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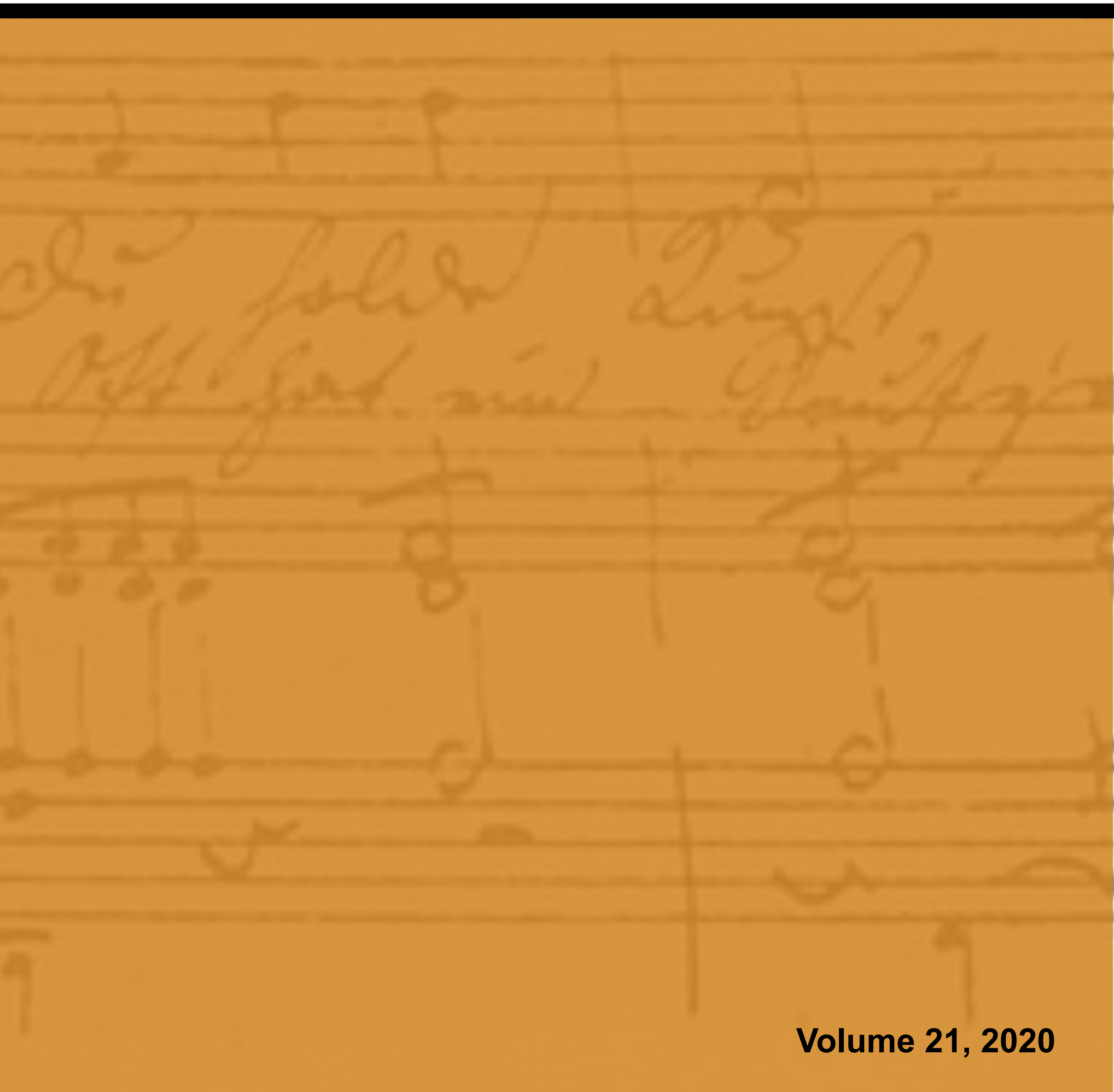

Volume 21, 2020

Australian
VOICE

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Cover

The cover references Schubert's *An die Musik*, a song that, in a very personal way, gives thanks to music for its power to fill us with warmth and lift us out of the dreariness of everyday life. Image sourced from https://commons.wikimedia.org/wiki/File:An_die_Musik.jpg

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VOICE

Contents

Volume 21
2020

Editorial

From the Editors ii
Julia Nafisi and Veronica Stewart

Articles

Applying Exercise Science Principles to Voice Pedagogy: Skill Acquisition, Performance Assessment, and Literature Selection 1
Matthew Hoch and Mary J. Sandage

Defining the Expert Voice Teacher: A Narrative Review of the Literature 9
Heather Fletcher, Jane W. Davidson and Amanda E. Krause

Re-examining the Roles of Text and Language in Western Classical Singing 22
Penelope Cashman

The Surprising Benefits of Asynchronicity: Teaching Music Theatre Online 31
Nicole Stinton

The Effects on Acoustic Voice Measures and the Perceived Benefits of a Group Singing Therapy for Adults With Parkinson's Disease 39
Richard Lewellen, David Meyer and Eva Van Leer

The Trouble With Adjectives: Aligning Singing Tuition and Artistic Practice With Procedural Learning Theory 49
Amanda Cole

Reviews

Insights Into the Benefits of Specialist Vocology Training 57
Victoria Lambourn

Diction in Context: Singing in English, Italian, German, and French 61
Linda Barcan

"The Stag Hunt" (2020), Based on *"La Chasse"* by Clément Janequin, Performed by I Fagiolini, Directed by John La Bouchardière 64
Linda Barcan

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From the Editors

Julia Nafisi and Veronica Stewart

What a year 2020 was.

While this is not the place to deplore the immeasurable toll of COVID-19 on all facets of life, *Australian Voice* did not escape the pandemic unscathed, with its main effect being a considerable delay in our publication timeline. And thus it is now March of 2021.

However, the wait was well worth it, and we are pleased to present an issue packed with high quality research articles and reviews.

Applying Exercise Science Principles to Voice Pedagogy: Skill Acquisition, Performance Assessment, and Literature Selection (by Matthew Hoch and Mary J. Sandage) explores the application of exercise science principles to vocal warm-up regimes (skill-acquisition exercises) and repertoire selection for classical singers.

Defining the Expert Voice Teacher: a Narrative Review of the Literature (by Heather Fletcher, Jane W. Davidson, and Amanda E. Krause), addresses the want of a generally recognised definition of the so-called 'expert voice teacher' through a narrative literature review of education, music education, and vocal pedagogy research and a subsequent synthesis of the content analyses.

Re-examining the Roles of Text and Language in Western Classical Singing (by Penelope Cashman) highlights the roles text and language play in the composition and performance of Western classical vocal music, and their subsequent importance in vocal pedagogy.

The Surprising Benefits of Asynchronicity: Teaching Music Theatre Online (by Nicole Stinton) explores the impact, challenges and surprising benefits of remote voice teaching as a consequence of COVID-19 restrictions.

The Effects on Acoustic Voice Measures and the Perceived Benefits of a Group Singing Therapy for Adults With Parkinson's Disease (by Richard Lewellen, David Meyer and Eva Van Leer) reports on the effects of a therapeutic singing protocol on the voice quality and wellbeing of individuals with Parkinson's disease.

The Trouble With Adjectives: Aligning Singing Tuition and Artistic Practice With Procedural Learning Theory (by Amanda Cole) addresses the custom and tendency of composers, teachers and coaches to offer descriptors of actions and emotions (i.e. adjectives and adverbs) for instruction and interpretation in music and vocal tuition pointing out how this is at odds both with learning and rehearsing processes in acting and theatre.

Insights Into the Benefits of Specialist Vocology Training (by Victoria Lambourn) is a personal account of a recent graduate of the Summer Vocology Institute and discusses the key benefits of studying vocology in this context.

Diction in Context: Singing in English, Italian, German, and French, First Edition by Brenda Smith, San Diego, CA, Plural Publishing, 2021, a new and comprehensive work on the subject of diction for singers has been expertly reviewed by Linda Barcan.

"The Stag Hunt" (2020), based on "La Chasse" by Clément Janequin, performed by I Fagiolini, directed by John La Bouchardière, also reviewed by Linda Barcan, whets one's appetite to see 'the string beans' (I Fagiolini) in action and makes for a lovely end to our 2020 issue.

We would like to give a special thank you to all authors and reviewers for their outstanding work in what was a difficult year.

Please note that *Australian Voice* welcomes submissions at any time – all information can be found on our website: www.australianvoice.net.au.

Julia Nafisi and Veronica Stewart

Applying Exercise Science Principles to Voice Pedagogy: Skill Acquisition, Performance Assessment, and Literature Selection

Matthew Hoch*, Mary J. Sandage#

**Department of Music, Auburn University, #Department of Speech, Language, and Hearing Sciences, Auburn University*

ABSTRACT: Although there is a large body of literature that applies exercise principles to athletic goals (running marathons, strength training, etc.), there is comparatively little research that applies these same principles to singing endeavours. This article applies exercise science principles to specific vocal warm-up regimes (skill-acquisition exercises) and literature selection for classical singers. After an introductory discussion of skill acquisition from an exercise physiology perspective, discussion will segue to a review of skill-acquisition warm-ups that are commonly used in classical voice training and habilitation. An examination of historical and contemporary methodologies reveals that traditional warm-ups for singers can be categorised according to targeted areas of skill acquisition, such as those that address onset/release, breath management, agility/flexibility, registration blending, tone/resonance development, or range expansion. Based on this information, the authors suggest the development of a rubric to assess the skill levels of individual singers in each of these areas. Teachers of singing can then consider these data when assigning repertoire from the standard body of vocal literature so that the specific areas of skill acquisition focused on in the warm-up are applied and reinforced through appropriate repertoire selection.

KEYWORDS: voice pedagogy, exercise science, skill acquisition, warm-ups, vocal repertoire, rubrics

SKILL ACQUISITION FROM AN EXERCISE PHYSIOLOGY PERSPECTIVE

Literature on skill acquisition in exercise physiology training is abundant. If one wants to train to run a marathon, there are numerous articles available on the internet as well as dozens (if not hundreds) of books one can read on the topic. However, there is comparatively little written about applying principles of exercise science to musical endeavours. This article will explore skill acquisition for vocal athletes from an exercise physiology perspective.

In exercise science, there are three basic principles that are considered. The overload principle addresses the concept of "strength building"; muscle tissue and the cardiorespiratory system must be exercised at an intensity beyond which it is accustomed in order for observable and measurable performance differences to occur. The specificity principle is the maxim that motor learning and muscle tissue adaptations for a motor skill are most efficiently trained when the target skill is trained. For example, if a singer aspires to improve specific note intervals, then those specific intervals need to be practiced. There should be no expectation of skill acquisition if the vocalises performed are unrelated to the target skill. The reversibility principle states that strength gains are quickly lost when the exercise intensity and frequency falls below maintenance level; if one ceases to exercise a particular set of muscles, detraining may occur after only a few weeks' break from activity (Powers & Howley, 2017). While all three of these principles can be applied to voice training, this article will focus on the specificity principle through an exploration of skill acquisition for singers.

Exercise science literature provides evidence to support the principle of *specificity*. In a classic study by Digby Sale (1998), subjects performed squats for eight weeks and made impressive strength gains in the quadricep muscles at the front of the thigh. After eight weeks of training, they also did leg press and knee extensions, which use the same muscle groups as squats. The improvement seen for squats was much greater than that for leg presses or knee extensions. The bottom line is if one wants to improve leg presses, one has to do leg presses. Thus, the principle of specificity speaks best to our understanding of skill acquisition.

SKILL-ACQUISITION WARM-UPS FOR SINGERS

Historical Methodologies

Historically, warm-ups for singers have overwhelmingly been geared toward skill acquisition. In the Italian bel canto tradition, vocalises were developed for the specific purpose of giving singers the skill set that that they would need to sing a specific repertoire (e.g., nineteenth-century Italian opera). In the master–apprentice tradition, singing teachers would develop their own vocalises, and some published their systems as methodologies. Although the reliance on historical method books has dissipated somewhat in recent decades, some of these publications are still in use. Three of the most famous examples of these skill-acquisition–oriented methods are by Nicola Vaccai (1790–1848), Heinrich Panofka (1807–1887) and Mathilde Marchesi (1821–1913).

Vaccai's *Metoda pratica de canto* begins by devoting each exercise to a specific interval. Beginning with the interval of a third, each subsequent exercise expands the interval by one step until the singer is practicing octave leaps; these exercises simultaneously address both range expansion and musicianship (interval hearing). Vaccai then proceeds to chromatic intervals (semitones) and increased rhythmic complexity (syncopation). The second half of the book offers individual exercises that focus on specific ornaments one would encounter in the standard bel canto repertory. The methodology concludes with advice (and an exercise) for singing recitative before continuing to a final lesson that summarises and reviews all of the skills addressed by the methodology. Another interesting feature of Vaccai's method is the use of poetic texts instead of neutral syllables or vowels; thus, the singer develops the skill of text delivery while integrating other aspects of vocal technique.

VACCAI – *Metoda pratica de canto*

1. The Scale – Intervals of Thirds
2. Intervals of Fourths – Intervals of Fifths
3. Intervals of Sixths
4. Intervals of Sevenths – Intervals of Octaves
5. Semitones
6. Syncopation
7. Intervals of Octaves
8. Appoggiaturas (above and below) – The Acciaccatura
9. Mordents (graduated exercises)
10. Turns (graduated exercises)
11. Trill (introduction)
12. Roulades
13. Glides (two methods)
14. On Recitative
15. Recapitulation (cumulative summary of techniques)

SKILLS ADDRESSED: *legato*, *flexibility*, *style*, *musicianship*
INTERESTING FEATURE: *the singer sings poetic texts throughout the method*

Figure 1. Vaccai's *Metoda pratica de canto*

Panofka's *24 Vocalizzi*, op. 81, proffers a similar set of skill-development excises as Vaccai, albeit in a different order and organisation. In addition, Panofka devotes specific exercises to major ("diatonic") and minor modes, dotted notes (*delle note puntate*), and legato singing. Overall, however, the two methods have much in common: both feature targeted exercises geared toward the acquisition of specific skills necessary to artistically perform the Italian bel canto repertory.

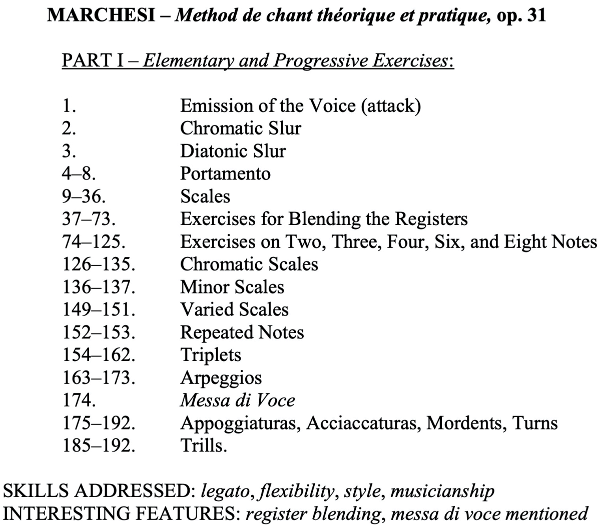
PANOFKA– *24 Vocalizzi*, op. 81

1. Diatonic Scale
2. Minor Scale
3–4. Agility
5–6. Thirds
7. Legato (groups of two)
8–12. Portamento
13. Dotted Notes (*delle note puntate*)
14. Syncopation
15. Legato
16. Appoggiaturas, Turns, and Mordents
17. Trills (introduction)
18. Agility
19. Trills
20–21. Arpeggios
22–23. Chromatics
24. Intervals

SKILLS ADDRESSED: *legato*, *flexibility*, *style*, *musicianship*

Figure 2. Panofka's *24 Vocalizzi*, op. 81

Perhaps the most expansive methodology published in this vein is Marchesi's *Method de chant théorique et pratique,* op. 31. Divided into two parts, it is a consciously comprehensive work; Marchesi aims to mold a novice singer taking her first lesson into a professional-level artist over the course of over two hundred graduated exercises. In addition to traversing the technical gamut covered by Vaccai and Panofka, Marchesi goes more in-depth by providing more exercises and devoting several pages to more complex topics such as register blending and *messa di voce*. Now almost 150 years old, *Method de chant théorique et pratique* remains one of the most thorough bel canto methodologies of the nineteenth century.



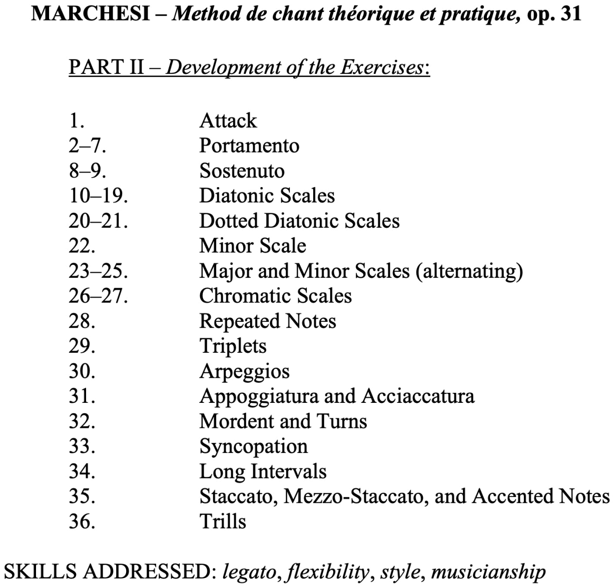
MARCHESI – *Method de chant théorique et pratique,* op. 31

PART I – *Elementary and Progressive Exercises*:

1.	Emission of the Voice (attack)
2.	Chromatic Slur
3.	Diatonic Slur
4–8.	Portamento
9–36.	Scales
37–73.	Exercises for Blending the Registers
74–125.	Exercises on Two, Three, Four, Six, and Eight Notes
126–135.	Chromatic Scales
136–137.	Minor Scales
149–151.	Varied Scales
152–153.	Repeated Notes
154–162.	Triplets
163–173.	Arpeggios
174.	*Messa di Voce*
175–192.	Appoggiaturas, Acciaccaturas, Mordents, Turns
185–192.	Trills.

SKILLS ADDRESSED: *legato*, *flexibility*, *style*, *musicianship*
INTERESTING FEATURES: *register blending*, *messa di voce mentioned*

Figure 3. Marchesi's *Method de chant théorique et pratique*, op. 31 – Part I



MARCHESI – *Method de chant théorique et pratique,* op. 31

PART II – *Development of the Exercises*:

1.	Attack
2–7.	Portamento
8–9.	Sostenuto
10–19.	Diatonic Scales
20–21.	Dotted Diatonic Scales
22.	Minor Scale
23–25.	Major and Minor Scales (alternating)
26–27.	Chromatic Scales
28.	Repeated Notes
29.	Triplets
30.	Arpeggios
31.	Appoggiatura and Acciaccatura
32.	Mordent and Turns
33.	Syncopation
34.	Long Intervals
35.	Staccato, Mezzo-Staccato, and Accented Notes
36.	Trills

SKILLS ADDRESSED: *legato*, *flexibility*, *style*, *musicianship*

Figure 4. Figure 4. Marchesi's *Method de chant théorique et pratique*, op. 31 – Part II

While additional bel canto methods retain their popularity—for example, the 50 *Lezioni*, op. 9, of Giuseppe Concone (1801–1861)—the skill-acquisition–based methodologies of Vaccai, Panofka, and Marchesi are significant because these pedagogues specifically labelled each and every exercise, categorising them according to the specific technical skill addressed. In this respect, they were a century ahead of their time.

Miller's Taxonomy

Richard Miller (1926–2009) is perhaps the most influential voice pedagogue of the second half of the twentieth century. In his seminal 1977 book, *English, French, German and Italian Techniques of Singing: A Study in National Tonal Preferences and How They Relate to Functional Efficiency*, Miller advocated that classical voice teachers subscribe to what he referred to as the "international Italian school," a contemporary methodology in the bel canto tradition based on his observation of hundreds of lessons with well-known singing teachers in England, France, Germany, and Italy. This study is generally credited with the near-universal embrace among modern pedagogues of the Italian school of breath management (*appoggio*), which Miller concluded is the most efficient breath management technique for classical singers.

Miller's greater contribution, however, was the founding of a systematic methodology for teaching voice that he outlined in his 1986 book, *The Structure of Singing*, the first of its kind in the modern, evidence-based era of singing. *The Structure of Singing* is effectively the merger of two traditions: the skill-acquisition–organised methods of the nineteenth-century Italian bel canto school, discussed above, fused with the science-based approaches to pedagogy that began in 1967, the year that William Vennard (1909–1971) published his definitive version of *Singing: The Mechanism and the Technic* and D. Ralph Appelman (1908–1993) released *The Science of Vocal Pedagogy: Theory and Application.* Like the historical methodologists, Miller organises his content according to skill acquisition, but tethers several innovations into his process-based chapters. First, he is systematic in his sequencing of the exercises, beginning with onset and release and breath management and stationing more difficult techniques, such as *messa di voce* and dynamic control, toward the end of the book. Second, and more important, detailed prose accompanies each exercise, with Miller discussing the physiology and purpose behind each exercise based on late-twentieth-century scientific principles and biomechanical findings.

MILLER – *The Structure of Singing* (1986)

1.	Onset and Release
2.	Breath Management
3.	Agility/Flexibility
4.	Resonance
5.	Vowel Balancing
6–7.	Resonance (nasal and non-nasal consonants)
8.	*Sostenuto*
9–10.	Registration (male and female)
11.	Vowel Modification
12.	Range Extension
13.	*Messa di voce* and Dynamic Control
14.	Vibrato and Vocal Timbre
15–17.	Extra-Technical Concerns

PRINCIPAL FEATURE: *detailed prose accompanies specific exercises*

Figure 5. Miller's *The Structure of Singing*

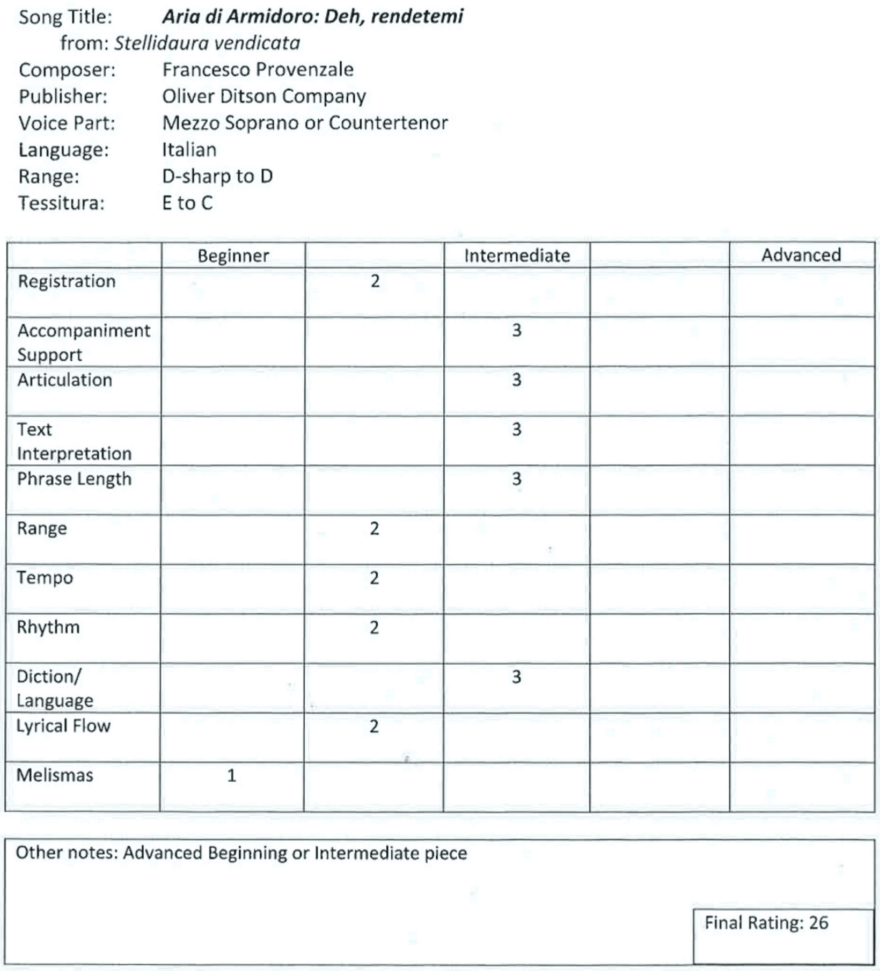
Habilitative Warm-Ups

All of the examples discussed thus far have been skill-acquisition–based methodologies that were developed with the goal of building up singers to perform classical vocal repertoire. In more recent decades, however, alternative methodologies have emerged. The abundance of contemporary commercial music (CCM) methodologies, many of them proprietary and trademarked, is perhaps the most obvious example. The engagement of singing teachers with professionals from the vocal health and voice science professions has also resulted in the creation of warm-ups that are not tied to repertoire or style. These "habilitative" warm-ups speak directly to vocal function and promote efficient use of the laryngeal tissue by balancing respiratory support, phonation, and vocal tract tuning. Ingo Titze (b. 1941) authored one of the most famous articles devoted to these habilitative warmups in a 2001 piece titled "The Five Best Vocal Warm-Up Exercises." Specifically, these warm-ups are as follows: (a) lip trills, tongue trills, humming, or phonation into narrow tubes (all partial occlusions of vocal tract) on glides, scales, or arpeggios; (b) two-octave pitch glides, up and down on the high vowels /i/ or /u/; (c) a forward tongue roll and extension on the vowel sequence /a/–/i/ in scales; (d) *messa di voce*, proceeding from a partially occluded tract to high vowels to low vowels; and (e) staccato on arpeggios. It is worth noting the overlap between these exercises and some of the ones discussed previously. However, Titze's warm-ups were not conceived for a specific repertoire; they are geared solely toward vocal function training and coordination of the subsystems of vocalisation. These function-based exercises—the most famous of which has become "straw phonation," i.e., warming up with a semi-occluded vocal tract (SOTV)—traverse all styles. They are good warm-ups for everyone.

