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# Shifting technique – From Wagner to Warwick A Micro Case Study: Developing CCM Chest Voice Quality in a Classically Trained Female Singer

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# ABSTRACT

Students wishing to develop their repertoire and skills in contemporary commercial music (CCM) have been found to face challenges in accessing voice teachers who are experienced in contemporary music singing techniques. It is reported that most voice teachers are classically trained and therefore teach classical singing techniques to all students. Breath management, voice qualities and acoustic aspects of CCM singing are opposed to classical singing technique and this paper argues that classical singing techniques may be inappropriate for CCM singing due to its typical features which are speech-like and bright voice production, high-larynx posture and narrow pharyngeal space. Issues related to the use classical singing techniques to collect data. The lessons involved an adult learner who asked the author to help her improve her CCM chest-voice quality. The study's approaches and methodological exercises were summarised, together with students' progress through several voice production's facets. The findings contribute to present research on CCM singing as it provides perceptions and commendations supporting voice teachers to adopt personalized methodologies that accommodates student's specific training, requests, and aims.

Keywords: Adult learning, belting technique, contemporary commercial music singing technique, chest voice, voice pedagogy.

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#### 1. Introduction

Contemporary commercial music (CCM), according to LoVetri (2008), is generally used to define non-classical music such as R&B, music theatre, pop, soul, country, hip hop and other styles that do not belong to classical group. The domination of singers of CCM repertoire in the music scene is due to their individuality, popularity and marketability, which have enabled them to profit from concert performances and also brand endorsements (Bartlett, 2014). Hoch (2019) states CCM prominence and

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demands to recognise CCM voice teaching have been debated by New York Singing Teachers Association's (NYSTA) board of directors, who were classical voice teachers, due to the reluctance to accept non-classical styles. However, CCM was finally given the recognition in 2000 in the inaugural workshop on belting. Nevertheless, despite the growing reputation, many questions have been raised on the suitability of applying classical techniques to teach CCM singing and its effect of vocal well-being.

Singing is an activity that requires individuals to be physically fit and skilled to meet performance demands (Phyland, 2017). Determining individual's fitness to perform is dependent on how individuals, as vocal performers, self-evaluate their vocal abilities to perform and manage the expected vocal load (Phyland, 2017; Lavan et.al. 2019). LoVetri (2002) explains applying classical techniques to CCM singing is not advisable as voice learners, who are not used to singing pop music, would not have the capacity to produce resonance, tonal qualities and power supply needed to produce the desired CCM vocal tones. Scearce (2016) likens the use of classical techniques in CCM performance to a tap-dancer wearing ballet slippers hence enforcing classical techniques on CCM singing is inappropriate. Attempts to produce specific CCM voice qualities with classical singing techniques could cause vocal harm (Bartlett, 2018).

#### 1.1 Background

Classical techniques are often used in the teaching of CCM vocalists, yet research indicates that this can result in vocal damage (Bartlett, 2010; Edwin, 1998), with multiple scholars questioning this approach (Bartlett, 2014; Chandler, 2014; Edwin, 2004). Therefore, this paper explores Amy, a classically trained singer, who is keen to develop her CCM chest voice quality. This paper explains, apart from describing strategies and vocal exercises used in the lesson, describes challenges she faced while in search of an experienced CCM teacher. The discussion includes her progress, with regard to voice quality and how her voice transited from operatic to CCM voice and how the lessons, which includes suitable pedagogical features, technical exercises and vocal strategies, were tailored to suit her needs.

#### 1.2 Case study (Amy)

Amy is a 57-year-old semi-professional singer and music teacher. Like many singers interested in CCM, Amy had taken many private singing lessons and became frustrated by the dominance of classical teaching styles. One of Amy's previous coaches had also advised her to abandon CCM singing because she was a "natural Wagnerian soprano". Amy continued her search for a CCM teacher but was anxious about being pressured to use classical techniques that she feared may damage her voice. Amy attended my summer 2019 Germany voice workshop and shared her passion for CCM singing; with Dionne Warwick, Aretha Franklin and Whitney Houston being amongst her favourite artists. Amy approached me for private coaching as she appreciated that I focus heavily on evidence-based pedagogy and have a great deal of knowledge about CCM techniques despite my classical training background. We arranged our first one-to-one lesson for December 2019. Amy wished to take lessons for four months to develop her chest voice and repertoire, with occasional feedback sessions thereafter. Due to Amy's busy schedule, we agreed on monthly in-person lessons lasting 45 minutes each, with video calls in between.

