use the speaking voice. Both methods promote connecting breath with voice, body, movement, text, and emotion. The methods are well suitable for jazz and pop singers.
- Speech therapy methods are focused on steps 2 and 3. They are in principle intended as therapy but in my opinion are very suitable for jazz and pop singers, especially Pahn's Nasal Reflecting Method²⁷ and Svend Smith's Accent Method.²⁸

Some other singing methods:

- Janice Chapman has adapted the Accent Method for singers, focusing on a quick, reflexive inhalation that she calls SPLAT. Her book has exercises for steps 2, 3, and 4.²⁹
- Ron Morris and Linda Hutchison wrote a book on breathing and support for singing based on the Accent Method.³⁰
- Bel Canto singing, EVT (Estill Voice Training)³¹ and CVT (Complete Vocal Technique)³² are focused on step 4: Breath support. EVT also uses torso, neck, and head "anchoring" to assist a strong breath support.³³
- Core Singing: In her book *The Performer's Voice*, Meribeth Dayme describes exercises for steps 1, 2, and 4.³⁴

The subject of breathing technique for singers has many layers and perspectives, making it a subject that has continued to fascinate me year in, year out. Most importantly, breath training always needs to be tailored to each student, and it certainly should not be trained in a mechanical way. There are many methods for improving breath coordination organically that that can even be used without their explicitly being called breath exercises, if the teacher prefers.

Ultimately, not only do the student's learning situation, age, background, and experience determine the choice of the best approach, but that the vocal style partly determines where the focus should lie when developing an efficient breathing technique. I again use the analogy of a gymnast and a weightlifter: Both use their bodies effectively, but each needs a different training to arrive at the desired result.

NOTES

- 1. M. Thomasson, Belly-in or belly-out? Effects of inhalatory behaviour and lung volume on voice function in male opera singers, TMH- QPSR 45, no. 1 (2003): 61–74.
- 2. J. Chapman, *Singing and Teaching Singing* (Oxford, UK: Plural Publishing, 2006).
- 3. I. van Doorn, *Singing From the Inside Out* (Arnhem, NL: Artez University Press, 2016).
- 4. C. W. Thorpe, S. J. Cala, J. Chapman, and P. J. Davis, "Patterns of Breath Support in Projection of the Singing Voice," *Journal of Voice* 15, no. 1 (March 2001): 86–104.
- 5. P. J. Watson and T. J. Hixon, "Respiratory Kinematics in Classical (Opera) Singers," *Journal of Speech and Hearing Research* 28, no. 1 (March 1985): 104–122.
- 6. T. J. Hixon, *Respiratory Function in Speech and Song* (Boston: College-Hill Press, 1987).
- 7. Thomasson; B. Griffin, P. Woo, R. Colton, J. Casper, and D. Brewer, "Physiological Characteristics of the Supported Singing Voice. A Preliminary Study," *Journal of Voice* 9, no. 1 (March 1995): 45–56; M. Thomasson and J. Sundberg, "Consistency of Inhalatory Breathing Patterns in Professional Operatic Singers," *Journal of Voice* 15, no. 3 (2001): 373–383; A. Watson, "Breathing in Singing," *The Oxford Handbook of Singing* (Oxford: Oxford University Press, 2015).
- 8. Chapman, 52.
- C. T. Herbst, "A Review of Singing Voice Subsystem Interactions—Toward an Extended Physiological Model of 'Support'," *Journal of Voice* 31, no. 2 (March 2017).
- 10. van Doorn, 106-107.
- H. Hallqvist, F. M. B. Lã, and J. Sundberg, "Soul and Musical Theater: A Comparison of Two Vocal Styles," *Journal of Voice* 31, no. 2 (March 2017): 229–235; F. Cleveland, E. Stone Jr., J. Sundberg, and J. Iwarsson, "Estimated Subglottal Pressure in Six Professional Country Singers," *Journal of Voice* 11, no. 4 (December 1997): 403–409.
- 12. Chapman, 75.
- G. Kayes and J. Fisher; https://www.reddit.com/r/science/ comments/6kfm93/science_ama_series_we_are_dr_ gillyanne_kayes_and/.
- 14. T. J. Hixon, *Respiratory Function in Singing : A Primer for Singers and Singing Teachers* (San Diego: Plural Publishing Inc, 2007).
- 15. G. Kayes, *Belting, Range and Register: A Practical Introduction for Singers* (Presteigne, UK: Vocal Process Ltd., 2003).
- 16. Herbst.
- 17. C. Sadolin and H. Kjelin, *Complete Vocal Technique* (Copenhagen, DK: Shout Publishing, 2000).