ASSESSING SKILL ACQUISITION

Traditionally, warm-ups comprise the opening portion of a singing lesson, and the skills honed through these vocalises are then applied to repertoire during the next portion of the lesson. Historically, however, the link between individual singer's skill level on various aspects of vocal technique and repertoire selection has been somewhat opaque. Recent scholarship advocates a more systematic approach to repertoire selection.

Christopher Arneson, in his 2014 book *Literature for Teaching: A Guide for Choosing Solo Vocal Repertoire from a Developmental Perspective*, advocates a developmental approach to repertoire selection through the use of a rubric. Arneson's rubric analyses the literature itself. Individual pieces are evaluated according to eleven factors that represent technical challenges for the singer: (a) registration, (b) accompaniment support, (c) articulation, (d) text interpretation, (e) phrase length, (f) range, (g) tempo, (h) rhythm, (i) diction/language, (j) lyrical flow, and (k) melismata. Each of these categories is then given a value on a scale of 1 to 5, with 1 representing minimal difficulty for the singer and 5 being the province of more advanced singers. While Arneson's approach is holistic in nature, addressing extra-technical (albeit important) skills such as text interpretation and lyric diction, the parallel between the majority of these criteria and the technical skills identified by Miller and the historical bel canto methodologists is striking.

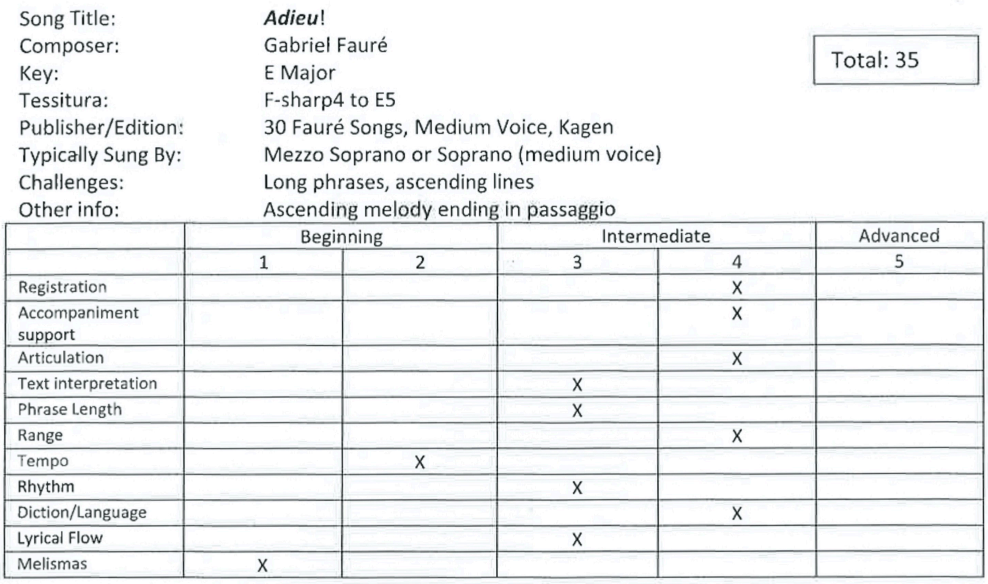


Song Title: ***Aria di Armidoro: Deh, rendetemi***
from: *Stellidaura vendicata*
Composer: Francesco Provenzale
Publisher: Oliver Ditson Company
Voice Part: Mezzo Soprano or Countertenor
Language: Italian
Range: D-sharp to D
Tessitura: E to C

	Beginner		Intermediate		Advanced
Registration		2			
Accompaniment Support			3		
Articulation			3		
Text Interpretation			3		
Phrase Length			3		
Range		2			
Tempo		2			
Rhythm		2			
Diction/ Language			3		
Lyrical Flow		2			
Melismas	1				

Other notes: Advanced Beginning or Intermediate piece

Final Rating: 26



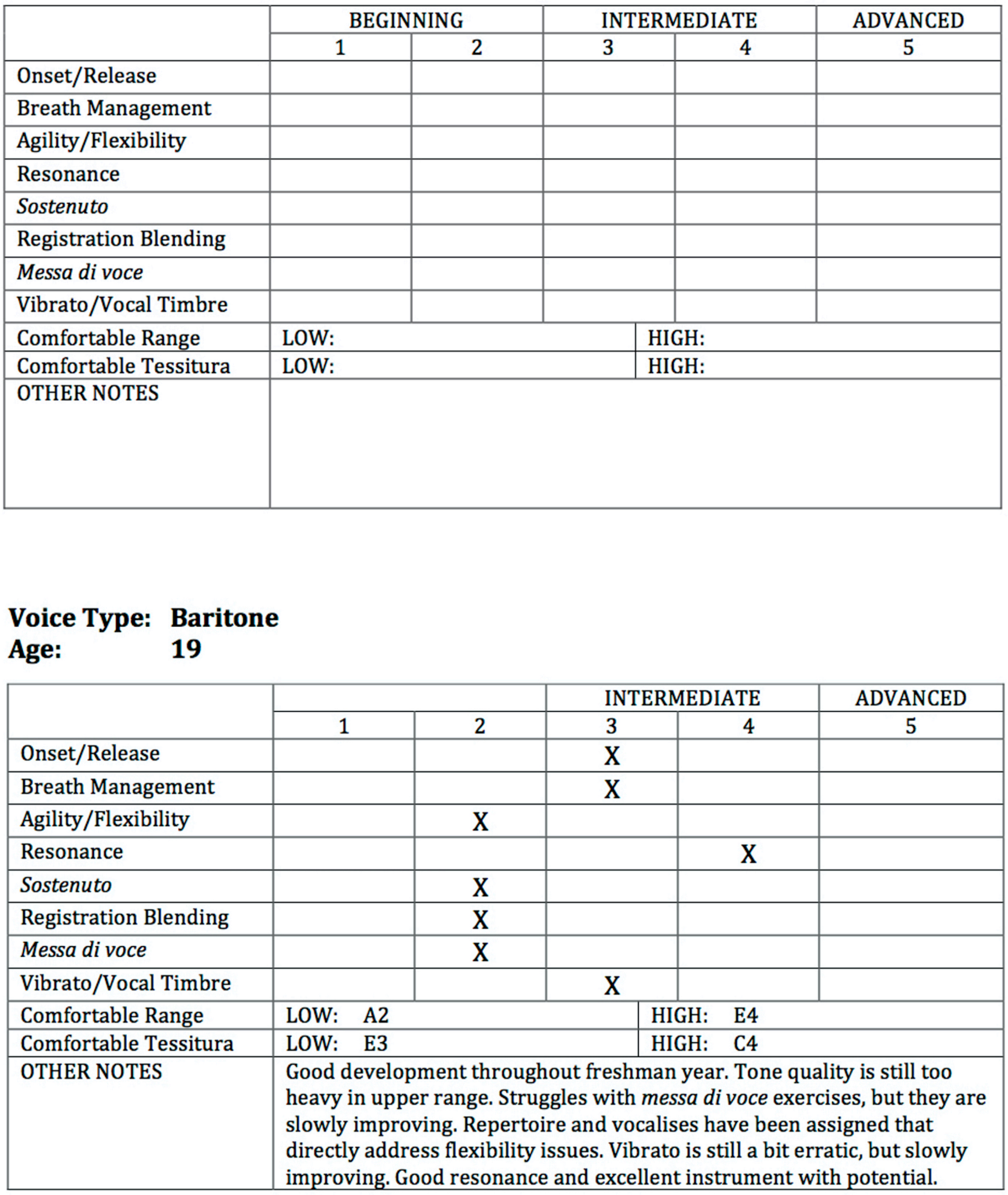
Song Title: ***Adieu*!**
Composer: Gabriel Fauré
Key: E Major
Tessitura: F-sharp4 to E5
Publisher/Edition: 30 Fauré Songs, Medium Voice, Kagen
Typically Sung By: Mezzo Soprano or Soprano (medium voice)
Challenges: Long phrases, ascending lines
Other info: Ascending melody ending in passaggio

Total: 35

	Beginning		Intermediate		Advanced
	1	2	3	4	5
Registration				X	
Accompaniment support				X	
Articulation				X	
Text interpretation			X		
Phrase Length			X		
Range				X	
Tempo		X			
Rhythm			X		
Diction/Language				X	
Lyrical Flow			X		
Melismas	X				

Figures 6 & 7. Two Literature Evaluation Rubrics from Arneson's "*Literature for Teaching: A Guide for* Choosing Solo Vocal Repertoire from a Developmental Perspective"

How then, does one best "match" these rubrics to the development of singers? Extending Arneson's framework, an alternative rubric could prove to be a useful vessel in demystifying the process of repertoire selection for singers. The authors propose a skill-acquisition–based rubric to complement Arneson's in which the aspects of the singer's technique are evaluated as a precursor to repertoire selection. Using Miller's taxonomy as a model, this rubric comprises eight categories of skill acquisition: (a) onset/release, (b) breath management, (c) agility/flexibility, (d) resonance, (e) sostenuto, (f) registration blending, (g) messa di voce, and (h) vibrato/vocal timbre. The rubric retains Arneson's five-value scale for these elements, but range and tessitura are evaluated more precisely according to specific pitches. The authors' rubric also provides space for the teacher to note additional specifics about the singer's voice that may not fall neatly into the rubric. An example of this skill-acquisition–based rubric, along with a completed sample, appears below.



	BEGINNING		INTERMEDIATE		ADVANCED
	1	2	3	4	5
Onset/Release					
Breath Management					
Agility/Flexibility					
Resonance					
Sostenuto					
Registration Blending					
Messa di voce					
Vibrato/Vocal Timbre					
Comfortable Range	LOW:			HIGH:	
Comfortable Tessitura	LOW:			HIGH:	
OTHER NOTES					

Voice Type: Baritone
Age: 19

			INTERMEDIATE		ADVANCED
	1	2	3	4	5
Onset/Release			X		
Breath Management			X		
Agility/Flexibility		X			
Resonance				X	
Sostenuto		X			
Registration Blending		X			
Messa di voce		X			
Vibrato/Vocal Timbre			X		
Comfortable Range	LOW: A2			HIGH: E4	
Comfortable Tessitura	LOW: E3			HIGH: C4	
OTHER NOTES	Good development throughout freshman year. Tone quality is still too heavy in upper range. Struggles with *messa di voce* exercises, but they are slowly improving. Repertoire and vocalises have been assigned that directly address flexibility issues. Vibrato is still a bit erratic, but slowly improving. Good resonance and excellent instrument with potential.				

Figure 8. Examples of a Skill-Acquisition–Based Rubric for Literature Selection

In application, the rubric can be used in two ways. First, it can serve as a structured methodology for academic voice professionals to use when evaluating technical skill and progress during student recital performances or end-of-the-semester examinations. Standardised methodology for evaluation of performance would support a more systematic approach for the evaluation of singing and provide a structured means for communicating between voice faculty members regarding vocal ability. Use of standard terms and approaches supports more consistency, which ultimately may reduce confusion on the part of the singer who is in receipt of the feedback. This structured approach for performance evaluation may also provide student singers with more specific feedback, a primary consideration for shaping motor skill in the motor learning literature.

Secondly, considering repertoire selection through the lens of this rubric provides a systematic way to support a singer's personal skill development. For example, if a young singer needs to improve the ability to sustain notes with less vocal strain and a more consistent tone quality, as evidenced by a lower score on the parameters of breath management or *messa di voce*, the singing teacher may choose to prioritise repertoire that demands this skill of the singer. Singing lessons may then focus more on vocal warm-ups to train this specific singing skill that could then be applied to chosen repertoire. In this manner the rubric could be used as a skill-acquisition road map to systematically work the singer through shorter-term singing goals to achieve the longer-term goals as they prepare for recital performance.

As is evidenced in the structure of the rubric proposed, the format of the rubric for either performance evaluation or skill acquisition and repertoire planning provides creative flexibility for the singing teacher. The rubric can be used for singers of all genders. The rubric could also be used as a visual map of skill development when counselling less experienced singers who insist on working on repertoire that is too difficult for their skill level. Use of the rubric in this example may help the student understand that their teacher's advice—to work up to the more demanding literature over time—is not a personal preference or opinion; rather, it is an informed decision based on historical and physiological bases.

It is acknowledged that rubrics, however well supported by literature and historical precedent, have flaws. In the effort to objectify and quantify data, they are inherently imperfect in that they are, in the end, largely subjective and perception based. As with many art forms, perceptual evaluation tasks that are required for training programs and competition can be improved through a standard approach that is characteristic of rubrics. When assessing vocal technique and assigning literature, the proposed rubric can provide a more systematic approach to this important aspect of voice pedagogy.

CONCLUSIONS

The specificity principle of exercise science carries enormous implications for teachers of singing. Particularly in the area of muscle training and skill acquisition, it is an invaluable tool when assessing singers' abilities and assigning vocal warm-ups and repertoire. Integrating these principles into one's teaching and voice training encourages successful outcomes when honing specific aspects of singing technique, and untangling these various aspects of vocal technique through specific assessment rubrics can prove invaluable when assigning pedagogically appropriate vocal literature to developing singers.

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BIOGRAPHY

Matthew Hoch joined the faculty of Auburn University in 2012, where he was tenured in 2015 and promoted to the rank of professor in 2020. His research program focuses on the scholarship of voice pedagogy and the practical applications of singing voice research in the applied voice studio. Specific avenues pursued include quantification of vocal dose as a means to frame exercise physiology aspects of skill acquisition and fatigue resistance when training up for recital performance, as well as furthering pedagogical scholarship in the areas of lyric diction, vocal literature, sacred music, women in music, cross-training across genres, and the history of voice pedagogy. Additional publications reconsider the traditional lexicography and taxonomy of singing terminology. Hoch's published bibliography on these topics includes several books as single author, first author, or editor and many peer-reviewed articles in over a dozen academic and professional journals. He earned his DMA in vocal performance at the New England Conservatory and his certificate in vocology from the National Center for Voice and Speech.

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Defining the Expert Voice Teacher: A Narrative Review of the Literature

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ABSTRACT: Currently there is no commonly regarded definition of an expert voice teacher. The manner in which an expert voice teacher is characterised is under-researched, with definitions often outlining unique criteria as determined by the researcher themselves. In this article, characterisations of voice teacher expertise have been identified through a narrative literature review of education, music education, and vocal pedagogy research. These characterisations have been synthesised through a summative content analysis in order to devise a comprehensive definition of the expert voice teacher. Findings indicate that voice teacher expertise can be divided into three overarching categories with additional sub-characterisations: 1) Experiential (e.g., performance experience, teaching experience); 2) Relational (e.g., adapt practices to the individual, diagnose vocal problems, effective communication, demonstrate knowledge of vocal function/style); and 3) Outcome-focused (e.g., success of students, quality of teacher's reputation, teacher's student pool). These findings have implications for developing vocal pedagogy training courses in higher education in the twenty-first century as well as ongoing research into the practices of exemplary voice teachers.

KEYWORDS: expertise, expert voice teacher, master voice teacher, vocal pedagogy, voice teacher training

INTRODUCTION

Expertise is a domain-specific concept, distinguished by individual characteristics, knowledge, skillset, and performance (Ericsson, 2018). However, there are currently no commonly regarded criteria for defining an expert voice teacher, specifically in relevant literature of education, music teachers, and vocal pedagogy domains. This could be because there are no formal, systematic approaches for prospective voice teacher training and development (Hoch, 2019). While previous studies have investigated the practices of master or exemplary voice teachers (Blades-Zeller, 1993; Burwell, 2018; Dufault, 2008; Durham-Lozaw, 2014; Roll, 2014; Stanley, 2018), definitions of expertise have often been determined by the researcher according to the specific context of their study. Investigating how expertise is defined in existing research among voice teachers and in education could offer insight as to how one might categorise a voice teacher as a master of their field. Developing clear criteria to define expertise in voice teaching could also aid a greater understanding of successful voice teacher practices and inform on vocal pedagogy training models for the twenty-first century. However, no study has reviewed existing theory regarding the knowledgebase, skillset, or practices of expert voice teachers in order to define expertise in voice teaching. The current narrative literature review aims to fill that gap.

This paper aims to identify characteristics of expert voice teachers by: 1) examining how expertise has been characterised in education, music education, and vocal pedagogy research, 2) identifying patterns, trends, similarities, and/or differences in the existing theory, and 3) devising a coherent, comprehensive, and complex definition of voice teacher expertise based on the literature reviewed.

This article first presents a brief background on the historical and current methods of voice teacher training and development, as doing so could clarify the practices and procedures that are expected to develop into expertise.

Historic and Current Methods of Voice Teacher Training and Development

In order to investigate vocal pedagogies of the present, it is necessary to reflect on processes through which voice teachers become voice teachers, and how the practice of teaching singing has been regulated, if at all. While it is likely that the traditional and predominant manner in which voice teachers have entered the profession is as an experienced and practising singer first, no conclusive research has highlighted this. Many influential Bel Canto pedagogues, namely Giulio Caccini (1551-1618), Pietro Francesco Tosi (1653-

1732), and Giovanni Battista Mancini (1714-1800), were all reputable singers who later became voice teachers (Reid, 1972). In subsequent centuries this trend has been followed, and research has shown that the training received by a singer strongly informs their approach as a teacher (Gaunt, 2008; Saathoff, 1995). Such voice teachers are classified as performer-teachers or teacher-artists, defined as:

> …a singer with advanced voice training and experience, who has at some point made all or part of his living singing professionally or semi-professionally, but who earns the major part of his living teaching singing and voice related courses in one of the thousands of public and private academic or independent studio settings across the nation. (Peeler, 2009, p. 157)

Performer-teachers impart knowledge derived from their performance experience (Schindler, 2016) and are considered crucial to modern-day vocal pedagogy, particularly in Western classical music, for developing musical performance (Mills, 2004). The performer-teacher's knowledgebase, accumulated through experiences as a student of singing and performer, typically includes an explicit and advanced understanding of: 1) vocal technique, proficiency, and mechanics; 2) stagecraft, theatre practices, and performance preparation including stage etiquette; 3) vocal hygiene; 4) repertoire, language, and musical style; 5) the complexity of the singer's psyche including the performer's understanding of fear and failure; and 6) the ways in which singers consciously and subconsciously synthesise multiple layers of understanding and skilling to achieve authenticity in high level performance (Schindler, 2016). Thus, training as a singer and experience as a performer are considered to directly impact training as a voice teacher. Credibility has also been associated specifically with what, where, and with whom a performer-teacher has sung (Harshaw in Van Sant, 1996).

Knowing how to sing does not predicate a knowledge of teaching singing, however, as "not all great singers are equally gifted teachers" (McCoy, 2014, p. 14). For example, in Australia, current institutional trends are predicted to require more formal qualifications, thus "mandatory teaching induction programs whereby performers entering the tertiary teaching environment with little previous teaching experience would require basic training in fundamental voice mechanics and vocal pedagogy" (Schindler, 2016, p. 204). The difference in skill level between performing music and teaching in music education is such that having been taught is by no means the same as knowing how to teach effectively (Parkes, 2009). The notion that knowledge of singing does not equate to knowledge of teaching singing was broached centuries earlier as Tosi (1743) who stated that perfect singers do not necessarily make perfect teachers as one's performance qualifications are insufficient if the teacher cannot communicate and adapt their methods to the student.

From the late twentieth century, courses in vocal pedagogy developed with numerous articles and theses focusing on degree programs, their curriculum, and speculation on how to improve the teaching of future voice teachers (Arneson & Hardenbergh, 2009; Cleveland, 1998; Folsom, 2011; Peeler, 2009; Walz, 2013; Wiley & Peterson, 2008). During this time in the United States, vocal pedagogy training became an "integral part of the curriculum of many voice performance degree programs" with lectures and coursework commonly focused on historical vocal pedagogy, anatomy and physiology, language and diction studies, repertoire, voice science, vocal health, music theory, and/or music history (Cleveland, 1996, p. 43). Depending on the institution, the curricula combined lectures with a practical application of knowledge through student teaching, observation, and feedback (Cleveland, 1996, 1998). This evidence suggests that pedagogy students at this time were being given considerably more theoretical knowledge about what to teach their students with less reference made as to how or to whom they apply this knowledge. According to Wurgler (1997), who herself designed a vocal pedagogy course for music educators, "Voice pedagogy courses rarely devote much time to communicating what we know about how to teach" (p. 7).

By the twenty-first century, however, the literature has shifted, with some pedagogy training syllabi including educational theory and psychology as well as subjects developing communication skills and/or encouraging critical thinking and creative teaching (Arneson & Hardenbergh, 2009; Folsom, 2011; Wiley & Peterson, 2008). For example, communication was noted as the central focus of their training course at Boston University (Folsom, 2011). In addition to addressing practical knowledge including vocal terminology, anatomy, breath control, registration, and resonance, teacher observation was noted as a crucial tool in expanding a student's knowledge of varied teaching techniques (Folsom, 2011). This aligns with findings from an investigation of twenty-first century pedagogy training courses at three leading conservatoria in the United States where it is claimed:

> The twenty-first century voice teacher faces the added challenge of considering the total picture of the student; including how the student learns, what fuels enthusiasm toward learning, and what will keep the student interested in practicing in order to promote technical and artistic growth. These teachers must consider the whole student. (Walz, 2013, p. 9)

Accordingly, teacher training in the twenty-first century has diversified to include workshops and mentorships. Professional organisations for singing teachers, largely developed in the twentieth century, include the New York Singing Teachers Association, Voice Foundation (USA), International Congress of Voice Teachers, British Voice Association, and the National Association of Teachers of Singing (USA). These organisations facilitate the professional development of singing teachers through publishing newsletters, hosting conferences and symposia, and/or offering internship/mentor programs (Hoch, 2019). For example, intern programs through the National Association of Teachers of Singing are designed to facilitate practical exposure to teaching practices and provide collaborative field experience in an integrated learning model. Members with less than five years teaching experience are paired with master teachers who supervise them in teaching lessons, participating in masterclasses, and in coaching. The objective of mentoring, according to Norman Spivey, the past president of the National Association of Teachers of Singing, is to exchange ideas "from teacher to intern, amongst interns, and ultimately in every direction—impacting all who participate" (quoted by Snyder, 2018, p. 266).

There is no singular way to train classical vocal pedagogy (noted by Hoch, 2019). This brief summary of vocal pedagogy training and development methods identifies a dichotomy in current training programs between master-apprentice and academic models, neither of which has been conclusively identified to be superior. While an academic model offers a broad spectrum of information and theory, mentorships and workshops allow for more practical exposure to the complexities of training the human voice while performing experience is considered an essential foundation to teaching singing. As voice teachers frequently adopt the practices from their own vocal training (Callaghan, 1998; Gaunt, 2008; Kennell, 2002; Saathoff, 1995), exposure to new methods in either training model could offer a more diversified and informed pedagogy in a young teacher's career. Of interest then are the theories and definitions of expertise in education, music education, and vocal pedagogy which could assist in characterising the expert singing teacher and contribute valuable information necessary for improving the manner in which voice teachers enter the profession and/or develop.