#### **1.3** Purpose of the study

This micro case study aims to address challenges faced by classically trained singers when learning CCM singing techniques. This study aims to support voice teachers in acquiring knowledge and confidence to offer classically trained students effective CCM voice coaching. This study, apart from addressing laryngeal posture, strategies and exercises for developing speech-like voice quality, and differences between CCM and classical voice production, addresses two research questions: 1) "What strategies and exercises benefit CCM voice production as part of singing lessons?" and 2) "How can students' progress be monitored when weekly in-person lessons are infeasible?".

#### 2. Methodology

Case studies, which are classified as micro (straightforward and specific) or macro (long and complex) (Alpi & Evans, 2019) are useful for examining needs, experiences, or challenges (Sagadin, cited in Starman, 2013) through a detailed analysis of a specific case (Flyvbjerg, 2011). Case studies are common in practice-oriented fields, including education (Doorewaard, 2010; Starman, 2013) and

coaching (Marshall, 2010), when seeking reasons for a phenomena's existence (McDonald, 2010). The present research seeks to discuss a phenomenon (Walsh, 2006) where Amy's case allows challenges faced by classically trained students learning CCM to be explored along with challenges presented when face-to-face time is limited. Problem-based methods and applied research are beneficial to the present research as they focus primarily on existing problems (Hancock & Algozzine, 2006).

Rutkowski (1965) emphasises the benefits of one-to-one singing lessons over group lessons, whilst Holden (2002) encourages teachers to listen and provide tailored strategies. Following this advice, I was able to evaluate Amy's background and observe her singing, voice quality, body alignment, laryngeal posture, tongue position, and breath management. Ongoing video calls provided multiple sources of data, as recommended in the literature (Hancock & Algozzine, 2006). Monitoring changes in Amy's mouth posture, laryngeal position and voice quality also allowed for collection of comparative data. Additionally, I regularly requested feedback from Amy before providing guidance.

#### 3. Voice coaching

#### 3.1 Lesson 1

Initially, we discussed Amy's previous training and technical knowledge, and I perceived her physical pose, speech pace, and speaking voice. We performed 5 minutes of warm-up exercises (running in place, head and face tapping, and body stretches) to promote coordination of breathing, laryngeal movement and voice, and to increase blood flow, heart rate and cardiorespiratory demand (Schneider, Dennehy & Saxon, 1997). She performed vowel /i/ exercise (Fig. 1), beginning at A3 (below middle C), reaching C5 (above middle C), and returning to A3. The exercise allowed voice warm up and more observation of her singing vocals, vocal transition areas and range. This exercise also assists in building skills necessary for CCM chest voice quality development. She was aware of her body posture

and intonation whilst performing the exercise. To collect data, I observed her voice quality and breathing patterns and recorded my observations in the lesson plan (Fig. 2) (Griffiths & Tann, 1992). "Bitesize chunks" was used as it is efficient to be used to learn novel approaches (Rosenshine, 2002). We discussed body alignment prior to moving to laryngeal position, speech-like voice quality, releasing breath support, and mouth posture. Amy understood and modified her



Figure 1. Vocal exercise on vowel /i/

technique for CCM chest voice, reflecting the principle of continuity, with students' experiences influencing their future actions (Chiarelott, 1978; Dewey, 1938).

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Lesson Objectives		Today I would like to				
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Take Home Tooks						

Figure 2. Observation lesson plan

#### 3.1.1 Body posture

The relation between body posture and vocal quality is shown in the literature (McKinney, 2005) and crucial for singing efficiency (Davis, 1998). I expressed to Amy that I felt she had been trained well by previous coaches with regards to body posture and alignment.