- 18. J. Sundberg and M. Thalén, "Respiratory and Acoustical Differences Between Belt and Neutral Style of Singing," *Journal of Voice* 29, no. 4 (March 2015): 418–425.
- 19. Cleveland et al.
- M. Weir, Vocal Improvisation (Van Nuys, CA: Advance Music, 2001), 80. This must be one of the very few books that offers a few words on breathing technique and singing accents.
- 21. K. Steinbauer, M. McDonald Klimek, and J. Estill, *The Estill Voice Model Theory and Translation* (Pittsburgh: Estill Voice International, 2017), 188–200.
- 22. Sundberg and Thalén.
- 23. Herbst.
- 24. K. Linklater, *Freeing the Natural Voice* (New York: Drama Book Publishers, 1976), 25.
- 25. Ibid.
- 26. Roy Hart Voice; https://roy-hart-theatre.com.
- 27. J. Pahn and E. Pahn, *Die Nasalierungsmethode* (Roggentin, Ger: Matthias Oehmke, 2000).
- 28. K. Thyme-Frokjaer and B. and Frokjaer-Jensen *The Accent Method: A Rational Voice Therapy in Theory and Practice* Bicester (Oxfordshire, UK: Speechmark Publishing, 2001).
- 29. Chapman.
- 30. R. Morris and L. Hutchison, *If in Doubt, Breathe Out!: Breathing and Support for Singing Based on the Accent Method* (Braunton UK: Compton Publishing Ltd., 2016).
- 31. Steinbauer, McDonald Klimek, and Estill.
- 32. Sadolin and H. Kjelin.
- 33. Steinbauer, McDonald Klimek, and Estill.
- 34. M. Dayme, *The Performer's Voice: Realizing Your Vocal Potential* (New York: W. W. Norton & Company, 2006).

Dutch Grammy winner, jazz singer **Ineke Van Doorn** is a highly respected authority as a jazz singer, improvisor, and teacher of CCM styles. In 2016 her book *Singing from the Inside Out, Exploring the Voice, the Singer and the Song* was published by ArtEZ University Press. The title describes a fundamental approach to teaching CCM singing where the singer builds a unique identity supported by sound technical work. The book received international acclaim and is being used as a textbook at European and Canadian universities.

Ineke holds a master's degree in jazz singing and graduated as a classical pianist. She is a voice professor at the ArtEZ University of the Arts, Arnhem (NL), teaching private singing lessons jazz and pop, voice technique, voice pedagogy, physiology and anatomy of the voice, and vocal improvisation. She has served six years on the board of the European Voice Teachers Association (EVTA).

Ineke teaches master classes and gives lectures regularly, among others at the International Jazz Voice Conference in Helsinki (FI), for the French AFPC, the Danish Leo Sings Conference, and at universities in The Netherlands, Germany, Canada, Indonesia, and the USA. She was a keynote speaker at Eurovox Riga (LV), Eurovox The Hague (NL), and ICVT Stockholm (SE). In 2011 Ineke started Van Doorn & Geven, a professional development program for singing teachers of all styles.

As a singer Ineke has been praised for her personal style and her seemingly unlimited vocal capacities. The Dutch newspaper *de Volkskrant* called her "the adventurer among the Dutch jazz vocalists." Together with guitarist/composer Marc van Vugt she performs internationally. Their original music is thoughtful and multilayered and combines lyrical songs with expressive improvisations. She has released 13 CDs with line-ups ranging from a trio to the Metropole Orchestra, the Dutch Chamber Choir, and the German classical vocal ensemble amarcord, and played in clubs and festivals in Canada, New York, Japan, France, Germany, Indonesia, and others. Both in 2016 and 2018, she toured for five weeks in Canada, playing in the Canadian Opera Company, in clubs and teaching and performing as artist-in-residence at Universities in Toronto and Vancouver. In 2018 Ineke performed an original duet on criticism with dancer/choreographer Cecilia Moiso (FI). In 2019 she toured in South Asia, both teaching and performing.

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Music the fiercest grief can charm, And fate's severest rage disarm: Music can soften pain to ease, And make despair and madness please: Our joys below it can improve, And antedate the bliss above. This the divine Cecilia found, And to her Maker's praise confin'd the sound. When the full organ joins the tuneful quire, Th'immortal pow'rs incline their ear; Borne on the swelling notes our souls aspire, While solemn airs improve the sacred fire; And Angels lean from heav'n to hear. Of Orpheus now no more let Poets tell, To bright Cecilia greater pow'r is giv'n; His numbers rais'd a shade from hell, Hers lift the soul to heav'n.

Alexander Pope, "Ode on St. Cecilia's Day," VII



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