METHODOLOGY

A narrative literature review (Green, Johnson & Adams, 2006) has been adopted to investigate how expert teachers, music teachers, and voice teachers have been theorised and defined in existing research. The narrative review allows for conclusions to be made at a scope and theoretical level (Baumeister & Leary, 1997). It is particularly useful for interconnecting existing studies, generating hypotheses, and building theory (Baumeister & Leary, 1997). Narrative reviews are considered less formal than systematic reviews in that they do not present methodology, databases searched, or criteria for inclusion/exclusion (Jahan et al., 2016). However, they present summaries on findings from authors in a condensed format, not only discussing theory but also provoking thought (Green et al., 2006).

This narrative review examines literature predominantly from the last two decades. To provide a foundation it focuses on how expertise has been conceptualised in education, thus presenting a broad perspective on expert teaching. Categorisations of expertise in music education and vocal pedagogy are then identified in order to consider concepts of teacher expertise in these related contexts. From this narrative review, a comprehensive definition of the expert voice teacher is devised through a summative content analysis (Hsieh & Shannon, 2005). This summative content analysis is conducted by: 1) identifying how expertise is defined in research with specific attention given to wording and context; and 2) establishing parallels or similarities in said definitions. The frequency with which key concepts or wording are presented is calculated (Hsieh & Shannon, 2005). Defining characteristics of voice teachers, as identified by two or more researchers, are then presented in a comprehensive table and considered in reference to teacher and music teacher expertise.

This methodology offers a useful route to examining expertise in vocal pedagogy as there is no existing set definition, thus bringing together multiple, individual concepts can offer a balanced, broader perspective on this complex topic.

A NARRATIVE LITERATURE REVIEW OF TEACHER EXPERTISE

Expertise in Education

Expertise incorporates skills and knowledge, experience, developmental perspective, individual characteristics, deliberate practice, and a consistently high level of performance (Ericsson, 2018). Expertise in education asserts that it is domain specific; no single definition or categorisation sufficiently covers all disciplines (Berliner, 1986; Bucci, 2003; Ericsson, 2018; Hattie, 2003, 2012, 2015). Furthermore, to date, it is unclear what an expert teacher might be and how or whether such a level is achievable (Goodwyn, 2017, p. 25). It has been recommended to define the term "expert" particular to the parameters of research undertaken, thereby providing the framework in which to: 1) determine research results; and 2) align the reader's perception of expertise with that of the researcher (Bucci, 2003).

An extensive meta-analysis of studies pertaining to student learning revealed five major dimensions of expertise underpinned excellent teaching (Hattie, 2003). Expert teachers can:

1) Identify essential representations of their subject and convey, with flexibility, a more integrated knowledge thereof;
2) Guide learning through classroom interactions, creating an optimal learning environment of enquiry and engagement;
3) Monitor learning and provide feedback as a result of comprehending and interpreting relevant information with great insight;
4) Attend to affective attributes, being receptive to and respectful of the needs of the student; and
5) Influence a range of student outcomes by setting challenging goals and acting in a motivational manner (Hattie, 2003, p. 5).

In addition to these dimensions, expert teachers set challenging tasks that encourage a shared commitment from students and focus less on lecturing and more on undertaking activities that promote student engagement (Hattie, 2003, 2012, 2015). Further, the cognitive skills of expert teachers become more automatic through teaching experience, thus allowing them to assess and monitor student learning and respond accordingly to student needs (Hattie, 2003).

Expert teachers demonstrate a reliable ability to problem-solve and deal with complex situations in the learning environment (Berliner, 1986; Ericsson & Lehmann, 1996; Goodwyn, 2017; Schempp & Johnson, 2006). As the teacher's understanding of a subject becomes thorough to the point of mastery, it is the unusual and atypical that receives their attention and mental space (Goodwyn, 2017). Further, expertise in teaching is characterised not only by the representation and organisation of knowledge, but also by the teacher's ability to communicate it (Goodwyn, 2017). Verbal aptitude and fluency are important features for teachers to effectively, clearly, and succinctly communicate with their students (Polk, 2006). 'Feedback' is conceptualised as information provided by a teacher regarding aspects of a student's performance or understanding, and is a transmission process, communicating the strengths and weaknesses of a student's performance (Nicol & Macfarlane-Dick, 2006).

However, acquiring the skills needed to become an expert teacher is difficult as:

> You can only learn by doing it which extends to the idea that a teacher is only credible if they have taught for many years and still regularly teaches. (Goodwyn, 2017, p. 20)

Whereas purposeful practice, particularly with regard to lengthy training, has been linked to expert performance (Ericsson, 2006), the definition of practice in teaching remains unclear. A teacher's opportunity to practice is through actual teaching, providing no opportunity for a second chance (Goodwyn, 2017). Thus, if a teacher's method of practice is developed in situ, then there remains no moment to repeat the experience as a means of improving, thus making the process inconsistent and not easy to define. Additionally, practice through repetitive teaching is not enough to pursue expertise, as "experience is a necessary but not a sufficient condition for being an expert" (Brandt, 1986, p. 7). To this end, expert teachers must try new things in order to expand upon their knowledge and skill base (Goodwyn, 2017).

Expertise in Music Education, One-to-One, and Group Tuition

Studies specific to music education have been conducted in order to define music teacher expertise. Firstly, an important manner in which expert music teachers accumulate their technical knowledgebase is through their training and experience as a musician, particularly in performing to a professional standard with world-class musicians/conductors (Kennell, 2002; L'Hommedieu, 1992). Expert music teachers then integrate this knowledge by combining an in-depth understanding of technique with the relevant needs of the student (Allsup, 2015; Cencer, 2007; Duke &

Simmons, 2006; Gaunt, 2008; Kiik-Salupere & Ross, 2011; Neill-Van Cura, 1995). Findings frequently highlight the way in which teachers engage with their student as a demonstration of their skills. For example, they set appropriate, challenging tasks and engage students in these tasks for a greater extent of time (Duke & Simmons, 2006). They also set achievable goals for students (Neill-Van Cura, 1995; Duke & Simmons, 2006; Wurgler, 1997) in which they facilitate student autonomy (Gaunt, 2008; Swanwick, 1999, 2008) and encourage critical thinking in their students (Duke & Simmons, 2006). Expert teachers improvise strategies and pedagogical solutions (Gaunt, 2008; Kennell, 1997). They act as facilitators, envisioning the potential of the student (Cencer, 2007; McCoy, 2014; Wurgler, 1997) and encouraging individual learning processes rather than imposing them upon their students (Cencer, 2007; Dufault, 2013).

The manner in which expert music teachers share their knowledge with students is also emphasised in the literature. Clear communication is considered the mark of an effective music teacher (Dufault, 2013; Mills & Smith, 2003; Wurgler, 1997) and is used to facilitate learning (Kennell, 1997). For music teachers, this communication is often exemplified through verbal and/or non-verbal feedback (Burwell, 2010; Duke & Henninger, 1998, 2002; Hamann et al., 2000; Levasseur, 1994; Siebenaler, 1997; Welch et al., 2005). Effective verbal feedback is specific and positive and/or negative (Duke, 1999; Duke & Henninger, 1998; Duke & Simmons, 2006; Parkes & Wexler, 2012) and is a large part of a music teacher's "verbal repertoire" in a lesson (Duke & Henninger, 1998). Effective non-verbal feedback includes gesture (Burwell, 2018; Levasseur, 1994; Nafisi, 2010, 2014), modelling or demonstrating (Dickey, 1991, 1992; K. Madsen, 2003; Sang, 1987), and eye contact (Levasseur, 1994; C. K. Madsen & Geringer, 1989). It has been shown that expert teachers use modelling techniques almost twice as much as novice teachers (Goolsby, 1996).

Moreover, an effective music teacher incorporates their personal values in their teaching, demonstrating and sharing a love of music (Hendel, 1995). Desirable characteristics of successful music teachers include high self-esteem and humour (Boag, 1989 in Hallam, 2001), enthusiasm (Clemmons, 2006; C. K. Madsen & Geringer, 1989, 1990; Mills & Smith, 2003), positivity and organisation (Mills & Smith, 2003; Teachout, 1997), and self-control (Madsen & Geringer, 1989, 1990; Teachout, 1997). Further, there exists a relationship between teacher personality and effective teaching (Teachout, 1997; Wubbenhorst, 1994; Yarbrough & Madsen, 1998). It has been shown that profiling student and teacher personalities and adult attachment characteristics informs on the ideal partnering between teacher and student personality types, thus creating a more effective teaching/learning environment (Serra-Dawa, 2010, 2014). Additionally, teacher-student relatedness and rapport positively influences interpersonal relationships and leads to learning success in the singing studio (Clemmons, 2006).

One notable study of music teacher expertise is Duke and Simmons' (2006) analysis of three master music teachers conducting one-to-one lessons. Their findings have been examined in other research investigating music teacher practices (Baughman, 2014; Burwell, 2018; Parkes, 2009; Wexler, 2009) and have provided a framework for some music teacher research (Parkes & Wexler, 2012; Stanley, 2018). The study by Duke and Simmons (2006) identified 19 common elements of instruction, grouped into three categories: Goals and Expectations represents how teachers target specific goals at the student's appropriate level of difficulty; Effecting Change details how teachers pace a lesson and guide student learning; and Conveying Information illustrates how a teacher provides feedback. Aspects of this research parallel Hattie's (2003) definition of teacher expertise as music teachers guide student learning, provide feedback, and influence student outcomes by setting challenging goals.

Methodologically, the validity of Duke and Simmons' (2006) results has been based on how consistently all three teachers demonstrated the 19 elements, but it is acknowledged that greater accuracy would be determined by more precise methodology. For example, the data they analysed was through video recording; however, studies have found this decreases data reliability (Kostka, 1984; Serra-Dawa, 2010). This is particularly important as Duke and Simmons (2006) talk about teacher feedback in three of their 19 common elements, yet none reference non-verbal feedback which has been found to be used by expert music teachers in other studies (Burwell, 2018; Levasseur, 1994; Nafisi, 2010, 2014). Duke and Simmons also arrived at this list of elements after examining one piano, one violin, and one oboe teacher. While they claim that these teachers were "very different people" (Duke & Simmons, 2006, p. 10), observing teachers of different instruments would offer more conclusive results. For example, in testing the 19 elements against expert voice teachers, Stanley (2018) found that the model of expertise did not fully apply to the voice studio as "common voice teaching behaviours were not described in their list" (p. 2) such as working with an instrument that is largely invisible.

Expertise in Voice Teachers

Expertise specific to voice teachers has been comparatively under-researched as evidenced by a small number of existing studies, the variety of criteria denoting voice teacher expertise, and the fact that no two studies share the same exact definition of voice teacher expertise. Some definitions relate to teacher-performers as expert voice teachers as they gain their knowledge through performing, experience, and knowledge of the professional world (Kennell, 2002). However, their quality as a voice teacher is believed to be proven in part by the quality of the students they produce (Duey, 1980; Dufault, 2008; Forrest, 1984). This view assumes that teaching a variety of students over a number of years aids in expertise development (Proctor, 1980).

Other definitions emphasise that expert voice teachers adapt their teaching practices to the individual student (Blades-Zeller, 1993; Dufault, 2008, 2013; Gaunt, 2008; Robbearts, 2015; Roll, 2014). For example, Blades-Zeller (1993) interviewed sixteen master classical voice teachers in the United States in order to ascertain how they approach teaching fundamental concepts of vocal production and what their perceptions are of how singers are trained. Based on content and inductive analysis of face-to-face interviews, it was concluded that the exemplary voice teacher is: 1) able to diagnose vocal problems and solutions; 2) able to assess student needs and clearly convey information to them; 3) able to treat each student as an individual; 4) able to apply a personalised approach and individual style of teaching; and 5) vigorous and excited about teaching singing (Blades-Zeller, 1993 p. vi). Similar studies of exemplary voice teachers include Stanley (2018) who built on Blades-Zeller's (1993) research by interviewing three expert teachers, again in the United States, and observing them conducting one-to-one lessons in order to determine the nature of expertise in voice teacher practices. Stanley (2018) concluded that voice teachers have integrated knowledge domains relevant to subject matter and running a professional voice studio, which is accumulated through their collective teaching experiences.

Dufault (2008) also investigated the practices of three exemplary classical voice teachers in the United States and observed them conducting one-to-one lessons. Similar to Blades-Zeller (1993), Dufault (2008) concluded that expert classical voice teachers had more agreement than disagreement about technique, artistry, and musicianship. Dufault (2008) also found that teachers demonstrated critical listening/observation skills, a strong knowledge of vocal function and musical styles, and an expert ability to diagnose problems. Upon interviewing four expert music theatre voice teachers, Roll (2014) similarly found much consensus in their approaches, specifically regarding physical components of vocal production and perceptions of sound quality or timbre. Further studies of voice teachers conclude that experts demonstrate an ability to address students verbally and non-verbally in the lesson (Dufault, 2008) and seek to build trust with their students (Robbearts, 2015). One study interviewing 50 Australian classical voice teachers in tertiary education categorised the expert voice teacher's approach into three distinct groupings: 1) mainstream (e.g., teaching using kinaesthetic and visual imagery, focusing on vocal tone and language); 2) traditional (e.g., teaching using imagery, focusing on beautiful tone); and 3) innovative (e.g., teaching using physical explanations of vocal technique, focusing on appropriate tone) (Callaghan, 1998, p. 29).

In contrast, a study conducted by Gaunt (2008) investigating teacher and student perceptions of one-to-one voice and instrumental lessons concluded that teachers did not adapt their teaching methods to the individual needs of their students. Gaunt (2008) found that while teachers were conscious of their students' unique needs and were concerned with supporting them, aspects of their methodology did not facilitate student-oriented or autonomous learning. However, 80% of participants interviewed for this study were not voice teachers/students but rather from keyboard, strings, wind, brass, and percussion departments. Thus, these findings potentially apply less to vocal pedagogy practices just as Stanley (2018) found that Duke and Simmons' (2006) 19 elements of expertise did not entirely cross over either.

Similar to Gaunt (2006), studies on the practices of expert voice teachers target voice teacher training (Blades-Zeller, 1993; Dufault, 2008, 2013; Durham-Lozaw, 2014; Gaunt, 2008; Robbearts, 2015; Roll, 2014). Investigating how voice teachers enter the profession is important because, while voice teacher training is not systematised (Hoch, 2019), the present literature narrative review identifies that becoming an expert voice teacher requires specialised skills and abilities. For example, Dufault (2008) concluded that while there is no clear, defined way to teach singing, voice teachers must recognise the responsibility of working with their students. Research specific to music theatre pedagogy asserts that teachers must be educated in teaching music theatre styles through specific techniques (Roll, 2014). Similarly, Durham-Lozaw (2014) identified that voice teachers should be able to model contemporary belt styles for their students, and that if they themselves are unable to belt, they should train with qualified pedagogues of music theatre singing.

Another way of defining mastery is to consider the specific criteria used when "expert" voice teachers have been outlined for participant selection in vocal pedagogy research. These criteria, while not identical for all studies, offer another insight as to how expertise is classified for academic or research purposes. For example, Blades-Zeller (1993) sought endorsements of expertise from highly regarded voice departments at universities and conservatories in the United States as well as the National Association of Teachers of Singing. Teachers receiving three or more endorsements from these individual sources were considered among the participant pool. In another study, Watts et al. (2003) categorised experts as "professionals belonging to the National Association of Teachers of Singing" (p. 299). Dufault (2008) classified experts as those who had: 1) at least three winners of the Metropolitan Opera National Council Auditions over a 15-year period; 2) taught at conservatories/universities; and 3) had extensive performing and/or teaching experience (p. 52-54). Durham-Lozaw (2014) had six criteria for establishing expertise among the participant pool, namely: 1) extensive voice teaching experience in multiple styles; 2) currently working "in the field"; 3) a positive reputation among practitioners; 4) employment in a higher education institution; 5) familiarity with voice science; and 6) dissemination of research at relevant pedagogy-focused symposia (p. 56-57).

Roll (2014) considered expertise as: 1) actively teaching professional music theatre singers; 2) holding a membership to the Actors' Equity Association union in the United States; 3) having 15 years of experience teaching in a "musical theater conservatory, university, or private studio setting, practical work with musical theater professionals in the field, and professional performance experience in musical theater productions" (p. 57). Stanley (2018) pulled on criteria used in previous studies, namely Blades-Zeller (2003) and Dufault (2008), in identifying expert voice teachers as those who had: 1) colleague endorsement; 2) more than five years' teaching experience; and 3) professional accomplishment (though this is not clarified with regards to teaching versus performance achievement) (p. 65). Lastly, while Burwell (2018) defined the voice teachers as experts in their study, participant selection criteria was comprised solely of appealing for volunteer teachers in an Australian undergraduate music programme.

When considering the diversity in the criteria for selecting expert voice teachers to participate in voice pedagogy research, the lack of consensus in defining mastery is even more evident. Not only is it indicative of non-regulation in voice teacher practices, but also about how expertise is classified in those practices. Individual beliefs about expertise potentially influence research conducted on it. However, these numerous criteria also demonstrate how complex the industry of voice teaching is. Unsurprisingly, all of these studies conclude that future research into the various practices, approaches, methodologies, and/or training of voice teachers is essential to understanding this complex field.

A SUMMATIVE CONTENT ANALYSIS CHARACTERISING THE EXPERT VOICE TEACHER

Existing definitions of voice teacher expertise have been identified in the narrative literature review. Particular attention has been given to the terminology associated with expert teacher characteristics as well as the frequency with which the concepts have been presented in the literature. The summative content analysis identified nine characteristics of expert voice teachers that were shared by two or more researchers. These nine characteristics include: 1) performance experience; 2) extensive teaching experience; 3) ability to adapt teaching practices to the individual student; 4) ability to diagnose vocal problems; 5) ability to communicate effectively; 6) demonstrative knowledge of vocal function and musical style; 7) has quality students; 8) has quality reputation and endorsement among peers; and 9) teaches in a higher education institution. In order to investigate connections between these characteristics, further analysis permitted higher level grouping of them based on what makes the teachers expert and how their expertise is demonstrated. Trends with regard to background and training, teaching approach, and reputation were established and three distinctive, overarching categorisations of voice teacher expertise emerged: 1) Experiential (e.g., performing and teaching experience); 2) Relational (e.g., engagement with the student); and 3)

Outcome-focused (e.g., reputation/status). The overarching categorisations and nested sub-characteristics offer a new lens to enrich current theory. These theoretical findings are presented in detail in Table 1.

As Table 1 highlights, while voice teacher expertise is characterised through independent criteria such as teaching and performing experience, the majority of defining elements depend on how a voice teacher relates to their students as well as the outcome of their practices (e.g., the success of their students and their reputation among peers in the field). As the majority of defining characteristics depends or relies on how a voice teacher is perceived, defining expertise objectively can be complicated. However, given the relational nature of music tuition, it makes sense that the worth of a voice teacher would be interdependent with their ability to relate to their students, and the outcome or success of those relationships.

These three categorisations of voice teacher expertise align with aspects of education and music education research. For example, theories on voice teacher expertise classified by how they relate to the student parallel Hattie's (2003) dimensions of excellent teaching, specifically the ability to identify and convey the subject-matter with flexibility and influence student outcomes, namely quality singing. They also align with the expert teacher's ability to problem-solve (Berliner, 1986; Ericsson & Lehmann, 1996; Goodwyn, 2017; Schempp & Johnson, 2006) and communicate effectively (Goodwyn, 2017; Polk, 2006). Expertise defined by extensive teaching experience speaks to the concept in education theory that credibility is established by the number of years one has taught (Goodwyn, 2017). Defining expertise through performance experience aligns with existing theories in music education (Kennell, 2002; L'Hommedieu, 1992). Expert music teachers have similarly been found to combine technique with the individual needs of the student (Allsup, 2015; Cencer, 2007; Duke & Simmons, 2006; Gaunt, 2008; Kiik-Salupere & Ross, 2011; Neill-Van Cura, 1995) as well as communicate clearly (Dufault, 2013; Mills & Smith, 2003; Wurgler, 1997). While Duke and Simmons (2006) also had three categorisations of expertise upon analysing three music teachers, all of their categories were defined by how the teacher related to the student, rather than any independent characteristics of the teacher such as experience.

Table 1.
Characterisations of expertise in voice teachers in vocal pedagogy research

Experiential	Relational	Outcome-focused
Performance experience (Dufault, 2008; Durham-Lozaw, 2014; Kennell, 2002)	Ability to adapt teaching practices to the individual student (Blades-Zeller, 1993; Dufault, 2008; Robbearts, 2015; Roll, 2014)	Has quality students (Duey, 1951; Dufault, 2008; Forest, 1984)
Extensive teaching experience (Dufault, 2008; Durham-Lozaw, 2014; Proctor, 1980; Roll, 2014)	Ability to diagnose vocal problems (Blades-Zeller, 1993; Dufault, 2008)	Has quality reputation and endorsement amongst peers (Blades-Zeller, 2003; Dufault, 2008; Durham-Lozaw, 2014)
	Ability to communicate effectively, verbally and non-verbally (Blades-Zeller, 1993; Dufault, 2008)	Teaches in a higher education institution (e.g., university, conservatoire) (Dufault, 2008; Durham-Lozaw, 2014; Roll, 2014)
	Demonstrative knowledge of vocal function and musical styles (Dufault, 2008; Roll, 2014)	

DISCUSSION

To articulate a clear definition of the expert voice teacher, a narrative literature review and summative content analysis were performed. By examining the patterns in how expertise has been characterised in education, music education, and vocal pedagogy research, a comprehensive definition of voice teacher expertise has been generated. The narrative review revealed that, to date, individual researchers have either drawn from existing theory from other disciplines, investigated and confirmed their own hypotheses of expertise, or classified expertise in a unique way independent of other studies. The summative content analysis of research investigating vocal pedagogy practices indicated that expertise can be divided into three overarching categories with additional sub-characterisations, namely: 1) Experiential (e.g., performance experience, teaching experience); 2) Relational (e.g., adapt practices to the individual, diagnose vocal problems, effective communication, demonstrate knowledge of vocal function/style); and 3) Outcome-focused (e.g., success of students, quality of teacher's reputation, teacher's student pool). These characterisations align with definitions of expertise in education and music education domains with regards to extensive teaching and performing experience, problem-solving, effective communication, and student outcomes.

Decerning expertise in voice teacher practices has a number of implications, most especially on how prospective voice teachers train for the profession. For example, while systematised vocal pedagogy courses are now offered in higher education (Cleveland, 1998; Walz, 2013), existing literature shows that these courses focus more on content than delivery (Wurgler, 1997). Academic courses warrant re-examination as theories outlined in this narrative review demonstrate that a voice teachers' background, how a voice teacher relates to their students, and the outcome of that relationship, correlates to their success as a teacher. Of particularly consideration should be training voice teachers how to engage with their students as this is seldom mentioned in literature on vocal pedagogy courses but is evidently linked to successful teaching practices. Therefore, a combination of master-apprentice and academic models may offer the optimal type of voice teacher training, specifically targeting how voice teachers diagnose, communicate, demonstrate, and adapt to the individual student. Further, a platform that encourages prospective teachers to continue in their own vocal development and performance would directly impact on their development as a voice teacher.

Given the complex phenomena of teaching singing, more research into the industry's best practitioners could offer greater insight into how effective vocal pedagogy has evolved into the early twenty-first century. Future research should utilise the characteristics of expertise presented in this narrative review when investigating vocal pedagogy and the practices of voice teachers. The interactive and interdependent aspects of voice teacher practices which have been identified to correlate with voice teacher success also warrant further examination. Observing and examining how expert voice teachers relate to their students could offer richer data for this under-examined aspect of vocal pedagogy.