# 3.1.2 Laryngeal position, voice quality, mouth posture, and releasing abdominal muscle support

Amy's legato style, laryngeal position, breath support and mouth posture highlighted her classical training. Although Amy had been trained to "sing from her diaphragm", research reveals that phonation happens in the vocal folds, with the diaphragm being an inhalatory muscle that cannot be palpated. Amy had been taught to yawn or imagine having hot potatoes in her mouth to lower her larynx to achieve the darker voice quality found in classical performance (Malde, Allen & Zeller, 2013). However, CCM involves a brighter, more forwarded, speech-like voice quality (Edwards, 2018; Hoch & Lister, 2016), with a neutral to high laryngeal position, high back-of-tongue, limited to no vibrato, and less emphasis on pure vowel sounds (Bartlett, 2014). Western classical and CCM singing techniques' incompatibility is recognised by the American Academy of Teachers of Singing (2008) and supported by Hoch (2016) who states that a lowered larynx with a high soft palate posture ("open throat") produces a warm, round voice quality less suitable for CCM singing. Bright CCM and belt voice productions are achieved through a shorter vocal tract and spread lip posture, which contradicts classical techniques (Edwin, 2007; Titze, 2007).

#### 3.1.3 Strategies and guidance

Whilst both CCM and classical singing require alignment, CCM emphasises motion over balance (Bartlett, 2010). Since Amy had good posture and body work knowledge, we planned this into a future lesson. We focused on laryngeal position and speaking-voice quality for the last half of the lesson, followed by cool-down exercises for vocal health.

**Laryngeal position:** Amy's classical training did not teach her to elevate her larynx. I demonstrated the neutral, elevated and lowered larynx by inviting Amy to place four of her fingers on my larynx before repeating on herself. I suggested she pretend to drink a glass of water to move the larynx (Silberman & Auerbach, 2014), then asked her how it felt (Scearce, 2016). I explained that CCM singing involves a flexible neutral to high larynx that shortens the vocal tract to produce a brighter sound (Boardman, 1989; Björkner, 2006; LeBorgne & Rosenberg, 2014). Amy was very interested in the exercise and was able to master lowering, resting, and elevating her larynx quickly.

**Siren Singing and Days of the Week:** After explaining, I asked Amy to touch her larynx and move her tongue forward to a high /ŋ/ position (as in "sing") to make a siren sound. Amy found it easier to feel her larynx moving during this exercise. We repeated the exercise, speaking days of the week with laryngeal elevation; then pretending to be a yawning Santa with a low larynx. I explained that this would help develop her CCM voice and encouraged her to stop if she felt discomfort, as the crowding of the hyoid bone can restrict articulatory motion (Titze, 2007).

**Speech-Like Voice Quality (SLVQ):** SLVQ is important for CCM singing, which engages the thyroarytenoid (TA) muscles (Bartlett, 2014; Hoch, 2016; LeBorgne & Rosenberg, 2014). CCM singing typically involves greater subglottal air pressure and a longer closed phase than in classical singing (Nair, 2007; Scearce, 2016). Barton (2018) recommends glottal onsets for finding SLVQ. I demonstrated the exercise, speaking vowels /a/ /e/ /i/ twice. Amy's had clear voice production with no breathiness.. I

observed Amy's ability to separate her speaking and singing voice and asked to say, "Ok, I am Amy" (Fig. 3) on pitch. I asked her to move up to her most comfortable top note (E above middle C) in semitone increments. Like many classically trained female singers, Amy found this unnatural as she had

o-kay I am A-my

been taught not to use SLVQ (Bourne, Garnier & Kenny, 2011). I explained that classical singing focuses on head voice register, which is rare in CCM (Edwin, 2000). I reassured Amy that new skills take time, providing positive

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support to boost her confidence and motivation (Leonard, 2002). I suggested that she repeat the exercise in a robot voice, enabling her to differentiate head voice from SLVQ.

#### 3.1.4 Cool-down exercises

I demonstrated and asked Amy to gently close her mouth, relax her jaw and tongue, and make a puppy whining sound on consonant /m/ at a high pitch, dropping to mid-range with a small voice. This exercise was repeated five times. Next, a gentle up/down siren singing exercise was performed with the high tongue /ŋ/ position. I consider cool-downs essential, being found to achieve a quicker return to

normal speaking voice, shorter recovery time, and greater vocal well being (Ragan, 2018).

#### 3.1.5 Checklist

I provided Amy with а checklist of techniques covered (Fig. 4) and kept a copy for reference. I invited her to seek support via WhatsApp and to engage in short frequent practice sessions (Brown, Roediger &McDaniel, 2014). We booked our next session for mid-December.