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Re-examining the Roles of Text and Language in Western Classical Singing

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ABSTRACT: This article highlights the integral roles text and language play in the composition and performance of Western classical vocal music, thereby justifying their corresponding importance in vocal pedagogy. It introduces the unnecessary notion of a battle between "logocentrism" and "musicocentrism" before illustrating the pivotal role of text in the composition of song, opera and oratorio. It then examines considerations that influence the choice between four possible language forms for vocal performance: 1) The original language of the text or libretto (not the audience's vernacular); 2) The original language (being the audience's vernacular); 3) Translation into the audience's vernacular; 4) Partial translation. Text and language are thus shown to play an integral and influential role in vocal performance, with the importance of their semantic, musical and expressive aspects interwoven with socio-cultural implications of language choice, the influence of the original language upon a composition itself, the history and social implications of performance in translation, and audience attitudes to language choice and intelligibility. Attitudes towards surtitles are also explored. Finally, the globalisation of the music industry is shown to have increased the practice of original language opera performance and, consequently, the language skills demanded of professional singers.

KEYWORDS: text, translation, poetry, libretto, lyric diction

For teachers and coaches of Western classical singing whose pedagogical focus includes text and language, there is often an implicit need to justify the importance of these aspects of vocal training. This arises particularly frequently in the conservatorium context, where competing priorities and budgetary limitations may result in difficult choices regarding the investment of time and educational resources. However, similar pressures may also often be present at the professional level.

The importance of text and language in Western classical singing can only be questioned if they are considered as somehow distinct from, or additional to, singing itself. Such a perspective fails to take into account the integral function of text, both as a source of inspiration and a fundamental semantic, musical, and expressive element of the vocal composition. Furthermore, an examination of the role of text and language from historical and socio-cultural perspectives provides a broad, multi-faceted picture of Western classical vocal composition in which text and language are essential.

This article initially considers the perception of music and words as competing priorities before exploring the role of text in the three principal genres of Western classical vocal composition: song, opera and oratorio. It then examines the priorities and considerations that may be taken into account when determining the language or languages of performance. This shows that the importance of semantic, musical and expressive aspects is interwoven with socio-cultural implications of language choice, the influence of the original language upon a composition itself, the history and social implications of performance in translation, and audience attitudes to language choice and intelligibility. Consideration is also given to surtitles which, since their introduction in the 1980s, have provided an additional linguistic dimension for opera audiences. Finally, historical and social contexts for multi-language performance are explored, as well as the effect that a globalised music industry has had on language choice, particularly in the performance of operatic repertoire.

LOGOCENTRISM OR MUSICOCENTRISM?

Though primarily thought of as musical forms, song, opera, and oratorio all combine music and text. They are indivisible from the text, which in many cases predates and inspires the musical creation. Translators R. Apter and M. Herman (2016, p. 6) describe an ongoing "battle" between "logocentrism" and "musicocentrism" in vocal music, highlighting that, though the words come first in order of creation, they are often considered secondary in order of importance. This is evident, for example, in a comment by conductor Mark Wigglesworth (2018), who writes:

> One could argue that the relationship between music and drama in the performance of an opera should be the same as that between composer and librettist during its creation. There is no doubt who is in charge. The words might be written first but composers get the top billing and will not hesitate to ask for changes should the text deviate from their musical vision for the story. (Wigglesworth, 2018, p. 116)

Apter and Herman argue that the prevailing opinions on this issue probably have more to do with fashion than the actual merits of words or music. Indeed, respected vocal coach Kurt Adler (1965, p. 43) wrote: "… the fight must end in a draw. In vocal art the word is lifted up and ennobled by the music, the music is made clear and brought into focus by the word". When considering the following lines from *Capriccio, Ein Konversationsstück für Musik in einem Aufzug*, Op. 85 (1942) it appears that this is a conclusion with which composer Richard Strauss and librettist Clemens Krauss would have agreed:

> "Vergebliches Müh'n, die beiden zu trennen. In eins verschmolzen sind Worte und Töne - zu einem Neuen verbunden. Geheimnis der Stunde. Eine Kunst durch die andere erlöst!" (Translation: Fruitless effort to separate the two. Words and Music are fused into one – bound in a new synthesis. Secret of the hour. One art redeemed by the other!). (Strauss, R., Krauss, C., & Divall, R., 1942, pp. 317-319)

One might well question whether any battle is necessary in the first place. An exploration of the role of text in song, opera, and oratorio highlights why this is the case.

Poetry and song

Almost all of the vast piano-accompanied song repertoire, whether German Lied, French Mélodie, English Art Song, Russian Art Song, or beyond, takes poetry as its starting point. The poem inspires and is integrated into the composition; Fischer-Dieskau (1977, p. 11) described a song composer as "both assimilator and interpreter". In some cases, the poem may be known and acknowledged as a masterpiece in its own right. Composers were often conscious of this, even if a text is perhaps now more widely known in its musical setting than independently. For example, after a performance of his setting of Goethe's *Rastlose Liebe* [D138] on June 13, 1816, Schubert wrote in his diary: "It cannot be denied that the essential musicality of Goethe's poetic genius was largely responsible for the applause" (quoted in Johnson & Wigmore, 2014, p. 161). This demonstrates the extent to which Schubert felt Goethe's poem transcended the composition that it had inspired [1]. However, composers do not always choose texts for their literary value. Fischer-Dieskau (1977, p. 13) posits that, while the preference shown by Lied composers for certain poets or "poems of negligible worth" is sometimes difficult to explain, it was "generally, and often unconsciously, a composer's flair for harmonizing his own creativity with the personal character of the poet [that] was predominant".

In addition to a singular text being the source of inspiration for a single composition, a literary genre can even be seen to have an influence that extends to calling a musical genre into existence. Just as the German Lieder of the eighteenth and particularly nineteenth century were kindled by new directions in German poetry (Böker-Heil et al., 2001), so too, for example, was French Mélodie inspired by French romantic poetry and then later the symbolist poets (Tunley & Noske, 2001). It is inconceivable that these musical forms might have come to be without their literary spark.

Libretto and opera

In the absence of large orchestral forces and scenic devices, the intimacy of song sets the text into relief. This is not the case in the multi-dimensional genre of opera. Desblache (2007, p.156) describes opera as being "about music and production and text (oral and written, particularly since the advent of surtitles) creating meaning interdependently". Yet, Salzman and Desi (2008) argue that both musicologists and music lovers commonly underestimate the importance of the libretto in traditional opera. Interestingly, the fact that they exclude anyone involved in the performance of opera from this accusation suggests that practical engagement with the genre cannot help but reveal libretto's role. Salzman and Desi see the early success of many classic and romantic operas as resting on the stage-worthiness of their libretti in the eyes of their contemporaries. Certainly, the influence of figures such as Metastasio and Da Ponte upon the world of opera is indisputable.

Though usually conceived first, the libretto is typically created specifically for the opera composition, whether as an original text or as a translation and/or adaption of an existing work. However, a pre-existing libretto may be a source of inspiration for an opera in the same manner as a poem inspires the composition of a song. For example, Italian lyric diction coach at the Royal

Opera House Covent Garden, Emanuele Moris (quoted in Cashman, 2019, p.68), tells a famous anecdote of the young Verdi in order to emphasise the role of text as an opera composer's inspiration: As yet unsuccessful, Verdi declared to his publisher, Giulio Ricordi, that he would no longer compose. Ricordi gave him a libretto by Temistocle Solera which he put in his pocket and later, at home, threw on the piano. It opened to 'Va pensiero sull'ali dorate' and Verdi sat at the piano to compose the now famous and beloved chorus from *Nabucco*. "But why?" asks Moris. "Because he was inspired by the words."

There is, however, often the potential for interaction between librettist and opera composer in a manner that is almost never available to song composers. Though on occasion song composers adjust text, insert repetitions, or choose to exclude verses and, in the case of some song cycles, entire poems, this is rarely in active consultation with the poet. The poem is a complete work before it reaches the hands of the composer who will turn it into song. However, in many instances the librettist and opera composer work together on an opera over a period of time, with influence being exerted in both directions. Benjamin Britten (2003) described such interaction with regard to the creation of *The Rape of Lucretia*:

> This "working together" of the poet and composer… seems to be one of the secrets of writing a good opera. […T]he musician will have many ideas that may stimulate and influence the poet. Similarly when the libretto is written and the composer is working on the music, possible alterations may be suggested by the flow of the music and the libretto altered accordingly. [...] The composer and poet should at all stages be working in the closest contact. (Britten, 2003, pp. 78-79)

Thus, just as an opera composer may initially be inspired by text, so too, as Wigglesworth pointed out, may they ask for changes to that text in the service of their overall vision of the work. Britten saw such collaboration as key to the successful composition of an opera and was one of many composers who worked in this manner with his librettists. Renowned collaborations that have produced several operas include that of Mozart with Da Ponte and Richard Strauss with Hugo von Hofmannsthal.

Libretto and oratorio

Such collaborations are associated less with oratorio. Traditionally based on sacred texts, though secular oratorios have been composed, the libretto in this genre could be seen to lack an element of originality that may be present in an opera libretto. However, the librettist still has a significant role to play; the chosen text must be adapted for the composition. Lacking opera's scenic elements in its original form (though some oratorios are now staged), the libretto in an oratorio must describe or suggest the action. Thus, the text carries the burden of conveying an even greater proportion of the plot than it does in opera.

Whatever the vocal composition, be it a song inspired by a poem, an opera based on a pre-existing libretto or created in collaboration with a librettist, or an oratorio with a libretto based on an adapted text, the words matter. Indeed, it is clear that text is both a source of inspiration and a fundamental part of the compositional process.

LANGUAGE OF PERFORMANCE

On both the opera stage and the concert platform, today's classical singers are required to sing in multiple languages. Western classical singing has a long and rich multilingual history, with the choice of language for opera in particular carrying historical and socio-cultural significance. Having ascertained that the text is integral to vocal compositions, it is important to explore some of the priorities and considerations that may be taken into account when determining the language or languages of performance.

There are four likely possibilities for language choice in vocal repertoire: 1) The original language of the text or libretto, which is not the audience's vernacular; 2) The original language, which is the audience's vernacular; 3) A translation into the audience's vernacular (assuming the audience shares a common vernacular); 4) Partial translation, e.g. recitative in vernacular, arias in original language. A brief historical and socio-cultural perspective gives an insight into each of these choices.

The languages of opera

The language most strongly associated with opera is Italian. Originating in Italy in the seventeenth century, opera expanded first throughout Italy, to the court of Louis XIV and the courts of central Europe. Between 1690 and 1790 it spread to another forty courts, to cities of central Europe, and to the kingdoms of Spain, Portugal, England, Denmark, Sweden and Russia (Brown et al., 2018). The emigration of Italian singers, composers and librettists allowed Italian opera to spread widely, and Italian was also widely spoken in Vienna, the capital of the Habsburg Empire. France, where French opera had the support of the royal court (Salzman & Desi, 2008), resisted Italian opera, and by the mid-eighteenth century, the English ballad opera, the French *drame lyrique*, the German *Singspiel*, and the Spanish stage *tonadillas* demonstrated each nation's attempt to develop an individual style and demonstrate the suitability of their language to musical drama (Mateo, 2014). Nevertheless, *opera seria* was associated with the Italian and French languages until the end of the eighteenth century (Desblache, 2007).

Russia, Poland, the Czech lands, Hungary, and other parts of the Habsburg Empire also saw the emergence of vernacular opera during the eighteenth century, but it was during the nineteenth century that they developed a 'national opera' bound up with a sense of national cultural identity (Brown et al., 2018). Desblache (2007, pp. 160-161) argues that, as "greater variety in topics through a wide range of works expressing burgeoning national identities… gave a new breath of life to opera, …opera in a certain language became a statement of identity, [and] complying with the dominant languages of the genre often implied betrayal". This is an important illustration of the significance attributed to language choice in opera throughout its history.

The influence of the original language

The nature of the original language may exert a powerful influence on the composition. For example, the distinct characteristics of the Czech language were a determining factor in Janáček's compositional style, stemming from his "obsession for setting naturalistic Czech speech to music, with the correct rise and fall and rhythmic lilt of his native Moravia" (Mackerras in Cheek, 2014, p. xiii). This has clear implications for lyric diction; when interviewed by Garsington Opera, UK-based Czech lyric diction coach Lada Valešová described the importance of her work in the context of Janáček's compositional process of setting exact speech patterns to music (Valešová, ND).

There are countless examples of an integral relationship between text and composition in both opera and song. Hugo Wolf was known to repeatedly recite the poetic texts as part of the compositional process for his songs (Schollum quoted in Cashman, 2019). Indeed, Fischer-Dieskau (1977, p.20) writes that Wolf's adherence to German "speech-melody" is such that in Wolf's works, "the declamatory shape of the song seemed unsurpassable".

Composers vary in their fastidiousness regarding the prosody of a language, but the relationship between text and composition can be seen to apply throughout the vocal repertoire, only truly, and conspicuously, absent on rare occasions when a composer has set a language that he or she does not speak. Furthermore, the nature of a language can have a broader music influence. One striking example of this is the influence of the Italian language on the development of *bel canto* singing, which encompasses not only the period-specific style but also the singing technique that is now employed so widely throughout the world.

In this context it is clear that there are several reasons for choosing to perform a work in the original language. Fidelity to the composer's intentions is likely to be a significant factor, both in terms of the sound of the language and its cultural implications. The style, both of the composition and the performers' interpretation, is often very much related to language, as exemplified by Janáček's prosody. Given that a translation must reconcile differences of meaning, syntax, prosody, and articulatory characteristics with music composed for and around another text, the original language will almost always allow the appropriate style to be more easily achieved. Furthermore, a composer who writes well for voices will often also have made judicious choices regarding choice of tessitura and other aspects of text setting that result in vocal ease (and therefore beauty) and intelligibility being most achievable in the original language [2].

The desire for fidelity to the original, both in terms of language and music, is supported by the commonly discussed notion of the sound of the words being part of the music itself: the musicality of lyric diction. Salzman and Desi (2008, p.80) dismiss this aspect, saying that "the notion that the music of language is equal in importance to its musical setting… requires an idealism that is inevitably in conflict with the realities of actual performance". One must question whether such conflict is in fact inevitable. Salzman and Desi refer to opera, but where poetry is set in song, the commonly agreed premise that the sound of language plays a musical role in poetry beyond the transmission of meaning supports the choice of the original language for song repertoire (Hollander, 1956). This goes a long way to explaining why song is translated so rarely in comparison to opera and oratorio.

One of Salzman and Desi's arguments for language's reduced importance is the failure of some professional singers to master their languages sufficiently, though this logic seems inherently flawed. If the original language is chosen in order to be true to the composer's original intentions, linguistically, compositionally, and stylistically, there is an onus on the performer to attempt to achieve that, and an expectation that they will possess the requisite skills. This is not negated by some performers' failure to meet those expectations.

Performance in translation

Nevertheless, works are not always performed in their original language. Though advocates of performance in the original language may be quick to point out the reasons for their preference, there is a long history of the translation of operatic works into the vernacular, which still occurs at opera houses such as the English National Opera and the Wiener Volksoper [3]. Italian opera was translated at small courts in Germany from the middle of the seventeenth century, and in England at public theatres from the beginning of the eighteenth (Desblache, 2007). During the nineteenth century opera was increasingly performed in translation and, in some cases, works achieved success in a language other than the original. Mateo (2014, p. 333) gives the example of Verdi's *Don Carlo*, originally set to a French libretto, which became known in Italian. She also cites Wagner's *Die Meistersinger von Nürnberg*, which, after premiering in German in Munich in 1868, was immediately performed "in English (in London), Hungarian (in Budapest), French (in Brussels) and Italian (in Milan, but also in Madrid, where Italianism was still strong in 1897 and where Wagner's opera was not performed in its original language until 1926)". Further noteworthy examples of translation include the first British performance of *La Bohème* in Manchester in 1897 in English (supervised by Puccini), and Poulenc's request that his *Dialogues des Carmélites*, of which he was both composer and librettist, be translated into Italian by Flavio Testi for performance at La Scala, Milan, in 1957 (Jonas Forssell in Apter & Herman, 2016).

It is important to acknowledge that the decision to translate a libretto may have social implications. During the nineteenth century, opera houses such as *The Metropolitan Opera* and the *Royal Opera House Covent Garden* generally chose to present the original language while provincial opera houses offered works in translation (Desblache, 2007). Thus developed a rift that is often still manifested today, with artistic superiority attributed to performance in the original language over that in the vernacular. A perceived superiority is even at times seen to extend to the audiences of the former over those of the latter. Since the latter decades of the twentieth century, it has been the international practice to perform operas in the original language, even in smaller houses. The occasional exceptions to this are particularly lighter or comic operas, to which similar prejudices may sometimes be seen to apply. It is not the aim here to make a judgment regarding the merits of original language and translation, but rather to consider the possible reasoning behind each decision. The examples above show that there was clearly a desire from many composers and audiences for the sung text to be understood by the listener. Bearing this in mind, the importance of intelligible and expressive delivery of text, be it the original language or a translation, is clear.

Audience attitudes

Whether or not the composer wished them to understand the text, not all opera-goers are concerned with comprehension. Of opera-goers who do not consider the semantic meaning and content of the words to be vital, Mateo writes: "For uncomprehending audiences who nevertheless enjoy the operas, the words probably function as music" (Mateo, 2014, p. 328). Apter and Herman (2016) write acerbically:

> …Some who do not care at all about words enjoy opera only for the sense impressions it makes. For them, opera is a succession of vocal fireworks on syllables that may as well be "la la la," preferably accompanied by spectacular costumes and scenery. Their credo is, "I don't care what language I don't understand opera in". (Apter & Herman, 2016. p. 39)

Yet if the words function as music, and well they may, then "la la la" is a monotonous theme. Both these perspectives neglect the fact that, while a listener may not understand the semantic content of a language, they can surely perceive the emotional content based on the manner of its delivery. In cases where the meaning of the sung words is not directly comprehensible to the listener, lyric diction can be perceived both musically and expressively.

When the original language of a work is the audience's vernacular, the attitude of the audience may differ significantly. The aspects of textual and stylistic fidelity and vocal ease remain applicable, however intelligibility becomes key. In her book, *Singing and Communicating in English* (2008), Metropolitan Opera English lyric diction coach Kathryn LaBouff writes:

> The English-speaking audience has a very different expectation for the musical performances it hears in English from a performance in a foreign language. They expect and want to understand most of the text on first hearing. (LaBouff, 2008, p. 5)

While she acknowledges that heavy orchestration and words set at the extremes of vocal ranges will limit intelligibility, LaBouff argues that ninety to ninety-five percent intelligibility is achievable by singers with good lyric diction knowledge and good singing technique. In fact, she sees this as imperative for the survival of the art form, writing: "If we hope to forge a connection with the younger generation, maintain, and even build opera and concert attendance, the text needs to be clear and communicative" (LaBouff, 2008, p. 5). In the case of American opera, this seems to be occurring. American composers are composing works "at a prodigious rate" for American audiences (Midgette, 2007, p. 81), suggesting a significant contemporary demand for vocal works in a language that the audience can understand directly.

Surtitles

Where the original language is not that of the audience it is now common practice for the audience to have access to some form of written translation, be it surtitles as in opera, or printed texts as in a song recital. Neither form truly allows the listener to comprehend the meaning of each word as it is sung; surtitles are necessarily a simplified translation of the sung language, and prose translations of song texts are rarely literal and cannot capture the poeticism of the original. Furthermore, written translation is no substitute for the interpretative expression of the performer.

Given the vigorous and passionate debate regarding the use of surtitles in opera and their potential influence on lyric diction, it is worth discussing them in some detail. First employed by the Canadian Opera Company in 1983, surtitles are now ubiquitous in major opera houses. In particular, the use of surtitles for operas sung in the vernacular is a somewhat thorny issue. Initially employed for operas sung in a language foreign to the audience, surtitles are now frequently used when the production is performed in the vernacular, be it the original language or a translation. For example, in 2006 surtitles were introduced at the English National Opera, where operas are generally performed in English translation. This was despite considerable opposition from some parties (though little from the audience – a survey in the early 2000s found 80% of the ENO's audience in favour (Marcia, 2013). Notably, the former director of productions at the English National Opera, David Pountney, had once described surtitles as "a celluloid condom inserted between the audience and the immediate gratification of understanding" (quoted in Murray Brown, 2010). Conductor Mark Wigglesworth (2018, pp. 176-177) expresses this sentiment somewhat differently when he writes:

> The ubiquity of operatic surtitles… encourages a literal approach, and despite their benefits, the danger is that opera's more elemental power is diminished. Leaving aside the fact that it is hard to truly listen and read at the same time, or that the eye cannot look in two places at once, or that the specific timing of the delivery of the text is no longer up to the performer, by giving our conscious so much power over our subconscious we negate opera's ability to transport us beyond the here and now. (Wigglesworth, 2018, pp. 176-177)

Some critics argue that the presence of surtitles leads to singers performing with poorer diction. Others feel that the use of surtitles in the language being sung is an insult to the performers (Cashman, 2019) [4].

The demand that led to the use of surtitles, be it for a performance in a foreign language or the vernacular, supports the argument that the majority of the audience does, as Mateo argues, expect text to be comprehensible (Mateo, 2014). Yet this does not imply that surtitles can or should carry the entire burden of communication and intelligibility. They function as an aid to the audience's semantic comprehension, but are no substitute for the musicality, expressivity, and immediacy of the sung language.

It is worth mentioning that surtitles are not always used in the audience's vernacular: At the Wiener Volksoper performances are frequently given in a translation into the German vernacular with surtitles in English, the common language of most non-German-speaking audience members. In this instance, surtitles serve the purpose of translation of a translation, the burden of intelligibility for German speakers resting solely with the singers.

Multi-language performance

The final scenario regarding language choice is that of partial translation. Though rare nowadays, this may include singers singing in more than one language, or different roles being sung in different languages. Until the mid-twentieth century Handel's operas were often sung with the arias in Italian and the recitative sung or spoken in the vernacular where they were performed (Desblache, 2007). Interestingly, this is exactly the approach currently employed by a South Australian company, *Co-Opera*, which performs without surtitles and tours its productions to rural and regional areas of Australia where opera is little known.

The singing of different roles in different languages is now rare given the general preference for performance of works in their original languages. However, prior to the mid-twentieth century, singers often imposed the languages in which they sang (Desblache, 2007). An Italian singer based in Italy might have sung all his/her roles, including Wagner, in Italian, and also performed in Italian internationally. During the 1920s, for example, up to three languages could be heard during the same performance at the Finnish National Opera when notable foreign artists were engaged (Gómez-Martínez in Mateo, 2014). Even in the mid-twentieth century, Russian singers who performed roles such as Boris Godunov outside Russia were usually the only member of the cast performing in Russian, the other parts being sung in English, German, or French (Mackerras in Cheek, 2014).

A global industry

The globalisation of the music industry has changed this significantly. Classical singers are now generally required to learn their roles in the original language, performing them in productions worldwide. Some may specialise in roles in a particular language, for example Verdi in Italian or Wagner in German, but most will be required to sing in several languages; those with poor lyric diction skills will find their employment opportunities to be limited. Most opera houses now rarely perform works in translation. Consequently, opera chorus members will frequently be required to learn works in a variety of languages for a single season. The choice of the original language in the performance of opera may be partially attributed to artistic preference, but globalisation can be seen to have resulted in the increasing practice of original language performance (Apter & Herman, 2016; Salzman & Desi, 2008).

Song continues to be almost always sung in the original language [5], translation seeming to sit particularly uncomfortably with the exceptionally close relationship between music and poetry in this genre. It could be argued that, in the creation of the song itself, a liberty was already taken with the self-sufficient poetic form, and that translation is simply a step too far.

CONCLUSION

To consider text and language as somehow distinct from, or additional to, Western classical singing fosters the unnecessary and counterproductive notion of a battle between musicocentrism and logocentrism. Whatever the language being sung, the semantic, musical, and expressive qualities of the text are integral to the performance. Furthermore, the role of text as a source of inspiration for composers, the historical and socio-cultural significance of language choice in vocal composition and performance, and audience attitudes to intelligibility make the delivery of text a crucial aspect in the performance of Western classical vocal compositions.

If the original language is chosen, this may well be due to the guiding consideration of linguistic and stylistic fidelity to the composer's intentions, and the relevant cultural associations. However, the frequent use of surtitles in such circumstances implies a continued desire for audience comprehension of the text. Where the original language is the vernacular, these aspects are combined with an audience desire for, and indeed expectation of, immediately intelligible sung text. Where the decision to sing a vernacular translation is taken, it is clear that intelligibility has been prioritised over fidelity to the original. Of course, history shows that this would not necessarily be counter to the wishes of the composer. Moreover, the language of a sung translation will not be devoid of musical aspects; it too will have musical qualities to be conveyed along with semantic and expressive aspects. Though now rare, performances employing partial translation into the vernacular in combination with the original language can be seen to encompass all of these aspects.

When considering these contexts, it is clear that the professional Western classical singer must be equipped with lyric diction skills that encompass a remarkable combination of multilingualism, intelligibility, and expressivity. Failure to acknowledge the necessity of these skills in a pedagogical situation, such as conservatorium study, contributes to the perception of lyric diction training as an optional extra for developing singers. This limits not only student singers' future employment opportunities, but moreover, their capacity to fully explore and do justice to the rich genres of Western classical vocal composition in which, to again borrow from Strauss' *Capriccio* 'words and music are fused into one'.

NOTES

1. Yet in his self-deprecation, Schubert failed to acknowledge the impact of the music and text in combination; Graham Johnson describes Schubert's setting of *Rastlose Liebe* as "a storm of raw energy and power which was an immediate hit with his circle … and which has been at the centre of the Schubert repertoire ever since" (Retrieved from https://www.hyperion-records.co.uk/dw.asp?dc=W1927_GBAJY9402405)

2. Translations facilitate vocal ease more rarely than original settings. In this case responsibility lies with the translator, rather than the composer. This is one of the less widely appreciated challenges inherent in creating singable translations.

3. Ronnie Apter and Mark Herman's book, *Translating For Singing: The Theory, Art and Craft of Translating Lyrics* (London: Bloomsbury Publishing, 2016) provides an insight into the craft and history of translation.

4. There is a "catch-22" situation here: the surtitles are only an insult if the singers' diction is intelligible. There is, of course, a risk that singers who take presence of surtitles for granted may fail to prioritise their own diction unless text and language are given sufficient priority both throughout their education and during the professional production process.

5. Though not entirely. The performance of Schubert Lieder in English translation is explored in the research of pianist and University of Toronto DMA candidate Lara Jane Dodds-Eden, whose forthcoming dissertation is entitled: *"Play your broken music to my broken song?": Contemporary implications of performing Schubert Lieder in English Translation*. See also baritone Roderick Williams' discussion at https://bachtrack.com/feature-roderick-williams-schubert-winterreise-lieder-month-january-2019 regarding his performance of Jeremy Sams' English translation of Schubert's *Winterreise.*

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BIOGRAPHY

Penelope Cashman, Adelaide-based pianist and vocal coach, is active as a performer, pedagogue and researcher. In her role as a specialist vocal accompanist and repetiteur, she has worked for Opera Queensland and the State Opera of South Australia and been accompanist for the WAAPA International Art Song Academy and the "Bel Canto in Tuscany" Summer Opera School, Italy. She is a Research Associate and regular visiting lecturer at the University of Waikato Conservatorium of Music, New Zealand, where she gives masterclasses in German Lieder and lyric diction.

Penelope teaches introductory classes in Italian and German lyric diction at the Elder Conservatorium of Music and, in her freelance vocal coaching work, has a particular interest in helping recent voice graduates continue their vocal and musical development. Furthering her specialisation in vocal coaching, in 2019 Penelope was awarded her PhD and the Dean's Commendation from the University of Adelaide for her thesis, "International best practice in the teaching of lyric diction to conservatorium-level singers". This was based on research undertaken in the US, UK, Austria, Germany and the Netherlands. Penelope also has Bachelor degrees in solo piano performance from the Conservatorium van Amsterdam and the Australian National University School of Music (Hons, University Medal), and a Masters in Lied accompaniment from the Musik und Kunst Privatuniversität der Stadt Wien (Vienna) where she won the Viennese Ministry of Culture/MUK Prize for an Outstanding Masters Thesis. Penelope has performed at numerous international masterclasses with leading singers and vocal accompanists, including twice attending the Franz Schubert Institut (Baden bei Wien), and is an alumna of the Lisa Gasteen National Opera School. She has been a masterclass presenter for the Accompanists' Guild of South Australia, an examiner and guest presenter for the Australian Music Education Board, and in 2018 was an adjudicator at the 37th National Liederfest, Melbourne. She presented her doctoral research in a paper at the 2020 Conference of the Australian National Association of Teachers of Singing.

The Surprising Benefits of Asynchronicity: Teaching Music Theatre Online

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ABSTRACT: The rapid quarantine and isolation practices that many nations implemented in response to the Covid-19 global pandemic in 2020, changed the way artists worked together. Two major implications for the singing performance and training industries were that face-to-face rehearsals, performances and classes were indefinitely postponed or cancelled; or if they were not, were shifted to online contexts using live-streaming technologies. However, there is a major issue with such virtual interfaces which is particularly problematic for music theatre practitioners. To date almost all available digital communication platforms do *not* enable time synchronicity between online users (Drioli, Allocchio & Buso, 2013). Therefore, practitioners rely on regular high-latency internet systems to interface with each other and thus experience time lags as input from one system's location travels digitally to another. These delays, however fractional, prevent remote-based practitioners to experience congruent sound. Nevertheless, by experimenting with a range of live-streaming interventions in teaching and directing Music Theatre students at WAAPA, I was not only able to deliver singing, acting-through-song and other practical curriculum elements effectively online, but also to capitalise on the virtual learning context, including the asynchronous sound factor. This resulted in an effective virtual learning context for students and broadened their curriculum scope positively.

KEYWORDS: *Asynchronous sound, back-phrasing, singing*

MUSIC Theatre, Opera and Operetta can be categorised as types of sung-theatre. Some argue that inherent within sung-theatre and theatre in general is that it is, at least in part, performed live (Reason, 2004, p. 221; Barker, 2003, p. 4; Phelan, 2013, p. 148). Furthermore, they assert that this liveness is one of the main factors that sets it apart from other related pre-recorded forms, such as film and television. That is not to say that there is no place for virtual, digital and pre-recorded components within live theatre. In fact, rather than the 'live' component of 'live theatre' being defined by an audience's ability to consume an art work in the same shared geographical environment as the actors who perform it, some contemporary musicologists such as Philip Auslander argue that the 'live' determinant is in the "ability to present performances that can be watched as they occur" (2002, p. 16). Certainly, since the end of last century, audiences have watched as performances have increasingly incorporated various non-concrete digitalised or pre-recorded components into their dramatic action in a range of ways. Increasingly audiences have seen singers and actors embrace new technologies during performance, engage with virtual characters and interact with digital elements on stage, and these augmented reality components have been broadening audiences' concepts of live theatrical experience (Jernigan, Fernandez, Pensyl & Shangping, 2009, p. 36). For example, the Menier Chocolate Factory's innovative interface of live actors with digital moving characters and set pieces in the musical *Sunday in the Park with George* in 2005 augmented the aesthetic and opened up relationship opportunities within the performance space in ways that had hitherto not been widely seen before (Fernandez, 2011, p. 3). This added a type of dramatic tension on stage that technodrama advocates, such as Susan Broadhurst, argue can only result from the inclusion of interfaces between the body, whether physical or virtual, and technology in theatrical performance (Broadhurst, 2004, p. 48).

Similarly, the preference for rehearsing theatre, including sung-theatre, in live face-to-face contexts has dominated until 2020, despite the 21st century online technological advances that enabled digital connectivity across geographical distances, many of which have been embraced by other, non-theatre, industries (Gorman, Syrja & Kanninen, 2019a, p. 241). Prior to 2020, exceptions in the theatre industry included solo artists who, during early rehearsal periods, prepared independently part-time while the rest of the companies rehearsed collectively full-time and face-to-face. This enabled producers to negotiate lower fees with these soloists, and for soloists to juggle other concurrent work projects. For example, when directing a 2018 Perth production of *Legally Blonde*, I undertook some early rehearsals with three

Sydney/Melbourne soloists using digital platforms, which enabled them to simultaneously continue their east-coast based work and to then join the Perth company the week before opening. Similarly, when I acted in a 2009 Singapore production of *Victor/Victoria,* Europe-based singer Laura Fygi, who was in the title role, was not required for a phase of the company rehearsals and publicity shoots. Instead, her photographs were edited into all group marketing material and she flew in to join the final rehearsal period.

In the case of a long-standing or a touring production where a high turnover of cast members is typical, an incoming artist may first work remotely with key members of the cast and creative team, before joining the company at the main rehearsal/performance location. Extraneous circumstances, such as where there are travel delays, logistics constraints or scheduling clashes, also may prompt an artist to rehearse via video-conferencing or suchlike while the remaining company members work together in person. However, digital rehearsals have not been able to emulate the shared face-to-face environment of the inner world of the play and cannot fully enable an integrated, haptic three-dimensional use of a single performance space, nor a physical interaction with other actors within that space; eye contact is impossible, as is tactile contact, and proxemics negotiation limited (Petralia, 2011, pp. 114-115). Many practitioners also believe online platforms do not allow for the same level of character presence and believability that shared onsite geographies facilitate (Barkuus & Rossitto, 2016, p. 865). In addition, and arguably the most problematic factor for rehearsing and performing in online contexts and the main focus of this article, is that sound is asynchronous (Gorman, Syrja & Kanninen, 2019b, p. 210). For sung-theatre forms, this asynchronicity prevents performers from making music together in real-time and has been a major barrier to successful live, virtual performance for many years. Of course, such digital environment challenges have not been restricted to professional theatre contexts, but have also impacted actor-singer training, where face-to-face learning methodologies have dominated prior to 2020.

Even aside from virtual sound asynchronicity, scholars advocate that online learning is typically better suited to certain subjects and delivery methodologies than others (Xu & Jaggars, 2014, p. 636). Until recently, this type of digital training has been relatively widely used for theoretical subjects, such as mathematics, science, history, etc, or when it replaces face-to-face lecture methodologies, which is why students who have strengths in visual, reading and writing learning styles are typically more successful learning online than those who are not (Kauffmann, 2015, p. 4). Conversely kinaesthetic subjects, that use creative play and practical training methodologies, work effectively in face-to-face learning contexts with interactive environments (Costandius, 2019). Reflective of this, prior to 2020, conservatoire music theatre training has relied on practical, experiential, face-to-face delivery methods. While occasionally a student has opted to train with an internationally-based, high-profile teacher, or a rural and remote student has had no option but to use a virtual platform, it is hardly surprising that, until recently, online learning in the performing arts has been the exception to the rule, rather than the norm. However, the rapid quarantine and isolation practices that many nations implemented in reaction to the 2020 Covid-19 global pandemic meant that, despite the seemingly insurmountable challenges, performers and educators moved away from face-to-face and embrace virtual contexts.

Theatres, conservatoires and singing studios across the globe swiftly closed early in 2020 in response to the pandemic, and face-to-face rehearsals, performances and classes were either postponed or cancelled. If they were not cancelled, in addition to the sharing of audio and/or video recordings, they were shifted to online contexts, heavily reliant on live streaming. Because of this, performing arts practitioners have been forced to be innovative to overcome the considerable problems that working virtually entails, especially with online vocalising.

ONLINE VOCALISING CHALLENGE

In response to the global pandemic, online digital live video-conferencing quickly became the preferred option for sung-theatre artists and educators as it enabled practitioners to communicate, experiment and perform together in real-time (Simamora, 2020, p. 86). However, in live-streaming, very few available digital communication platforms/software enable time synchronicity between the various digital online uses in different locations (Drioli et al., 2013). Some of the few exceptions include low latency AV streaming systems such as Lola or Ultragrid, however these have particular specialised hardware and symmetric connection network service needs that prevent almost all internet users from being able to access them. Other software, such as *Jamulus* and *JamKazam*, provide relatively popular real-time online jamming tools for musicians, despite that some users claim issues with audio drop out or once again fractional time lag (Jimamsden, 2020; Richardson, 2020). Even when such programs are operating effectively, they rely on users connecting to shared servers which mix all online user inputs and send the mixed versions back to users. This means that artists are required to experience *all* sound digitally, including with their own instruments, through ear phones.

For theatre-with-music actors this can be problematic because they use their physical bodies to vocalise acoustically and rely, at least to some degree, on hearing themselves as they create sound in order to make physical adjustments for intonation accuracy (Watts et al., 2003). Vocalising online in real-time is made even more challenging when artists need to go in-character and/or to move or dance as they vocalise. In either situation, it is difficult to negotiate the microphone/ear phone equipment that is needed to use the software effectively. Even if one could utilise this hardware successfully, the cost and availability of the necessary/required technology is not always affordable for or accessible to artists, students and teachers. They must instead rely on regular high latency internet systems to interface with each other in a lesson, rehearsal or performance. As such, they always experience a slight time lag as input from one system's location travels digitally to another system's location.

Asynchronous Time

Real-time online time lag prevents the sound that is travelling virtually from one location to be heard concurrently by another location(s) (Drioli et al., 2013). As such, two artists working together remotely, cannot experience congruent sound. For example, let us say that there is a live streaming musical theatre lesson (or rehearsal) between a teacher (or pianist) in location A and a singer in location B. When the teacher plays the musical accompaniment of a song and vocalists sing along as they listen to the accompaniment, the latter will perceive that their vocals are in time with their teacher's piano music, while the teacher will hear the actor's vocals as being behind the beat and delayed.

It becomes even more challenging to rehearse live together via virtual means when two vocalists, each in their own location, are attempting to sing in unison (singing the same notes at the same time) or harmony (singing different notes at the same time) together, with a pianist who is playing in a third location. In such a situation, while vocalists will perceive that they are singing in-time to the piano music, they will also experience their duet partner's vocals as delayed. Compounding the problem, the pianist will usually experience both vocal lines as not only delayed, but as asynchronous to each other. The more locations are set for concurrent musical inputs, the more asynchronous the sound blend becomes. This generally prevents vocalists and repetiteurs from rehearsing virtually together in the same way that they would if they were face-to-face.

In reality, it is more accurate to say that *all* artists, whether vocalist or pianist, *could* experience either being in-time (synchronous) with the other artist(s), or being ahead of the other(s). This is because live digital messages (i.e. – a musical sound/performance visual inputs) travel concurrently from each sender to the other receiver(s). However, in musical theatre, it is the pianist who usually starts playing a song's introduction *before* the actor sings and then it is the pianist who usually continues to make sound as the song progresses. Singing actors, by comparison, have pauses in-between musical phrases when they do not sing, as well as frequent momentary vocalisation gaps when they take a breath. The result of this is that it is the actor(s) who typically experiences synchronicity in the sound/visual blend while the pianist, and indeed any other listeners, experience asynchronicity in the sound/visual blend.

OVERCOMING CHALLENGES

When working with WAAPA Music Theatre students online in 2020, the practical learning needs, together with the online asynchronous time challenge prompted me, like so many educators globally, to adopt an innovative, trial-by-error approach to teaching, rehearsing and assessing. I believe that the experience was as much a learning one for me, as it was for our students. We became more skilled, adept and confident at negotiating the online context, utilising live-streaming software such as Zoom and Teams, and in being successful in course content exploration and outcome achievement as we progressed. In retrospect, I can now identify three types of interventions that we implemented that enabled us to continue to utilise to the practical learning methodologies that conservatoire training demands, to overcome the virtual challenges and, most importantly, for the students to achieve success. These were:

1. Adjusting how we made and used sound when singing, rehearsing and performing music theatre material in live contexts;
2. Adapting the teaching and assessment delivery methods to enrich content exploration and ultimately enable higher student outcome achievement than in the past;
3. Capitalising on the live online time lag to teach specific music theatre techniques.

Creating and using sound

Adaptability was integral to being able to explore and perform sung material on video-conferencing platforms, as different approaches were needed when working on a solo song, compared to an ensemble song. At the most simplistic level students utilised a backing track while their peers and I watched. When wanting a student to work with live accompaniment, I would play piano with my online sound function *un*muted, which allowed the sound I made to be heard by everyone on the video-conference. Concurrently the student vocalising would do so with their sound function on mute, which allowed everyone, including myself, to see but not hear the singer. Surprisingly, this afforded a great deal to comment from a vocal perspective. It often provided feedback opportunities on the breath support system, as well as many of the physical aspects of vocalising. I found, unexpectedly, that much of the physiology of the student's vocalisation became clearer when I was unable to hear their voice. Unfortunately, I was able to respond as an accompanist during the song only by reading the student's non-verbal communication, which was difficult given I was also reading the sheet music of the song. However, more positively, students were able to respond to the piano accompaniment as they would in a face-to-face context, including adapting to changes in tempo, dynamics, phrasing, expression, etc. Often students would also video or audio record themselves, enabling them to play back recordings afterwards for further analysis and feedback.

While students certainly found the digital platforms difficult and frustrating initially, as the semester progressed, they were surprised to realise that their acting and singing skills were continuing to develop, especially in learning online "how to communicate with others" (WAAPA, ECU, Diploma of Musical Theatre Focus Group, personal communication, 16/06/20). Paradoxically, students discovered that "you can make real connections and relationships happen without actually being with the person" and importantly that this skill, acquired via online learning, was later transferable to some live performance contexts to "convey realism and believability" (ibid.).

Live group singing, including duets, trios and ensemble numbers, were far more difficult to work with effectively online than solo singing. This is because the more concurrent virtual inputs were added, in this case performers, the more asynchronous the simultaneous vocal lines were heard. As a base line, for group songs we often reduced the number of concurrent inputs by replacing the live piano with a backing track. We then split the backing track into partial excerpts so that students could play individual sections from their own technological devices, such as mobile phones, starting just before they needed to sing their solo section. Because our students are training in music *theatre*, and not to be concert artists, it was important that they appeared to stay in-character when performing. This meant we had to find ways for them to press play on the backing track on their devices while being unnoticed by others or, albeit less often, make that behaviour a part of the dramatic action. These interventions, however, did not overcome the asynchronous sound challenges of multiple concurrent voices.

We addressed these by implementing a number of strategies that, in retrospect, can be identified as out-of-the-box thinking. We found that by rearranging parts of the music, such as reducing multiple voices to a single voice, or having one person vocalise with words while changing a second person's harmony line to a non-lexical sound (such as an 'Ah' or 'Oo') enabled the live-streaming software to select the appropriate vocalist to broadcast and thus sound then appeared to the other actors and audience as synchronous. Similarly, varying the students' proximities to their computer microphones, by having the key student vocalise close to their device, while the others distanced themselves upstage, prompted the software to accurately pick-up the key voice. Redistributing overlapping lines to a single voice or cutting long end-phrase notes of the first vocalist short so the second could begin without overlap, enabled the streaming software once again to switch easily between performers. Most difficult for students to master were situations in which we maintained a song's original overlapping lines, such as when the main singer's phrase or final note was interrupted momentarily by a second student. In these situations, the interjecting student had to anticipate their cue and come in early with their vocalisation, which required both thorough practice and also faith that the first singing-actor, and any listeners, would experience the interruption as congruous.

In terms of singing and acting, students reported that they could see “improvement coming along in those areas”. They also “learned how to discipline [one]self”, “work in a team”, “manage time more effectively” and “make [themselves] motivated” (WAAPA focus group, personal communication, 16/06/20). These broader skills promote a community of practice (Lave & Wenger 1991) that helps to equip students with transferable knowledge and skills, provide them with the confidence to pursue excellence in their personal practice and prepare them for future employment. Students agreed that these skills are indeed an “advantage for the future” (ibid.).

Teaching and assessment delivery

In conservatoire training, such as that which is offered at WAAPA, content is predetermined, and objectives specified well before a student undertakes a unit of study. Thus, teachers must follow a prescribed curriculum by exploring certain topics at prescribed times with students, providing them opportunities to acquire particular skills and enabling their achievement of specific outcomes. What are not usually mandated, are the methodologies used to facilitate their learning. In the beginning of the pandemic-prompted process, given our reliance on practical, experiential learning as the main vehicle for student development, I had assumed that replacing face-to-face learning with online methodologies would impede student progress. I discovered, however, that if I was flexible in *how* I taught, that we were able to cover most of the content and that students were successful in achieving most of the prescribed objectives. Extremely surprisingly, with some topics, I found that I was able to add more breadth and depth to content exploration than I had previously been able to cover in a face-to-face context. This resulted in students achieving the outcomes more easily and at a quicker rate than students had done in the past in face-to-face environments.

One such focus area was the dream ballet within the Golden Age musical genre in our Acting-through-song classes. Prior to 2020 this subject had been split into two weekly classes: one practical class and a second theoretical class. I have always found it challenging to ensure that students fully understood and could recreate the subtext and psychological components of the dream ballet from this period in music theatre history. This is because it is difficult in a live classroom or studio setting to easily create the *dream* component of a dream ballet, without having access to lighting, sound and other scenographic effects that theatrical or filmic production afford. However, teaching this class online, meant that I was able to take a blended practical and analytical approach in both of the two classes, which enabled me to more comprehensively explore this topic than I had done in past years. In each class I was able to implement a range of practical exercises and discussions. This included break-out room activities in pairs or small groups; coaching individuals in front of the whole group; providing my own live demonstrations, as well as accessing demonstrations by other artists online. Swapping between activity types was more efficient than in the past when it would have required the group move to a different location to access different equipment. Specifically using the online break-out rooms also enabled the more introverted students to share their work and their ideas freely, without the pressure of having to do so in front of the whole cohort. Most importantly, this holistic approach meant that I was able to improvise and source digital material in response to student needs in real time, and to continually oscillate between practical and theoretical learning styles as was required. I believe this facilitated students’ thorough content understanding and clear skill development, as was evident in their final assessment.

Rather than students performing a duet with a dream ballet section live for their end of semester assignment, as they had done in past years, they submitted a video of their work. This enabled them to explore and incorporate subtext and psychological components that past students had not been able to demonstrate as easily. They were extremely creative in their responses to my assessment instruction that they could do anything they wanted to, as long as they covered the content and met the outcomes. Many students, for example, chose to use multiple settings (locations); to incorporate sound, lighting and special effects; to use story-telling devices such as voice over, flashback/forward and slow motion; and to use editing functions to help create their dramatic world, as well as changing the mood and atmosphere; and to comment creatively on the themes of the musicals. Because students were submitting a video assessment task, they were also able to review, improve and re-record their work until they were satisfied with their final assessment (WAAPA focus group, personal communication, 16/06/20). The group strongly felt that not only their technical recording and editing skills had improved greatly, but also that their story-telling and analysis abilities became more nuanced (ibid.).

It had become clear that the scope of the original live assessment context did not provide students the need to probe as deeply into the layers of subtext and the changing dynamics within scenes to produce an acceptable performance, as did the filmic task with the plethora of aforementioned storytelling devices. As such, I argue that the online task was a more successful vehicle than its face-to-face predecessor. That is, students were better able to both theoretically and experientially uncover, understand, utilise and communicate fundamental subtext and psychological components of the genre's dream ballet convention. Moving forward, I believe this online assessment has armed these students with the critical and creative thinking skills necessary to effectively interpret and create live Golden Age dream ballets in face-to-face theatrical contexts in the future.

Capitalising on time lag

Most surprising of all in working online was that by conducting practical virtual classes, a new vocal process was uncovered which students found beneficial to their developing singing technique: back-phrasing. This new approach only emerged due to live, real-time sound a-synchronicity and, as such, it positively repositions the online virtual time lag phenomenon as advantageous in certain situations, rather than merely challenging. In addition, in the process of exploring this type of vocal phrasing through the asynchronous sound factor, students' musical analytical skills were extended as their attention was unintentionally drawn to intervals, rhythms, motifs, etc.

Back-phrasing in sung-theatre is when a vocalist purposefully sings off tempo using a slightly different timing to the written beat (Hill, 2014, p. 131). This enables the vocalist to create a sense of spontaneity in performance and/or to express difficult, heightened emotion with believability (ibid., p. 123). Enabling student singers to effectively learn to back-phrase can be arduous because the strength of a song's incessant beat subconsciously underpins the musical experience, making it difficult for young vocalists to be flexible with rhythmic timing. Emerging singers can struggle to pull back from the beat or, if they do, may not then be able to return to the beat on the required final note of the phrase. When live-streaming as a teacher, I can certainly demonstrate this phrasing technique by vocalising myself as I play the piano. However, when live-streaming, the opportunity exists instead for one student to vocalise as I play, and for other listening students to focus on the naturally occurring extremely clear time-lag delay between the vocals in one location and the accompaniment in another. We found this afforded a quick and easy way for students to notice when the vocals were unquestionably behind the beat. After witnessing the vocal delay because of the asynchronous sound, students then strove to emulate this by singing behind the beat themselves, on mute, while I played the accompaniment. Students also worked in pairs in break-out rooms, where student A would play a backing track and also listen to student B as they practiced vocalising behind the beat. By alternating roles, providing feedback to each other and repeating this process several times, students quickly became better adept at vocal back-phrasing. The primary challenge with learning back-phrasing in this way was to enable students to then return proactively to singing the final note of a phrase *on*, and not behind, the beat. This was afforded through both facilitated discussion, demonstration, practice and individual coaching.