Figure 4. Summary of the first lesson/checklist

#### 3.1.6 WhatsApp video chat

Amy and I had two 20-minute video sessions after our first lesson, comprised of warm-ups, technical skill training, and cool-downs. During the second video call, Amy was able to move her chest dominant voice up to G (above middle C) and had been challenging herself to master this aspect. As a positive mind-set is crucial for voice students as they may be afraid to produce their desired sound (Wormhoudt, 2001),

#### 3.2 Lesson 2: Breathing and tension release

I encouraged Amy to perform breathing exercises to release abdominal tension before our warm-up. Amy pointed to her abdominis ("six pack") when asked to locate her diaphragm. I showed her a diagram illustrating the correct position (Alesandrini, 1984; Shabiralyani, Shahzad Hasan, Hamad & Iqbal, 2015). I explained the myth of singing from the diaphragm (Michael, 2010) and described how "six-pack" deactivation increased the efficiency of air intake (Chapman, 2006). I asked Amy to try a recoil breathing exercise, standing comfortably with a hand over her abdomen, making a series of "sh" sounds ("sh" – abdominal release – inhale – repeat – with the last "shhhh" being the longest). This felt unusual to Amy due to her background, but she then felt the air "dropped" into her abdomen.

#### 3.2.1 Exercises

The breathing support work improved Amy's performance on the siren exercise, perhaps due to the release of abdominal tension (Chapman, 2006; Kayes, 2004). Amy was confident about repeating the laryngeal movement exercise from Lesson 1, and we applied the strategy to the "Happy Birthday" song. I explained that we would apply this to her desired repertoire in future lessons and planned to work on her rounded mouth posture in the next lesson. Amy was very comfortable repeating the SLVQ exercise, and we worked through the nursery rhyme "Are You Sleeping? (Brother John)". I explained that this was beneficial for SLVQ and asked Amy to produce only the vowels, as follows:

/a-u-i-i-, a-u-i-i-, A-Ə D, A-Ə D, O -i-E -a-i-i, O -i-E -a-i-/i-a- O, i-a- O/

Beginning at A<sub>3</sub> (below middle C), Amy repeated the exercise in semitone increments until she reached head voice (G4, above middle C). She seemed challenged yet more confident in finding her SLVQ and demonstrated good self-directed learning (SDL), determining her own needs, goals, strategies, and outcomes (Knowles, 1975). As she was comfortable with her head voice, we worked on her chest voice. as the two voices would eventually merge. Focusing on chest and head voice separately has been found to help singers experience the feelings associated with each (Gundersen, 2012; Hall, 2014). We

ne		Summary of lesson plan	Date		
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	Voice Quality	(i) Classical (ii) CCM	Repertoire/Sanga		
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Figure 5. Summary of the second lesson/checklist

then completed our cool-down exercises. I provided Amy with a checklist (Fig. 5) and we booked our third lesson for January 2020.

#### 3.2.2 WhatsApp video chat

We had weekly 15-minute video calls after the second lesson, during which Amy asked for feedback on her singing "Amazing Grace". She had performed our exercises prior to singing the song. Amy started at B flat (below C) and felt the melody would be simple enough for her to perform well. Amy's song choice was perfect as she used her pure head register when singing the top note and rounded her mouth to sing /my/. I made a note to help Amy improve her mouth posture and addressed SLVQ technical aspects in her upper range.

#### 3.3 Lesson 3

Amy repeated the abdominal tension release and warm-up exercises from Lesson 2 well. To address Amy's mouth posture, I proposed an exercise using the /jæ/ sound (as in "yeah") (Fig 6.). Amy began at A3 and reached F4 in semitone increments. I told Amy that if she felt she could maintain her SLVQ, she could attempt a higher range.



I suggested that Amy begin with the bright /æ/ vowel to effectively find a TA-dominant voice quality and prevent classical tone (Jennings, 2014). Bright resonance can be achieved with a spread lip posture, higher laryngeal position, and a narrow pharynx (Edwin, 2007; LeBorgne & Rosenberg, 2014). Therefore, I advised her to move her tongue forward and spread her lips whilst singing /jæ/ ("yeah") sound. I noticed her mouth reverting to the rounded shape on E4. To correct, I demonstrated my lip posture and asked her to imagine I was waking up Snow White with a kiss. She emulated my lip posture while looking in the mirror, before adding the vowel /æ/ sound. This utilised visual, kinaesthetic and auditory learning strategies, and Amy was able to see and hear the differences. Amy maintained the spread lip posture up to F4, and I asked her to return to the previous exercise (Fig. 3). I paid careful attention to Amy's specific needs (Zull, 2002) and encouraged active learning to promote critical thinking and knowledge acquisition (Karge, Phillips, Jessee & McCabe, 2011). We finished with cooldown exercises, a lesson summary (Fig. 7), and feedback about the progression of the lessons so far, and we set a plan for next time.