Not only did WAAPA students develop back-phrasing skills by working with asynchronous sound online, but we found that for the listener, the mismatch of a motif with the vocalist's interpretation of it, highlighted the musical motif, including the rhythm, intervals, etc, itself. Because the listener heard the motif fractionally before the singer was able to interpret and express it, the delay provided the former with not only an aural experience of the sound, but almost a visual experience of the sound too as they then watched the singer. In retrospect, this assisted the listening students to identify and analyse motifs and other musical elements for themselves. For example, when utilising this back-phrasing learning approach with Cole Porter's "Miss Otis Regrets", students agreed that they had not noticed the syncopation of lines one, two and four, nor their rhythmic juxtaposition to the repeated crotchets (quarter notes) of line three, until they experienced time-lag and witnessed another student singing behind the beat (WAAPA focus group, personal communication, 21/04/21).

CONCLUSION

Further comprehensive investigation would be necessary to determine whether online learning in conservatoire training is categorically inferior when compared to face-to-face training. Particularly pertinent to this question is that the opportunity exists to test whether students of a filmic Golden Age dream ballet task seem indeed better equipped with the critical and creative thinking skills needed to interpret and create live dream ballets than students who have completed a face-to-face stage version of such a task. However, the debate as to whether live or digital learning is more rewarding is not the focus of this article. What is, is that educators, practitioners and students, can uncover surprising discoveries and create exciting solutions when faced with the seemingly impossible. I firmly believe that this is possible by adopting a 'Yes we can…' mentality while concurrently not knowing what the 'can', (i.e. the solutions), will be. Innovative problem-solving requires deliberate 'thinking outside the box' which, according to John Adair who first coined the phrase in 1969, means innovators need to interrupt unconscious assumptions and self-imposed limitations in order to uncover effective solutions (2013, p. 61).

In the case of responding to the 2020 global pandemic, I needed to disrupt my initial assumption that working virtually with kinaesthetic disciplines, such as singing and acting-through-song, would not allow for effective practical, experiential learning to take place. No doubt the pressure of having a group of talented, dedicated and somewhat frightened students relying on me to take immediate action, who were expectant that I would find positive solutions, incited my can-do attitude. I am thankful that I took the leap and discarded the popular belief that online learning could only be ineffective for theatrical vocalising subject matter, especially when compared to face-to-face training. One student, in summary of their digital learning experience, said, "Working online makes you try things and experiment with things that you wouldn't normally do if you were in person. It requires you to think outside the box" (Volpe, personal communication, 15/06/20). By adopting Adair's positive, risk-taking approach, I was able to not only innovate, but to uncover several surprising benefits of teaching music theatre online.

This year, whether we need to work online or not, we will adopt a blended learning approach by implementing some virtual classes and assessments, so that the relevant required content exploration will be enriched and ideally enable higher student outcome achievement in those areas than in the past. In the future, should extraneous circumstances prompt a need for further online training I feel confident that, together with my colleagues and students, we will be able to overcome the video-conferencing sound asynchronicity challenge, effectively modify delivery methods and facilitate student learning. By embracing Adair's thinking outside the box approach to adjust the ways in which music will be made and used in live classes, rehearsals and performances, and adapt teaching and assessing methodologies, we will be able to cover the required content, empower students to successfully achieve the associated outcomes and facilitate an exciting, rewarding community of practice.

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BIOGRAPHY

Nicole Stinton has worked as a director, vocal coach and actor for over two decades across Australasia, specialising in music theatre. In addition to her professional practice, Nicole has also taught acting and singing across her career, including at the Western Australian Academy of Performing Arts (WAAPA, Australia) and LASALLE College of the Arts (Singapore). Other industry experience includes as Artistic Director of short play festival *Short+Sweet* in Singapore for four seasons, as well as the inaugural Malaysian festival.

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The Effects on Acoustic Voice Measures and the Perceived Benefits of a Group Singing Therapy for Adults With Parkinson's Disease

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ABSTRACT: The purpose of this single-group, pre-post, quasi-experimental study was to examine the effects of participation in a therapeutic singing protocol (TSP) on the voice quality and wellbeing of individuals with Parkinson's disease who attended eight weekly Parkinson's community choir rehearsals. We hypothesized that participants would show improvement on vocal outcome measures and report personal-social benefits from choral singing. A board-certified music therapist conducted 50-minute sessions consisting of physical and breathing warm-ups, vocal exercises and singing designed to increase phonatory effort, glottal closure, and to maintain vocal strength. Data included audio recording participants on singing tasks (messa di voce, sustained vowel), speech tasks (reading, conversation), and exit interviews. The Wilcoxon non-parametric signed rank test was used to determine any significant changes ($p < 0.05$) in acoustic measures. Participants showed statistically significant improvements in sample duration, mean intensity, maximum intensity, cepstral peak prominence, jitter, shimmer, and harmonic-to-noise ratio. Post choir interviews noted participants believed their voices had become stronger, reported increased confidence in conversation, improved mood, and that the choir was an intrinsically motivating and meaningful experience. Consequently, TSP may have potential as an adjunct to speech therapy to improve the vocal functioning of individuals with Parkinson's disease.

KEYWORDS: phonatory effort, vocal fold adduction, music therapy, singing, Parkinson's, acoustic, intensity, voice

INTRODUCTION

PARKINSON'S disease (PD) is a degenerative condition affecting 7-10 million people worldwide, with one million reported cases in the United States (Parkinson's Disease Foundation, 2010). Central to decline are problems in movement and speech. Hypokinetic dysarthria occurs in 89% of cases (Ramig et al., 2008), can appear at any stage of PD, worsen in later stages, and cause a progressive loss of functional communication (Logemann et al., 1978; Ramig et al., 1995; Pinto et al., 2004), contributing to decreased quality of life (social skills, relationships and emotional wellbeing) (Selman, 1988; Bright, 2006; Mahler et al., 2015). Hypokinetic dysarthria is characterized in speech by reduced vocal loudness (hypophonia – a 2-4 dB reduced intensity in speech and voice tasks) (Fox & Ramig, 1997), a breathy, hoarse or rough voice quality (dysphonia) (Little et al., 2011), imprecise consonants and distorted vowels, and reduced voice pitch inflections or monotone voice (Mahler et al., 2015). These changes result in reduced intelligibility (Ramig et al., 2008) and also may make adults feel defensive, less confident and less likely to engage in social conversation (Trail et al., 2005; Elefant et al., 2012). Since symptoms of hypokinetic dysarthria increase over time, interventions are considered effective if these improve or maintain skills.

Parkinson's patients often seek help to address voice and speech complaints. A common treatment is the Lee Silverman Voice Treatment (LSVT LOUD), an approach that addresses aspects of vocal function (Ramig et al., 1995; Ramig et al., 1996; Ramig & Dromey, 1996; Sapir et al., 2007; Shih et al., 2012). Music-based interventions have been used to treat the physical (Swallow, 1987) and psychological effects of PD (Kneafsey, 1997; Selman, 1988). Haneishi (2001) found improved mood states and tolerance for rehabilitative exercises following a voice protocol that included singing. Cohen and Masse (1993) found participants with PD showed improvements in functional communication, and drawing on the principles of LSVT, Haneishi (2001) developed a Music Therapy Voice Protocol (MTVP) that showed significant improvement in speech intelligibility, as rated by caregivers, and vocal intensity after individual sessions with people with PD.

In a development of the work of Haneishi (2001) and Perez-Delgado (2007), Yinger and LaPointe (2012) used a group music therapy voice protocol (G-MTVP) to address speech intelligibility. Changes in mean speech intensity were observed from reading and conversational speech tasks measured after the six-week program.

In a post-intervention questionnaire, participants cited benefits to vocal production and group camaraderie that were reflected in the fun, social setting of the choir. Outcome benefits cited by Yinger and LaPointe (2012) suggest that group activities such as choir singing appear to address core psychological concerns including isolation and withdrawal, and may also provide positive social experiences that enhance wellbeing (McNamara et al., 2006; Moore & Seeney, 2007). For example, Dingle, Brander, Ballantyne and Baker (2012) found that participants in a choir discovered a new and valued social group identity, an increased social connectedness, and improved health. Choir singing can also inspire confidence, reduce isolation, and may be of greater benefit than either singing alone or merely participating in a social activity (Skingley & Bungay, 2010).

The literature suggests that music-based interventions, and choral singing in particular, may help patients mitigate some of the negative symptoms associated with PD, thereby enhancing connections to others (e.g. partner, community) and providing a creative, of self-care. This way of understanding music as a resource is consistent with the Folkman et al. (1986) model of stress and coping, in which symptom distress, such as loss of vocal control, is managed by activating available resources that help one cope with the difficulties at hand.

Additionally, meaningful, 'normal' activities (e.g. singing in a choir, focusing on creative expression) are perceived to provide quality of life benefits such as increased interpersonal connections (Yinger & LaPointe, 2012).

PURPOSE

This pilot study examined measurement of the benefits of community choir singing on voice qualities and perceived meaningfulness for adults with PD. It drew from a community that has an active Parkinson's support network, emphasizing not only the benefits to symptoms commonly associated with PD, but also the nature of music as a creative, health enhancing undertaking that promotes connections to others and a sense of belonging. The research questions were:

1. Can objective acoustic analysis measure potential improvements in voice outcomes of adults with Parkinson's disease (hypophonia and dysphonia) participating in an eight-week community choir?
2. Can exit interviews measure choir member perceptions of their functional communication, social interactions, sense of community and wellbeing?

We hypothesized that participants would show improvement on vocal outcome measures and report personal-social benefits from choral singing.

METHODS

This study employed single group, pre-post design, with data collected prior to and at the completion of eight choir rehearsals. The independent variable was choir participation, with a specific Therapeutic Singing Protocol (TSP) guiding each choir rehearsal. Dependent variables were outcome measures obtained from acoustic analysis of voice recordings (described below). In addition, all participants completed exit interviews following completion of the eight-week program.

Participants

This study was conducted in compliance with the Shenandoah University Institutional Review Board, and utilized a convenience sample. Choir members included 15 individuals with Parkinson's disease (4 women and 11 men), and 7 of their caregivers/partners. The caregivers/partners contributed to the choir's social component and enhanced participants' motivation to sing, but were not otherwise included in this study. Participants varied in age from 45-86 years (*M* = 66.5). The data of three participants were excluded from analysis because of missing data points (one received DBS treatment after pre-test data collection, one did not phonate during pre-choir recording, one did not complete post-choir data collection). A total of 19 adults participated in the choir. Participants received no other therapies during the eight-week period of the study.

Participants had stage 2 or 3 PD symptomatology on the Hoehn and Yahr (1967) symptom scale, exhibiting deficits in verbal communication and mobility warranting supportive interventions (Hoehn & Yahr, 1967). Participant prior experience or technical training in voice were not disclosed to researchers. For a summary of participant demographics, see Table 1.

Table 1. Demographic Information on Participants with Parkinson's Disease

Age (Years)	Gender	Years Since PD Diagnosis	Other Treatments/ Therapies
63	female	18	DBS*
63	female	3	None
71	male	9	DBS
86	male	6	LSVT BIG**
62	male	5	DBS
70	male	0.7	Speech Therapy
60	male	8.5	LSVT BIG
45	male	10	DBS
62	male	12	DBS
62	male	12	DBS
83	male	8	None
71	male	3	Speech Therapy

*Deep Brain Stimulation
**LSVT BIG applies the principles of LSVT LOUD to limb movement (LSVT Global, retrieved February 25, 2016)

Procedure

Participants attended eight weekly choir rehearsals, each lasting 50-minutes. Rehearsals followed a specific Therapeutic Singing Protocol (TSP) adapted from Yinger and LaPointe (2012):

1. *Opening song and conversation (5 min):* Choir director welcomed the participants, led them in a vocal warm-up, asked about news in their lives, and summarized the activities in which the participants were about to engage.
2. *Posture/body alignment (2 min):* Choir director directed the group members to place both feet flat on floor at shoulder width, sit tall in chairs, expand chest and lower ribs, lower and relax shoulders, and gently elongate back of neck to align head over spine.
3. *Breathing exercises (3 mins):* Participants stretched three linked rubber bands during exhalation/phonation and released the tension in the linked rubber bands during inhalation. Over the course of the 12 weeks, participants were asked to stretch the linked rubber bands while blowing out air for 12, 16, and ultimately 20 seconds.
4. *Voice warm-ups (5 mins):* Choir director led the choir in three trials of vocal "sighs" sung beginning in the middle of each participant's vocal range and descending in pitch to the bottom of the vocal range. The "sigh" terminated in a vocal fry (or 'scrasp') and participants were guided to execute the fry in a quiet/gentle manner. Participants then mimicked a siren by beginning with a quiet fry, vocalizing up through their vocal range in relaxed manner and upon reaching their apex "sighing" back down and terminating in the fry. Once again employing rubber bands, participants sang five glottal /a/ vowels (/ʔ a/) sustaining the final one while stretching rubber bands. The fry and /ʔ a/ were chosen to strengthen vocal fold adduction.
5. *Applied Technique (10 mins):* Participants used a /ʔ a/ onset to sing a familiar song (e.g. "Amazing Grace") and stretched rubber bands to sing long phrases or support high notes while singing these familiar songs.
6. *Singing familiar songs (20 mins):* Participant-preferred songs (folk, country, pop, and rock) were sung with live guitar accompaniment. Choir director encouraged generalization of techniques from warm-ups and encouraged participants to entertain themselves by inflecting lyrics to subtly change the emotional meaning of songs.
7. *Closing song and conversation (5 min):* Choir director led participants in singing a closing song, identified strengths of the rehearsal, and looked ahead to the next rehearsal.

The primary investigator designed this musical intervention to incorporate the clinical drills developed by Yinger and LaPointe (2012) in a choral setting. This allowed participants to experience each therapy session as a *rehearsal* though the tasks were designed to maintain or improve hypophonia or dysphonia. As such, the emphasis of each choir rehearsal was on the creative group undertaking of making music. Additionally, the primary investigator and music therapist (MT-BC) who conducted the choirs is referred to as the "choir director" in this pilot study.

Data Sources and Collection

Three data sources were included in the research design, summarized in Table 2.

Demographic information

Participants completed a demographic profile including information regarding age, diagnosis, medications and additional/related health concerns. Participants also listed previous and current treatments.

Recordings of Speech and Singing tasks

Voice outcome measures were obtained prior to and following completion of the eight-week choral singing program. Instructions were scripted, recorded, and administered by the choir director. Tasks included:

1. Messa di Voce (MDV). Developed in 1898 by Concone, it is a singing voice exercise and a common building block in voice pedagogy (Titze, 2010). The MDV is singing task in which a single pitch is sung with varying loudness, beginning at a minimal intensity, crescendo to maximal intensity, decrescendo to minimal intensity, sustaining for maximal duration, all on a single breath. This requires a high level of vocal coordination, particularly in the decrescendo phase (Titze, 1996; Christiansen, 2005).
2. Reading of the Rainbow Passage (Ramig et al., 1996).
3. Completion of the Consensus Auditory Perceptual Evaluation of Voice (Zraick et al., 2011) tasks including: the reading of six standard sentences, sustained /i/ and /a/ vowels.

Interviews

At the end of the eight-week choir rehearsal sequence participants completed 30-minute semi-structured interviews, answering the following questions: a) Please describe your experience of being in the choir. b) Comparing how your voice felt before the choir sessions to how your voice feels now, please describe any changes. c) What effects has the choir experience had on your day-to-day quality of life? d) What feedback to do you have for the researchers? e) How could the experience have been improved? In an approach similar to Dingle, et al. (2012), participants' responses were recorded in detailed notes and evaluated in relation to the themes of personal impact, social impact, and functional outcomes perceived by participants. Questions were developed from the researcher's observation of choir members' experience, and their informal comments, during the eight-week choir program.

Acoustic Measures

All audio signals were recorded with a Marantz PMD661MK2 recorder and an Earthworks M30 condenser omnidirectional measurement microphone at 44.1 kHz, 16 bit sampling rate (uncompressed). Recording levels were calibrated with eight seconds of white noise at 90 dB (as verified by a CheckMate Galaxy CM-140 SPL Meter) prior to each sample collection session to preserve the validity of the recordings' intensity data. Participants maintained a 30 cm (on axis) recording distance during sample collection. Recordings were made in the Janette Ogg Voice Research Center, an acoustically treated space with a noise floor of 42 dB.

Acoustic measures included: sample duration, mean intensity, maximum intensity, cepstral peak prominence (CPP), jitter, shimmer, and harmonic to noise ratio (HNR).

Hypophonia (perceived reduced loudness) was objectively evaluated by measuring sample duration (seconds), and mean/maximum sound intensity (dB) of the MDV, the Rainbow Passage, and CAPE-V Sentence tasks.

Cepstral peak prominence (CPP) was employed to objectively measure dysphonia in the voice signal (Heman-Ackah et al., 2014) with lower values indicating greater dysphonia or breathiness, and higher values indicating less dysphonia or breathiness (i.e., greater overall clarity of voice). Stable mid-portions of both the speech and sustained vowel tasks were used for this measure.

Periodicity of the vocal signal was objectively evaluated by measuring jitter, shimmer, and HNR from the stable mid-portion of the sustained vowel task. Jitter and shimmer are measures of signal periodicity that quantify cycle-to-cycle variations in fundamental frequency and amplitude, respectively (Hartelius et al., 1997). Harmonics-to-noise ratio (HNR) detects cycle-to-cycle differences in the voice signal and quantifies spectral noise (Awan et al., 2009).

Data Analysis

Quantitative Analysis

Acoustic analyses of the audio recordings of speaking and singing tasks were performed using Praat Software version 6.0.42 (Boersma & Weenink, 2001). Because the data were not normally distributed the Wilcoxon signed rank test was used to compare pre- and post-test study values for all acoustic analysis variables.

Qualitative Data

The semi-structured interviews were analyzed through standard narrative analysis. Two investigators independently read interview transcripts, divided these into content units, and categorized these under content codes. Disagreements in content codes were resolved through discussion. Subsequently, themes were independently identified; content codes were categorized by theme. Themes containing a greater number of content units were considered more prominent than those with fewer content units.

RESULTS

Acoustic Analyses

Post-therapy values were significantly higher (see Table 2) for all acoustic measures (mean and maximum intensity in dB, CPP, Jitter, Shimmer, and HNR) of task recordings (MDV, Rainbow Passage, CAPE-V Sentences, and CAPE-V Sustained Vowel). MDV and Sustained Vowel tasks were repeated five times with the high and low results discarded. Rehearsal effect may have been confounded by fatigue effect. Participants did not appear to improve with each successive repetition, and participant age appeared to be unrelated to improvements in acoustic results.

Table 2. Mean, SD, and P Values of Acoustic Data Pre- and Post-TSP in Choir Members with PD

Measure	Pre-TSP Mean (SD)	Post-TSP Mean (SD)	*p*-value
Messa di Voce			
Dur	8.03 (3.82)	10.84 (5.87)	0.003**
Mean dB	80.31 (5.63)	84.58 (4.63)	0.012*
Maximum dB	84.9 (6.15)	89.11 (5.11)	0.015*
Rainbow Passage			
CPP	9.5 (1.65)	10.1 (1.57)	0.008**
Mean dB	70.86 (3.21)	72.31 (3.87)	0.008**
Maximum dB	81.65 (4.2)	83.7 (5.36)	0.019*
CAPE-V Sentences			
CPP	9.57 (1.57)	10 (1.59)	0.028*
Mean dB	71.98 (4.93)	81.53 (4.47)	0.003**
Maximum dB	81.53 (4.47)	83.52 (4.48)	0.015*
Sustained Vowel			
CPP	15.74 (2.82)	17.35 (2.23)	0.004**
Jitter	0.4533 (0.1646)	0.3275 (0.1621)	0.003**
Shimmer	6.1858 (3.4699)	3.5308 (1.269)	0.003**
HNR	18.2625 (3.1266)	20.2217 (3.6701)	0.019*

P values on Wilcoxon signed-rank test mean+/-SD of pre-TSP and post-TSP measures are reported. Effects significant at $p<0.05$(*) and $p<0.009$(**) are noted.

Abbreviations: CAPE-V, consensus auditory-perceptual evaluation of voice sentences; CPP, cepstral peak prominence; Dur, duration. HNR, harmonic-to-noise ratio; dB, intensity in dB; MDV, messa di voce; PD, Parkinson's disease; RP, Rainbow Passage; Sent, sentences; SD, standard deviation; ST, sustained vowel; TSP, therapeutic singing protocol.

Semi-structured Interviews

Qualitative analysis of semi-structured post-treatment interviews yielded three themes: 1) wellbeing related to the choir experience, 2) vocal improvement, and 3) motivation for practice/singing (see Table 3).

Table 3. Exit interview responses

Theme 1 – Wellbeing
"Director made it fun"
"Communication, instruction, atmosphere, respect all good"
"Less stressful than other choirs"
"Enhanced attitude"
"Gave me something to look forward to"
"Enjoyed singing, my wife loves it"
"I see myself going out more to contact people"
"Looking forward to talking to someone"
"Psychologically, physically, it was meaningful and worthwhile"
Theme 2 -- Voice
"I can be heard now"
"Louder, better clarity"
"A bit more resonant, authoritative"
"A little more clarity"
"Took less effort to do day-to-day talking"
"Friends say I'm talking much louder, projecting"
"More cognizant of breathing and putting bass in my voice"
Theme 3 -- Motivation
"I want something to bring home to practice"
"Longer sessions – just getting into it when we stop"
"I want more sessions per week, at least twice"
"I was inspired being with others like me and seeing them improve"

Participants described a heightened sense of wellbeing as a result of their participation in the choir. Voice and speech comments revealed increased confidence in speech and the perception that participant voices were louder, had more resonance and clarity, and that it was easier to be heard when employing techniques from choir rehearsals.

Participants expressed motivation to sing for the purpose of improving the speaking voice in the company of caregivers and others with PD. They suggested that the choir sessions be longer, offered twice weekly, and requested homework to be able to generalize therapeutic techniques outside of choir rehearsal. Several comments regarding motivation were closely linked to statements of an enhanced sense of wellbeing.

DISCUSSION

The purpose of this study was to examine the effects of a therapeutic choral singing program on the wellbeing and some acoustic correlates of the voice qualities of individuals with PD. Our hypothesis that participants would show improvement on vocal outcome measures and report personal-social benefits from choral singing was supported by the data. Quantitative acoustic measures revealed pre-post positive effects. Qualitative measures suggested perceived improvements in participant wellbeing, voice, and motivation.

Quantitative measures

Substantial and significant improvements in MDV maximum intensity and duration are indicative of improved vocal function. Thus, a primary gain of the treatment was related to a singing task involving loudness dynamics. As the program was focused on choral singing and loudness, this is not surprising. Likewise, gains in intensity (mean and max) were also observed in the Rainbow passage. Increases in CPP values and reduction in shimmer may also stem from gains in intensity because CPP rises with intensity while shimmer lowers (Maryn et al., 2009) (Orlikoff & Kahane, 1991; Brockmann-Bauser et al., 2018). In sum, the program appears to have had a positive effect on intensity, and consequently, some improvement in voice quality.

Improvements in duration and intensity of singing and speech tasks may have resulted from warm-ups and voice drills in the TSP addressing breath management and improved glottal closure. Note that this study did not include a comparison of the TSP with other therapeutic protocols. Although intensity maximum and average intensity were significantly increased in conversation at study completion, these gains were small (e.g. 1-2 dB). Loudness gains in speaking have shown to require intensive daily practice, (Baumgartner et al., 2001); this was not included in the program.

Qualitative measures

Preferred music sung in a choral setting provided a meaningful experience, and enhanced caregiver relationships and social interaction. Based on the post-treatment interviews and weekly anecdotes at rehearsal, participants were surprised with how much fun they were having singing familiar songs. Participants knew that voice work was important for quality of life maintenance, but were apprehensive about singing. The choir director celebrated all vocal contributions and prioritized a reduction in anxiety over perfection of craft. Use of eye contact, member names, and humor supported an experience that was, therapeutic and entertaining. Choir members appreciated the accepting, low-stress and anxiety setting of choir rehearsals and found that they were more expressive in their singing because they were treated as 'normal' members of a 'normal' choir rather than as 'sick people' struggling with a 'disease'. Participants' request for an increased frequency of choir practice is particularly interesting. The request for more sessions is likely related to the wellbeing and social benefits associated with choral singing. Since a greater intensity of treatment may result in greater gains, more frequent and more intensive choral practice holds potential for greater vocal improvement. Future studies may find greater voice improvement in choirs that focus primarily on drills, but reduced psychosocial adjustment in their choir members. Balancing the mix of technique, drill and free creative expression in singing is the choir director's 'art'.

Acoustic and qualitative findings are consistent with those of Yinger and LaPointe (2012) regarding the use of choir singing to improve intensity in speech, and reinforce the notion that choir participation may not only support the maintenance of existing skills, but may also improve aspects of speech intelligibility in the face of significant declines often associated with the disease process (Pinto et al., 2004).

Limitations and considerations for further research

Parkinson's disease processes affect characteristics of motor skills in ways that present challenges to data collection. Participants reported in exit interviews that they experience voice variability each day, due to their medication cycles and the extent to which they experience 'good' or 'bad' days (days on which they are more or less symptomatic). Not only do they experience good and bad days but also have 'good' and 'bad' hours and minutes in connection with their medication cycles, and related medical conditions. A number of participants reported that they experienced this phenomenon during the course of the study. Thus, researchers may choose to collect data at a time when each participant reports feeling less symptomatic.

Vocal improvement may in part have resulted from participants' desire to impress the choir director who collected post-treatment data. Future studies should take care to minimize this effect by separating the choir director from any data collection and should consider either family report or covert measures of vocal function.

Choir size was an additional limitation to the current study. Small choirs reduce generalizability of findings, but maximize the choir director's ability to provide individual attention to each choir member – the converse is true of large choirs. Researchers may be able to balance these concerns by determining an optimal choir size range, and/or using multiple choirs during data collection.

Another consideration relates to the regularity and length of choir rehearsals (i.e. "dosage"). The current study featured a low frequency and duration: one rehearsal per week for eight weeks. Increasing the frequency and/or duration of the treatment may improve the measurable impact on dysphonia, but may also limit the recruitment and compliance of participants in future studies. These individuals often have schedules that are full of medical and rehabilitation appointments. Further investigation into the impact of session frequency (number per week), length (time of each rehearsal), and duration (number of weeks), on the maintenance or improvement of voice in individuals with PD is warranted.

A further limitation is the lack of a comparison with different choral programs and protocols to shed additional light on the therapeutic value of specific aspects of the TSP.

Future studies would also benefit from assessment of test-retest reliability of the acoustic measures, pre-treatment laryngeal examinations, and the inclusion of a number of perceptual raters. A recommended number of raters for future studies may be 8-12, as suggested by studies of this population in related fields (Awan et al., 2010).

CONCLUSION

Results suggest that individuals with PD may find improvements in voice quality, functional communication, and sense of wellbeing following a creative musical experience such as the TSP. This supports the findings of Yinger and LaPointe (2012). The neurodegenerative nature of Parkinson's disease poses challenges to therapeutic compliance in this population. Participants in this study reported feeling motivated to comply with the TSP, and they largely maintained or improved their vocal skills. TSP is a promising adjunct treatment for deficits in functional communication, having the potential to maintain or improve vocal qualities and enhance the wellbeing of adults with PD.

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BIOGRAPHIES

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Eva van Leer is an Associate Professor in the Department of Communication Sciences and Disorders. She is a speech-language pathologist by trade with primary expertise in the treatment and evaluation of voice disorders. Within this area, her research focus lies in treatment outcomes and patient adherence to behavioral voice therapy. She is particularly interested in the prediction, measurement and improvement of adherence to voice therapy, including through the use of mobile technology and social-cognitive approaches, and has further clinical and research expertise in dysphagia (swallowing disorders).

The Trouble With Adjectives: Aligning Singing Tuition and Artistic Practice With Procedural Learning Theory

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ABSTRACT: This article addresses the custom and tendency of composers and teachers/coaches to offer adjectives and adverbs (i.e. descriptions) for instruction and interpretation in music and vocal tuition or as the focus of a performer's attention. This is at odds both with learning and rehearsing processes in acting and theatre, which traditionally focus on verbs rather than adjectives. It is also out of alignment with scientific research on procedural learning, which has been shown to be the most valuable kind of knowledge in singing. Procedural learning has also been shown to have longer-lasting effects on the learner than declarative learning. In an attempt to inform and improve vocal tuition and professional performance practice, the author takes an approach to learning, rehearsing and performing that is borrowed from theatre and compares it with research about procedural learning. The author proposes reasons for the effectiveness of interpretive verbs over bio-mechanically focused verbs in overcoming technical difficulties and finding meaning through a process of play. Case studies are provided to illustrate a verb-oriented approach.

KEYWORDS: *procedural learning, declarative learning, motor learning, focus of attention, voice instruction, constructive language, voice performance, acting, theatre, verbs, adjectives*

IN this article I respond to an observation made by Katherine Verdolini Abbott in a recent webinar presented by the *Australian National Association of Teachers of Singing* (ANATS). Abbott observed that in the long histories of acting and of singing "there has been little cross-pollination of ideas, philosophy, pedagogy or approaches to training" (2020). In this article I give examples of how this is true and how, if we as singers paid more attention to certain acting techniques, such as focusing on verbs rather than adjectives in our process, our approach would align better with the latest thinking about motor learning and focus of attention. By verbs, I mean creative actions that we strive to execute as a process of integrating technique and interpretation. Instead of creative actions, the goal of musicians is often, rather, an adjective, mood or feeling. As I shall show in this article, by using verbs in place of adjectives here we fill in the step that is missing when we strive directly for mood and feeling. While it is traditional to separate the technical from the interpretive, as pedagogues from Manuel Garcia and Mathilde Marchesi to Richard Miller have done (Miller, 2004), I am suggesting here a different paradigm: that technical learning is possible through interpretive experimentation and that the two can be integrated.

This article is a synthesis of ideas and research findings from multiple fields. It is therefore beyond the scope of this article to offer a comprehensive literature review of the research in any one area from which I draw. For an extensive literature review of the research on motor learning (procedural versus declarative) and its relevance to voice instruction, the reader is referred to Roth and Verdolini Abbott (2014). More recently, Treinkman offers a comprehensive and up-to-date review of the research on focus of attention – as a subset of the motor learning field – and its application to voice teaching (2021).

In this article, I draw together ideas and observations about acting, apply them to singing, and integrate them with recent research on motor learning. My own research and professional experience includes and crosses the widely disparate fields of medicine, music and voice, languages and the Alexander Technique. My doctoral research drew previously unrecognized parallels between John Dewey's education philosophy and the teaching of pioneer Alexander Technique teacher Marjorie Barstow (1899-1995).

VERBS AND ADJECTIVES

University of Washington drama professor Catherine Madden observes that actors are schooled in the value of the verb "from the very beginning of their training" (Madden, 2014, p. 225). Musicians and dancers, on the other hand, are often coached to use their techniques to "go for emotion, substituting emotion for action" (Madden, 2014, p. 225). After informally surveying books on performing, Madden observed that "acting books all talk about verbs in some way," while music coaching books use "words like 'expressive' and 'emotional' to describe what performers are supposed to do"

(2014, p. 225). Nick Peterson's *Introduction to the concepts of music* (2008) is an example of a text widely used in Australian schools and highly regarded (Walmsley, 2011), in which the author judges performers by the amount of "feeling" they put into a piece. Ironically, he uses an analogy with acting as a way to get musicians to understand the "intangible concept" of expression, suggesting (with a musician's mistaken assumption, perhaps) that actors *play* adjectives and feelings to reach "international stardom" (2008, p. 122). In a chapter on dynamics and expressive techniques Peterson devotes an entire page to "mood words" – a list of adjectives and emotional states to help the musician build "a broad vocabulary" for "finding words which accurately reflect these feelings" (2008, p. 123). He also explains that tempo markings often express feelings rather than speeds (2008, p. 121). While these words may be useful for analysing and describing music, Peterson does not make any clear distinction between the two practices of describing and analysing on one hand and performing on the other, creating, as I will show, a conundrum for performers. There are two problems with "going for emotion." First, substituting emotion for action is one of the primary causes of tightening in all performers (Madden, 2014). It may be what adjudicator Ronald Dowd was trying to express in an eisteddfod some years ago when he wrote in a comment to my performance: "Don't try to express the character's anguish with your voice – *never* with the voice!" (I paraphrase). For years I pondered the question of how to express something in singing if not with the voice. I was able to answer this question eventually by learning how to use verbs creatively: as a process for learning, in overcoming technical difficulties and in interpreting poetry and music.

The second problem is that going for emotion can get in the way of real emotion happening on either side of the performance (performer/audience); "Emotions may result from the actions of a performance, but genuine emotion cannot happen unless *actions* – rather than emotions – are played" (Madden, 2014, p. 225). Madden describes the approach of going straight for emotion as a kind of 'end-gaining,' which disrupts performers' coordination by paying attention only to the ends (emotion and expression, which are the *effect* of our action) rather than the means (the verb, or action itself). 'End-gaining' is a term coined by F.M. Alexander to describe the process of grasping for results without due attention to process, in which circumstances, he observed, we frequently do not employ optimal means (1910/1996).

COMPOSERS & PLAYWRIGHTS

Composers may be partially to blame for our obsession with adjectives, even if it wasn't their intention for performers to use the adjectives *as process* or as the focus of their attention. Composers necessarily have a clear and distinct idea of how they want their music to sound. But it is not their responsibility to direct the performer's process. It is the performer's responsibility to acknowledge the composer's wish and to find his/her best way to create this. As Madden describes, however, this cannot be by grasping directly for the adjective, feeling, emotion or mood. French composers give us words such as *rêveusement, expressif* and *majestueux.* German composers give us *innig, leise, duftig* and *fließend.* And we have Italian composers to thank for so many of our tempo indications, many of which carry emotional or affective implications or undertones. *Andante, lento* and *presto* are simple speed indications. But *giocoso, maestoso, allegro, allegretto, grave, largo, vivace, affettuoso* and *dolce* all carry an emotional charge or *affect* (directly related to the word *affettuoso*), as Peterson also points out (2008). First, moods, affects, adjectives and adverbs are not actions, but the *effect* of what we have *done* or *acted.* Second, they are vague, intangible and often fleeting, making them difficult to hold on to as a piece progresses. With verbs, our job as performer is clear, active and fun. It is also easier to keep the critical voice at bay when we are fully and clearly occupied in our role (1).

William Shakespeare, on the other hand, often regarded as the world's greatest playwright of all time (Greenblatt, 2005), gives the actor no adjectives (Hagen, 1973). That is, he gives no indications of how to go about interpreting his work or what the *emotional effect* of his work should be. This restraint on the part of the playwright allows the performer a more active – and freer – process of interpretation than many composers allow musicians. Certainly, early composers provided fewer adjectives than modern composers, but baroque composers did give more directions than Shakespeare, and it seems that this habit grew with every successive century. Modern playwrights are less circumspect than Shakespeare, observes Hagen (1973), explaining that many of the descriptive elements in published versions of modern plays are simply descriptions of past productions for the reader's benefit and are not intended for performers. Modern composers are unlikely to use the same excuse.

Uta Hagen's pedagogy is a favourite among actors because of her very practical approach and her own brilliance as a stage actor, according to Ates, an acting coach who describes her approach as not "perfumed with flowery abstractions" (2019). "Acting is doing!" says Hagen (1973, p. 184). "The misguided actor predetermines an attitude toward a given person, object, circumstance or event," says Hagen. "He even finds an objective and then rides or floats towards it with his 'attitude,'" mistakenly thinking he is in action (p. 185). "You can strike the word *attitude* from your vocabulary because it can't be played. I get so single-minded about this misunderstanding that I recommend my own way of avoiding the danger" (p. 185). Hagen's way is to retype the script to eliminate *any* adjectives from the stage direction. Madden's way is to cross them (including dynamics) out of music scores to make space for the performer to come up with verbs that will create the effect rather than going directly for effects such as *forte* or *piano* (which also often cause singers to tighten). This approach echoes Stanislavksi. Under the heading "Emotion and Logic" he writes: "My method is this: I set up a list of actions in which various emotions spontaneously manifest themselves… Take, for example, love. What incidents go into the making of this human passion? What actions arouse it?" (1924/1990). Hagen specifies: "*Angrily, sadly, gloomily, gladly, smilingly, passionately, shyly* etc do not belong in *anybody's* acting score. They are *not* actions! If you should happen to smile or frown or feel sad or glad or furious or frustrated or shy or loving, it will be a *result* of your particularizations for each object, person, event or circumstance – and the result of the give and take of actions!" (1973, p. 185).

Part of my doctoral research could be called focus of attention research (2): collecting data on the learning and rehearsing processes of professional performers and teachers. Amongst other things, I investigated their responses to substituting verbs for adjectives. Some of this research is presented in the case studies below. The new – additional – perspective on this practice of using verbs rather than adjectives is that of Abbott's research and observations about motor learning, which I will now discuss, before presenting the case studies from my own research and teaching.

MOTOR LEARNING RESEARCH

It is helpful, in analysing the teaching and learning processes in singing, to do as Verdolini Abbott has done and compare and contrast two dominant forms of knowledge, memory and learning: 'procedural' and 'declarative.' The terms 'procedural' and 'declarative' describe the kinds of information that amnesic patients can (procedural) and cannot (declarative) learn. Descriptions of these two types of learning and memory date from at least as early as 1975 (Winograd, 1975; Anderson, 1976, both cited in Squire, 1986). To differentiate the two kinds of knowledge, psychologist Maria Airth asks the reader to imagine playing charades and being asked to demonstrate two very different kinds of knowledge: An example of procedural knowledge would be to show "How to ride a bike," while the example she gives for declarative knowledge is to try to demonstrate "D-Day was 6 June, 1944" (Declarative & Procedural Knowledge: Differences & Uses, 2018). As Airth says, a key feature of declarative knowledge is that it is easy to express it in the form of words and symbols (such as the fact about D-Day), while procedural knowledge consists of actions and can be hard to explain verbally (but easy to do once you have learned it, like bike riding). Similarly, and to return to my argument, verbs belong more to procedural knowledge, while adjectives belong more to declarative knowledge.

Procedural knowledge is what we need in order to sing. But many aspects of the way we teach singing are declarative. We try to explain to students what to do, and composers try to explain the effect they want (declarative knowledge), but in order to *do* the act of singing and interpreting, we need procedural knowledge. Once procedural knowledge is gained, it tends to become implicit, meaning that we are no longer aware of the knowledge, creating further difficulties for teachers trying to teach voice students what to do. Perhaps this is the same for composers. *They* know what they want the piece to sound like, having lived with it for days, weeks, months or years. But giving us an adjective doesn't help us procedurally. Giving ourselves a creative/ dramatic verb with which to play, experiment and be creative in executing the technical aspects of singing can provide exactly the kind of procedural knowledge we need in order to learn long term.

Verdolini Abbott, referring to the differences between declarative and procedural learning and echoing the findings by Wulf and her colleagues (Wulf et al., 2002), found that the more feedback teachers give to students, the greater students' *short-term* improvement *in lessons*, while the less feedback teachers give, the greater the *long-term learning* (2020). This suggests that helping students to play creatively with a verb as described in the paragraph above, thereby allowing students space to build procedural knowledge in an autonomous way, is likely to lead to greater long-term learning than getting students to follow our instructions and directions successfully in the short-term.

Verdolini Abbott also describes procedural learning as non-intentional, and declarative as intentional. The benefit, therefore, of creative verbs over bio-mechanically focused verbs is that the procedural learning about vocal technique can come indirectly, as a result of play, rather than directly as a result of biomechanical 'intentionality'. As Roth and Verdolini Abbott describe (2014), this is not to suggest that the voice teacher eschew biomechanical knowledge altogether. Rather, such experimental play is optimally done under the guidance of a teacher who can comment knowledgeably on the outcomes of chosen verbs, confirm technical progress and suggest constructive verbs (3). The accompanying chart lists all features of the two types of knowledge and learning, as described by Verdolini Abbott (2020):

Table 1. Declarative versus Procedural Learning (after Verdolini Abbott, 2020)

Declarative Learning	Procedural Learning
• Conscious	• Non-conscious
• Semantic/associational	• Sensory/perceptual
• Intentional	• Non-intentional
• Flexible	• Stereotypical
• Limited capacity	• Unlimited capacity
• Slow	• Fast
• Serial processing	• Parallel processing
• Phylogenetically new	• Phylogenetically old
• Ontogenetically new (recent, late developing)	• Ontogenetically old (early appearing)
• Unstable over time	• Stable over time
• Repetition-dependent	• Repetition-dependent

As an extrapolation of identifying the differences between declarative and procedural learning, Verdolini Abbott also explains that giving our attention to biomechanics has been found to impair both immediate performance *and* long-term learning. One possible reason she gave for this was that it simply involved an *internal focus,* making learners uptight. She gives the example of golfers who focused on the swing of their arm rather than the swing of the club. The latter, who focused on the club *(external* aspect), rather than the arm (*internal* aspect), resulted in improved outcomes in both learning and performance.

A further reading Verdolini Abbott makes is that the success of having an external focus may be more about focusing on the *effects of movements*, rather than simply on the external focus. Her current conclusion is that attention to movement *effects* appears to benefit motor performance and learning more than attention to bio-mechanics (2020). This was also the conclusion drawn by Wulf et al. (2002). It fits with the later research finding that increasing the distance of an external focus of attention enhances learning (McNevin et al., 2003).

This finding – that the benefits increase with increasing distance – would also seem to support the use of creative/intentional verbs for performers, as such verbs focus on other people and the external environment rather than the performer. I would offer, however, an additional conclusion or way to justify using verbs as process rather than adjectives, not least because there seems to be some confusion about what constitutes an internal versus an external focus. This is evident in the study by Wulf et al. (2002), in which the authors admit that their external-focus feedback statements were not completely void of references to body movements (4). First, if we focus on verbs rather than adjectives, we are focused on our process rather than only on the result or effect we want to achieve, thus avoiding Alexander's charge of 'end-gaining.' Second, if we choose verbs that are likely to produce the musical, vocal or expressive effect we want (or the effect indicated by the composer), we integrate the process with the outcome, rather than focusing only on one or the other. That is, we unify the process with the desired outcome. We are not *focused* on biomechanics, although they certainly can and should inform our actions and decision making and discussions about singing. Finally, technical (procedural) learning takes place indirectly. This seems to be what Verdolini Abbot calls the non-intentional aspect of procedural learning, but what I would prefer to call indirect learning. Performers should always have an intention, but it should not be merely biomechanical or functional, as it might be in sport. Musicians' intentions cannot be purely mechanical or functional because these must be *in service to* artistic or dramatic intentions. Thus the bio-mechanical-procedural learning is indirectly achieved through the dramatic/musical/artistic intention. Further, the problems caused by focusing directly on bio-mechanics, as Verdolini Abbott describes, is supported by Madden's principle that any approach to performance that requires an exclusively internal focus is fundamentally flawed, because it does not take into account the nature and contract of performance (Madden, 2014).

WHAT KIND OF VERBS?

To summarise my argument so far, I have pointed out that verbs are actions and give performers a clearer role than adjectives. I have explained how using verbs aligns with procedural learning, which has been shown to last longer than declarative learning. In this section I will elaborate further on what kind of verbs I am advocating, since a focus purely on bio-mechanical verbs (or instructions with an internal focus only) has been shown by various researchers to be less effective than verbs with an external focus (Wulf, 2013; Mornell & Wulf, 2018; Verdolini Abbott, 2020). What kind of verbs, then, lead to procedural learning?

First, verbs are helpful for performers if they keep us connected to meaning. The second case study, below, is a good example of this. Second, verbs that connect us to others keep us engaged in the act of performing, or the *intention* of performing while learning, practising or rehearsing. They also give us an external focus, which is supported by the research. The action can also be what you want the *other* person onstage to do, to feel, or to understand (Jory, 2000). In the case of vocal music without an obvious dramatic context, such as that provided by opera or music theatre, the other 'person' can be another singer or singers, co-performers, the conductor and the audience. The verbs or actions come from the performer's or the character's performance intention, rather than arising simply from a biomechanical process. These verbs harness our whole psychophysical self and organize our whole coordination. They also provide a more distant external focus than, say, focusing on one's instrument. As McNevin, Shea and Wolf (2003), showed, the more distant the external focus, the greater the enhancement of motor performance.

The aim is to use technique, melody, rhythm, notes, phrases and words to *do* these things to another character, group of people or the audience or a thing, or situation, or to *cause* something to happen. Table 2 gives some examples of verbs that can work in place of certain adjectives or adverbs. These are just a small selection of verbs that can be used. Some of these have come to me from Catherine Madden and her students; others are my own. The possibilities are endless and allow the repertoire performer a degree of choice and improvisation that is otherwise denied us. According to several musicians who took part in my doctoral research the most enjoyable – and surprising – part of using creative verbs is the revelation that a performer's choice of verb never needs to be revealed to the audience, co-performers or teachers, thus opening up further opportunities for creativity and playfulness. One violinist thought that the best part was that she did not have to use the same verb as her duet partner, even though they were working as an *ensemble*.

Table 2: Verb Examples to replace adjectives

Adjective/Adverb	Try verbs such as:
Soft/softly	caress, lull to sleep, stroke, seduce
Joyful/joyfully	tickle, make them dance, whirl the audience into a new world
Warm/warmly	wrap a blanket around the audience, light a fire under everyone's chair
Angry/angrily	pummel, hit, slap, throw, spit, punch, hammer

THREE CASE STUDIES

Verbs in the singing and learning process can be used and experimented with in a variety of ways. These ways include, but are not limited to:

1. in one's imagination (or intention) only
2. explicitly and physically acted out in rehearsal
3. explicit and physically acted out in performance.

The three case studies I present here represent each of these approaches. The singers in all three examples use, or learn to use, procedural knowledge (an action), rather than declarative (a description), and they are employing external and post-attention (focusing on what they want their actions to do in the world, rather than on an internal or pre-attention focus).

Case Study 1: Benjamin Britten's 'Mother Comfort' (*Two Ballads*, 1937)

The first case study is an example of intentional verbs only, where the singers learn to enact the verb by focusing on the effect they wish their singing and the song to have on another, or others. That is, they do these things *with their voices* rather than acting them out. This case study comes from data I collected as part of my doctoral research. The data consisted of recordings of several small ensembles rehearsing, with Madden as performance coach. This ensemble was a vocal duet with piano. The following exchange occurred at a point when the rehearsal had stopped and the ensemble was discussing how to overcome a technical and ensemble difficulty.

> **Soprano**: It has to be very furtive. This is a very furtive song. This is something I still struggle with. My problem is wedding the *molto più lento* with the furtive desperation that I have to feel while I'm singing this…
>
> **Madden**: The other thing I'm going to just note: you need to think what is the verb, what are you doing? Because you can't play 'to be furtive.' That's a result… So you've got an action in the hallway, you're telling secrets, you're touching with the secrets.
>
> **Soprano**: Mmmmmm!
>
> **Madden**: That's *active*.
>
> **Soprano**: Touch with the secrets..
>
> **Madden**: Do you see the difference?

Note the difference between "having to feel" furtive desperation and using the words and music with the very specific and active verb: "to touch".

Case Study 2: Debussy's *Chansons de Bilitis:* "Le tombeau des Naïades"

The second case study is that of a singer who solved several technical difficulties by moving into actual action as she rehearsed and practised a song. She then had a choice about whether to retain some or all of these actions in performance.

This singer also took part in my doctoral research and was studying Debussy's *Chansons de Bilitis.* In the third song, "Le tombeau des Naïades," she had been working to try to make the steps of the protagonist '*p,'* and *"doux et las"* (quiet, soft and heavy), as Debussy had marked them. Trying to make the low-pitched *recitativo*-style singing (in conversation with an unknown 'he') soft but audible was causing the singer to tighten. The climactic crescendo (at "ou jadis riaient les naïades") and final decrescendo (on 'travers') were also causing tightening and frustration and an obsession with the technical aspects of singing.