# 3.3.1 WhatsApp video chat

I noticed that Amy had gained greater control of her chest dominant voice and was able to produce a non-classical singing voice. I told Amy that I felt she was ready to start applying her new skills to songs in our upcoming lesson. Merrill (2002) defies this as the application suggested phase. Dionne Warwick's "Walk on By", as I knew Amy would enjoy it, it contains glottal onsets, and the lyrics require a spread lip posture:



Figure 7. Lesson summary

"If you see me walking down the street <u>and I</u> start to cry <u>each time we meet...</u> In private 'cause <u>each time I</u> see you <u>I</u> break down <u>and cry and walk <u>on</u> by..." "Walk on by" – Burt Bacharach (Music) and Hal David (Lyrics)</u>

The song was also chosen due to its reasonable range, with the lowest note being A<sub>3</sub> (below middle C) and the highest being D<sub>5</sub> (Fig. 8), enabling Amy to maintain chesty voice quality at the lower range and balance chest and head voice beyond G (above middle C).



Figure 8. Vocal range of "Walk on By" using original key of F major

#### 3.4 Lesson 4

Amy could self-correct technical issues and was ready to be less dependent on coaching, demonstrating the benefits of ongoing learning and practise (Merrill, 2002). She was able to achieve CCM voice and chesty speaking voice quality in the appropriate vocal range with a combined slight of head voice at the top notes while elevating her larynx, maintaining a spread lip posture, and feeling her voice shifting to contemporary.

#### 4. Results

Each exercise was explained and demonstrated before Amy was asked perform them, with feedback provided (McCarthy, Carlow, Gabriele, Hall, Moore & Woody, 2003). Lessons included interactive techniques such as verbal imagery; gestures and roleplay; verbal and non-verbal instructions; and visual, auditory and kinaesthetic learning. Feedback was provided at the end to minimise distraction, promote independence, and encourage emotional connection (Scearce, 2016). Once it was clear that Amy could address her technical challenges independently, I requested for feedback throughout and shifted my strategy to give her more singing time. Amy gave positive feedback on her progress with technical strategies and CCM chest voice development but felt more frequent lessons would be beneficial, leading her to adjust her schedule to allow for at least one or two video calls per month. I expressed my appreciation for Amy's commitment, and she told me she enjoyed my explanations, exercises, positivity, support, and personalised teaching style. Amy was happy that she was quick in learning new skills such as laryngeal movement, SLVQ, abdominal tension

release, and mouth posture. We intend to explore other aspects of CCM singing in future lessons, such as the use of chest voice or SLVQ to a higher range, use of belt-mixed and yell-like belt voice, and the application of belting technique to her repertoire.

### 5. Discussion

My expertise in CCM and belting allowed me to focus directly on developing Amy's CCM voice quality within her limited schedule. Recognising specific differences between classical and CMM's vocal techniques and actual performance factors (e.g., crowd noise, microphone technique, vocal effects, and improvisation) is crucial. Thus, teachers should use CCM-specific techniques to support students' vocal health. As all students differ in terms of learning style, ability, objectives and background, it is recognised that Amy's outcomes may not be replicated by professional classical singers. However, the teaching guide can be used as a technical foundation for CCM singing applicable to all types of students. Based on my own experiences in Europe and Asia, I understand that most voice teachers have more professional singing experience than pedagogical knowledge. Thus, support for voice teachers to enhance student-centred teaching strategies that emphasise on individual needs and vocal health is crucial.

# 6. Recommendations

Growing interest in CCM singing should be supported with effective and appropriate training. Teaching should be tailored to individual needs and experience level. For instance, performers, who frequently use their voice, may require specific guidance on vocal health and stress management. It is beneficial for them to be provided with techniques to perform a range of musical styles. Age is also another factor to be considered due to CCM singing popularity among adolescents who may be in greater need of guidance on repertoire and vocal health strategies.

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