The song is about walking through snow, looking for traces of satyrs and nymphs. During the song, we learn that the satyrs and nymphs are dead. The singer is led by the unknown 'he' to a frozen well, the 'tomb' of the nymphs. 'He' breaks the shards of ice and holds them up to the light to look through them. In the process of finding verbs for this song to replace some of the adjectives that were impeding her ability to sing this song well, the singer began to act out the text of the song as she sang. (Note: this is just one way to discover – or brainstorm – verbs as process). As she began to move, experiment and play, thus reaffirming that she had creative choices in interpreting this song, many of the technical difficulties disappeared. Not only that, but through action, the singer also discovered layers of meaning in the song – or ways of interpreting it – that she had previously overlooked, such as that the 'he' may have been using the magic of the song to see the nymphs in the ice (or even to try to bring them back to life). Even if this interpretation seems far-fetched, it gave the singer an overall intention for the song: a verb that harnessed a wish – to bring the nymphs and satyrs back to life *through* singing. An example of a less fantastical verb for the song, which might reach today's audiences, might be to encourage people to value art, beauty, magic or the mystery of life. More prosaic again might be to call on our government to fund the arts, or to integrate aesthetics into the curriculum. Practising the song with the actions gave the singer procedural knowledge about singing and interpreting the song. The decision about whether (and when) to take any of the gestures into performance was a decision that continued to give the performer a choice, but it was not necessary to use them in performance to have gained the benefits from the process of creating them.

Case Study 3: Messiaen's *St François d'Assise*

The final case study comes from a documentary about an opera production at the Salzburg Festival (Gorin, 1992). It is an example of a director giving a singer specific (and difficult) movements to accompany a difficult piece of singing. This is the third of the three approaches mentioned above, where the actions are an explicit and visible part of the performance. The director is Peter Sellars and the singer is Dawn Upshaw. Upshaw expresses frustration at the difficulty of the actions Sellars is asking her to make, reminding him that in the previous rehearsal, they agreed that they would "make it easy for Dawn."

In response to Upshaw's plea to be sympathetic to her difficulties, Sellars explains to the camera: "You take the music that is the most difficult, and then make, to go with it, the staging that's the most difficult. So then the music isn't so hard (laughs)! You have other things to worry about… I usually try and build around something the artist doesn't think they can do. And that's where you centre the entire performance. Because then every night, when the artist *does* do it, it's miraculous and beautiful" (in Gorin, 1992). Sellars appears to have a slightly different motivation from the ones I have been discussing in this article (such as to make singing and communication *easier* not *harder*). But his overarching goal is the same: to help singers achieve artistic heights and overcome technical obsessions or difficulties. His approach appears to have been successful. It is gratifying to watch Upshaw grow in the role as the movie unfolds. And the critics – even those who dislike Sellars's adaptations and interpretations – seem to have agreed. "Those who came to protest Mr. Sellars and Mr. Mortier," wrote Rockwell, "wound up cheering the singers" (1992).

CONCLUSION

The problem I have identified is that of reaching directly for an effect, or mood or adjective when one sings or instructs singers. The solution I propose is to replace adjectives with verbs so that singers can learn through play and increase their long-term learning through the autonomous cultivation of procedural knowledge, while being guided and supported by their teachers.

NOTES

(1) There are, of course, differences between vocal music and instrumental music, since vocal music usually has a verbal text in addition to the music. Yet the differences are not fundamental in any way that is relevant to my argument. These adjectival and adverbial composer directions I have quoted come from French art song and Lieder. In fact, the argument to borrow practices from theatre is even stronger for singers, since singers straddle the arts of theatre and music. This is not to say that these techniques cannot equally be used with instrumental musicians, but I have kept examples and case studies of these out of this article, because the focus of this journal is voice.

(2) Melissa Treinkman describes focus of attention research as a subset of the motor learning fields that attempts to answer the question: Where should performers place their attention during learning and performance?

(3) There is also continued debate over whether externally focused instruction should entirely replace internally focused instruction, especially at the early stages of learning (Helding, 2016; Wulf et al., 2002). Recent studies, both in sport and in music, have confirmed that an external focus is beneficial at all levels of skill development (Wulf, 2015; Atkins, 2017; Atkins & Duke, 2013). Helding (2016) and Beilock et al. (2002) maintain that step-by-step components of a skill must be spelled out in the early stages. My advocacy of creative verbs does not preclude the use of biomechanical verbs, as long as there is an overarching creative or performance goal. Ideally, the biomechanical is in service to the artistic, and this is the major area where music differs from sport. As Helding points out, the internal-external focus question does not have to be an either-or proposition (2016, p. 624).

(4) In fact, many of their examples of their external-focus instructions appear to be simply paraphrased internal-focus feedback statements. Compare, for example: "position your foot below the ball's midline to lift the ball" (internal) with "strike the ball below its midline" (external) or "position your bodyweight behind the ball" (internal) with "be behind the ball" (external) (Wulf et al., 2002, p. 178). These so-called pairs of opposites contain no substantive difference between internal and external instruction.

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BIOGRAPHY

Amanda Cole is an Australian performer, researcher and music educator, currently Research Fellow at Griffith University. She has lectured and taught for over twenty years in Victoria, Queensland, New Zealand and Germany. She has won numerous awards for creative projects, research projects and professional development, including a Churchill Fellowship for music and language study in Europe, Arts Queensland and Chamber Music New Zealand grants and an artist in residency in Seattle, Washington. Amanda has a doctorate in performing arts pedagogy from Griffith University and a Master's of Music Performance from the VCA (University of Melbourne). Her articles on constructive pedagogy, performance and the importance of the whole have appeared in peer-reviewed journals such as the *Australian Journal of Music Education*, *Australian Voice*, and the US *Journal of Singing* (in press). Her book on pioneering Alexander Technique teacher Marjorie Barstow will be published by Palgrave Macmillan in 2021.

Insights Into the Benefits of Specialist Vocology Training

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ABSTRACT: This paper discusses the key benefits of studying vocology from the perspective of a recent graduate of the Summer Vocology Institute. It identifies the components of the curriculum considered most useful and interrogates how studying vocology can impact the professional practice of singers, teachers and researchers.

KEYWORDS: vocology, Summer Vocology Institute

VOCOLOGY

Vocology as a professional discipline has been defined as "the science and practice of voice habilitation" (Titze, 2000). The case for vocology has been argued extensively by Titze (1992, 1996, 2019) and Titze and Verdolini Abbott (2012), and the professional advantages of being a vocologist are likely to become even more apparent when the Pan American Vocology Association launches its "PAVA Recognised Vocologist" designation (Hersey, Scearce, & Johnson, 2020). An ever-increasing number of universities and private organisations are offering vocology training courses. In 2019, the current author completed one such program, the Summer Vocology Institute (SVI). This article reflects on her experience of the course and the impact it has had on her practice as a singer, teacher and voice researcher.

SUMMER VOCOLOGY INSTITUTE

The SVI is an intensive, eight-week program run annually by the National Center for Voice and Speech (NCVS) and administered by The University of Utah. It is the brainchild of Dr. Ingo Titze (University of Iowa Foundation Distinguished Professor of Voice and Speech) who teaches on the course alongside other members of the NCVS and visiting faculty. The curriculum is an accelerated version of the course originally offered as an add-on specialty in the Master of Arts degree in speech-language pathology at the University of Iowa. Since its inception in 2000, there have been 312 graduates including, it appears, four Australians. The short course format is comprised of four subjects (units) organised into three blocks that may be taken in different years, making it possible for working professionals to attend. In 2019, attendees included speech-language pathologists, singing teachers (classical and contemporary) and laryngologists. The course is assessed via examination and assignment, and graduates can receive academic credit from The University of Utah. Upon successful completion of all three blocks, participants receive a certificate of completion. Graduates are requested to use the term "NCVS-trained vocologist" when describing their vocology credentials.

Overview of the 2019 SVI

Principles of Voice Production

The first three weeks of the SVI are a foundation course in voice science taught by Dr. Ingo Titze. It closely follows the textbook *Principles of Voice Production* (Titze, 2000) with the addition of some material that has emerged since the book's publication. The course covers laryngeal anatomy, biomechanics of laryngeal tissue, aerodynamics of respiration, vocal fold oscillation, generation and propagation of sound, vocal acoustics, voice classification and age-related changes, control of fundamental frequency, control of vocal intensity and efficiency, vocal registers, fluctuations and perturbations in vocal output (e.g. jitter, shimmer, and vibrato) and an overview of voice disorders. A breakdown of each topic can be found in the book's table of contents, see: http://ncvs.org/POVtoc.pdf. While the textbook can be used for self-study, a major benefit of attending the course is the opportunity for interaction, asking questions and hearing Titze's opinions on how concepts in the book might apply practically to speech and singing. For example, the chapter "Biomechanics of Laryngeal Tissue" discusses stress relaxation over time of the thyroarytenoid muscle, which was researched by Alipour-Haghighi & Titze (1985). What is not mentioned in the textbook or the original research paper is the potential significance of this to the singing of high notes. As Titze explained in class, the propensity of the tissue to relax over time means that strain (here meaning elongation) must be continuously increased if fundamental frequency is to be maintained. In other words, when singing a sustained high note, there needs to be a continual increase in contraction of the cricothyroid muscle, otherwise the pitch will go flat. Once the physical limit of cricothyroid contraction has been reached, the pitch can no longer be maintained. Most of the tissue relaxation occurs within the first second, which could explain why some singers find it possible to sing a pitch at the top of their range briefly, but struggle to sustain that same pitch (I. Titze, personal communication, June 11, 2019).

The practical application of voice science is central to vocology, and this unit includes a number of practical assignments. In an anatomy lab led by Dr. Tobias Riede (Associate Professor of Physiology at Midwestern University), we dissected a cow larynx, which helped to consolidate our knowledge of laryngeal anatomy, calculated the stress-strain relationship of the dissected vocal fold tissue, and estimated the corresponding fundamental frequency. As with the daily assignments involving a voice-related physics problem, this facilitated deeper learning and gave tangible meaning to concepts that might have otherwise seemed abstract.

Voice Habilitation

The three-week unit on voice habilitation draws largely on speech-language pathology. The first week was taught by Dr. Aaron Johnson (Assistant Professor of Otolaryngology in the New York University School of Medicine) and focussed on vocal health, particularly the prevention, management and assessment of voice disorders. One assignment required us to devise evidence-based vocal health guidelines, which I have since used as the basis for a presentation on vocal health for singers. Although the diagnosis and treatment of the disordered voice is beyond the scope of vocology (Titze, 2019), it is beneficial for voice teachers to have some knowledge of the etiology, pathophysiology, symptoms, and treatment of common voice disorders so they can offer an informed opinion as to whether a student with a voice complaint should seek medical advice. This is important because teachers are likely to be the first port of call for a student with a voice problem. Vocologists are also better equipped to work with singers recovering from vocal injury.

Week two of Voice Habilitation considers how principles of exercise science and perceptual-motor learning, as well as research on compliance and concordance can be applied to voice training and rehabilitation. These classes were taught by Dr. Katherine Verdolini Abbott (Professor of Communication Sciences and Disorders at the University of Delaware), who co-wrote the textbook accompanying this unit (Titze & Verdolini Abbott, 2012). Examples of the practical application of the principles discussed include evidence-based strategies for dealing with vocal fatigue, and timing feedback (knowledge of results) to maximise student learning.

The third week is an overview of voice therapies and training models used in voice rehabilitation. This week was taught by Starr Cookman (Assistant Professor of Surgery, University of Connecticut School of Medicine) and covered a number of therapies, such as expiratory muscle strength training, which have applications to singing teaching. We also discussed research on therapies involving vocal exercises and how this might be applied to voice training.

Instrumentation for Voice Analysis

Running concurrently with the unit on voice habilitation is a three-week course on instrumentation for voice analysis. Consisting of lab practicums designed to introduce a range of instruments and skills utilised in voice research, it was facilitated by Dr. Lynn Maxfield (National Center for Voice & Speech and The University of Utah) who taught alongside a number of guest presenters. Some of the practicums, such as interpreting and performing videostroboscopy and using the KayPentax Phonatory Aerodynamic System, were rare opportunities to experiment with technologies not usually available to non-health professionals. We reviewed case studies, practiced auditory-perceptual evaluation, spent time in a cadaver laboratory, and observed high-speed videoendoscopy and electroglottography at the University of Utah's Voice Disorders Center. Several of the practicums involved tools and technologies that can easily be incorporated into the voice studio. As a singing voice researcher, I was particularly interested in the labs on acoustic measures, formant analysis and spectrography, spirometry and airflow measures, and voice range profiles. We also experimented with voice simulation software, which could be employed by voice teachers to demonstrate the impact of different vocal tract shapes on acoustic output. Although the course is introductory level, it was effective in facilitating an appreciation of the applications and limitations of each instrument and laid the foundation for using the literature to develop more advanced skills.

Voice for Performers

The final two weeks of the SVI focus on the singing and acting voice. As a classical singer, I was naturally interested in the classes taught by Lynn Helding (Professor of Practice in Voice and Vocal Pedagogy at the University of Southern California Thornton School of Music), who offered valuable insights into teaching formant tuning and the application of cognitive-science principles to vocal pedagogy. Matt Edwards (Associate Professor and Coordinator of Musical Theatre Voice at Shenandoah Conservatory) and Kate DeVore presented classes on commercial and musical theatre styles and voice training for actors, respectively. Interdisciplinary sharing of knowledge is a hallmark of vocology, and the greater understanding of the classical voice I gained from these classes is testament to this. Other classes, taught by Dr. Titze and Dr. Maxfield, covered topics such as voice research, the role of the singing voice specialist, tessitura, formant tuning, and science-informed singing exercises. Since returning from the SVI, I have frequently referred to this material and adopted many of the strategies and exercises into my teaching and singing practice.

IMPACT ON PROFESSIONAL PRACTICE

The most immediate benefit of attending the SVI has been the ability to more easily comprehend the voice science literature. It is not an exaggeration to state that books and research papers I previously struggled to understand now appear relatively straightforward. This has enabled me to continue developing as a vocologist and be better equipped to be critical in my evaluation of the pedagogy literature. As a researcher, I have also built on the skills I developed at the SVI in formant analysis, which I have used to demonstrate my research on the acoustic impact of traditional pedagogy techniques.

This year, I have been offering a series of online classes for students enrolled in the Master of Music degree in Opera Performance at the University of Melbourne. Topics have included vocal health, semi-occluded vocal tract exercises, respiratory physiology, and vocal acoustics, all very much developed out of my SVI learnings. Significantly, I have been able to devise ways to demonstrate the practical application of voice science to singing and explain scientific concepts using non-technical language. This is a skill I have carried over to my private teaching practice, where I feel my observations have benefitted from a more intricate knowledge of the processes involved in vocalisation. I am also more adept at devising strategies to target specific technical issues — a skill that is at the heart of vocology. As Dr. Maxfield concluded in our final class, “the biggest argument in favour of voice science for the voice practitioner is that it gives you the path to the desired output…It’s not that we gave you specific tools; we gave you the foundry to forge your own tools. My experience attests to this.” (L. Maxfield, personal communication, August 3, 2019).

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BIOGRAPHY

Victoria Lambourn is an opera singer and NCVS-trained vocologist. She is currently completing a PhD in Performance Science at the University of Melbourne, where she has also been contributing her teaching skills to the Master of Music in Opera Performance course. As a singer, she has performed regularly as a principal artist with Opera Australia, the Australian state opera companies, and the Hessisches Staatstheater Wiesbaden. On the concert platform, she has performed with the Australian symphony orchestras and given concerts in Europe, New Zealand and Asia, where her performances have been broadcast on national television. Several of her recordings appear on the ABC Classics and Chandos Records labels.

Diction in Context: Singing in English, Italian, German, and French

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Diction in Context: Singing in English, Italian, German, and French. First Edition by Brenda Smith, San Diego, CA, Plural Publishing, 2021, 345 pp., U.S. $79.95 (paperback), ISBN 9781635501209. *Diction in Context* is the most recent publication to emerge in the field of lyric diction. Aimed at the beginning student of singing in a conservatory setting, the book addresses all aspects of language and diction pertaining to the four main singing languages: English, Italian, German, and French. It distinguishes itself from previous singing diction texts by its focus on text interpretation and meaning.

Based on Smith's thirty years of lyric diction teaching experience, the text is structured as a one-year training program, comprising two semesters of two languages each: English and Italian in the first semester, and German and French in the second. The intensity of this study plan speaks to the time and significance assigned to language and diction learning in the American conservatory, in seemingly sharp contrast to the equivalent Australian experience. I read Smith's "Message to Teachers" with a sense of awe and not a little envy, impressed that "eight weeks of classes with three classes weekly" (Smith, 2021, xvi) could be dedicated to each language per semester. Were an Australian teacher of diction to use this book as a study design, whether in a private or an institutional context, it would more likely represent a longer period of training, though of course one-to-one delivery would progress at a faster rate than a classroom setting.

Diction in Context combines all the elements of lyric diction pedagogy inherited from its predecessors - pronunciation of speech sounds, grammar, biographical, historical and literary contexts and text interpretation - but presents these elements in a way that places greater emphasis on meaning and interpretation. The luxury that Smith enjoys to dedicate time and space to the expressive aspects of lyric diction is partly predicated on her personal philosophical and pedagogical approach, and partly on the many resources, especially online resources, that have accumulated since singing diction was first enshrined in formal texts of the 1970s and 1980s such as Evalina Colorni's *Singers Italian*, Thomas Grubb's *Singing in French* and William Odom's *German for Singers.* Smith recognises these resources in a fulsome reference list at the end the book, and the publishers add to this digital database through a dedicated website.

The first chapter sets out Smith's overall framework for language study, introducing the student to six main areas of skill acquisition: 1) comprehension, requiring an understanding of both form and content; 2) pronunciation, for which the book's primary tool is the International Phonetic Alphabet; 3) articulation, the physical formation of vowels and consonants; 4) enunciation, an intentional, emphatic form of articulation; 5) punctuation as an organising mechanism for creating meaning and 6) cultural context. The two areas which bookend this list - meaning and context - are familiar to the student of lyric poetry from interpretational, biographical and historical analyses by, for example, Bernac (1970), Bathori (1998) and Johnson and Stokes (2002) in French and Fischer-Dieskau (1976) and Johnson (2014) in German. The uniqueness of Smith's book lies in the primacy given to these meaning and contextual elements, and in the skill with which she combines them with a more traditional approach to the authentic formation of speech sounds. The introductory first chapter encapsulates this approach, with only four pages devoted to the mechanics of speech production but nearly 20 devoted to poetic interpretation and close reading.

The Introduction is followed by discussions of each of the four languages in dedicated chapters whose structure adheres to a standard pattern. First, the speech sounds of the language are introduced. Next, elements of grammar relating to that language are explored. Representative age- and level-appropriate texts from the vocal literature in that language are presented, in chronological order, with their historical and philosophical contexts. These serve as an additional resource for both teacher and student. To align with the collegiate course design that is the basis for this text, two presentations are built into the program. The first occurs midway through the course, is ungraded and acts as a rehearsal for the final, graded version. The student is asked to select from a repertoire list of around 25 songs or early arias in the language, and to prepare an oral presentation, an IPA transcription, a translation, a poetic reading and a sung performance.

The formalisation of the assessment component is another demonstration of the way in which Smith has both learned from and expanded upon the work of her predecessors. Discussion questions and learning tasks built into the text are presented in a workbook format that surely draws inspiration from Cheri Montgomery's lyric diction workbooks (2006a, 2006b, 2009, 2013, 2014, 2015, 2016a, 2016b, 2019a, 2019b), which are themselves applications of the standard textbook rules defined by such diction luminaries as Colorni, Odom, Moriarty and Grubb (https://www.stmpublishers.com).

I began this review by identifying one of the singular features of this new lyric diction text. Borrowing techniques from the field of literary analysis, including comprehension, contextualisation and close reading, places expression and meaning at the forefront of the singing diction student's mind, illuminating and invigorating what can otherwise be a dry subject. The book's other impressive features - the uniting of all the major elements of diction and interpretation, the recognition and provision of online and other resources, the course design and the inclusion of learning and assessment tasks –lead me to place this book high on a list of recommended lyric diction texts. One feature, however, stands out above the rest for its uniqueness, necessity and timeliness: the use of guided comparative listening tasks. In a loud, overwhelmingly visual world, whose busy pace may be said to encourage casual and cursory relationships, the ability to listen attentively and critically has become an art and a craft. Smith acknowledges this by including comparative listening tasks for every language, naming individual singers and pianists, and citing actual commercial recordings. As Smith says in her "Message to Teachers," "perfect diction is grounded in the careful imitation of exquisite models" (Smith, 2021, xvii). Far from advocating a monkey-hear, monkey-do approach, Smith's use of the words "careful" and "exquisite" represent the intelligent reinstitution of active listening as a skill to be developed and honed.

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BIOGRAPHY

Lyric mezzo-soprano **Linda Barcan** trained at the Conservatorium of Newcastle, the Sydney Conservatorium of Music, and the National Institute of Dramatic Art (NIDA). Following professional engagements in France and intense study in Germany, Linda returned to Australia to perform for many years with Opera Australia in Sydney and Melbourne. Linda's affinity for 20th and 21st century opera led to appearances in *Christina's World* (Sydney Chamber Opera), *Abelard and Heloise* (Opera Hunter), *Pecan Summer* (Short Black Opera) and *The Emperor of Atlantis* (Lost & Found Opera). A specialist in art song - specifically in French mélodie and German lieder - Linda has been coached by Graham Johnson and David Harper amongst others, and has performed in recital for companies, festivals and art song societies in Australia, France, Germany and Asia, frequently appearing in French cultural and diplomatic circles. Linda is currently Lecturer in Music (Voice) at the Melbourne Conservatorium of Music, where she is also completing her PhD.

“The Stag Hunt” (2020), based on “La Chasse” by Clément Janequin, performed by I Fagiolini, directed by John La Bouchardière.

Linda Barcan

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RUNNING just under 9 minutes, *The Stag Hunt* is the latest in a series of short films from internationally renowned solo voice ensemble I Fagioloni. The film is a modern visitation of the programmatic French chanson *La Chasse* (1537) by Clément Janequin (c.1485-1558), one of the most popular sixteenth-century composers of the genre.

Based in the UK and under the direction of founder Robert Hollingworth, I Fagiolini specialises in early and contemporary music and is particularly known for its innovative productions. John La Bouchardière, who directed this latest project, has worked with I Fagiolini on other filmed performances, notably the *Ode à la Gastronomie*, featuring 20th century choral works, and the humorously titled *The Full Monteverdi*, based on Monteverdi’s fourth book of madrigals. The dynamic collaborations between Hollingworth, La Bouchardière and a group of fine singer-actors has once again produced an imaginative interpretation of a vocal ensemble piece.

In an interview about the making of *La Chasse*, La Bouchardière remarks on the challenges of teasing out the narrative from a polyphonic composition whose use of overlapping vocal lines inevitably disturbs the sequence of events (IMDB, 2020). Despite La Bouchardière’s lament, the story of a proud king who wants to track down and kill a great stag “before his game is up” is cleverly told thanks to sophisticated filmic techniques (including the judicious use of close-up), excellent subtitles (which bely the obscurity of the original text), clear diction and true intonation on the part of the singers, and the creative framework in which La Bouchardière sets the scene. To avoid spoilers, I won’t say any more about one visual aspect of this framework which re-imagines a stag-hunt in a contemporary and relatable manner.

Structurally, the original work is divided into two parts, the sections delineated by changes in voicing rather than by any major development in the story line. In both parts, the voices deliver fragments of dialogue that could conceivably be heard on a stag-hunt, the lines passing back and forth between the hunters (in the original text a dozen hunters are named in the first section and a further 15 in the second). In Part I, four voices, with the bass voice representing the King, direct each other as they set off on the hunt. As the piece proceeds the audience continues to overhear snatches of conversation, including more instructions, an analysis of the stag’s droppings and superstitious talk of bad luck. In the second part, as the chase reaches its climax and the stag is hunted down, three additional voices join in, adding to the musical and vocal complexity of the work with effective mimicry of barking dogs (“gnof, gnof”), horses hooves (“plif, plof”), and hunting horns (“tronc, tronc”).

The original piece is scored for two sopranos, two countertenors, two tenors and a bass. I Fagiolini have modified this voicing, presumably to accommodate their core members and to allow for the allocation of unnamed but titled characters, a feature not in the original text. The seven I Fagiolini singers appearing in the film are given the roles of the King (bass Charles Gibbs), the Queen (soprano Anna Crookes), the Princess (mezzo-soprano Claire Wilkinson), the Duke (tenor Nicholas Hurndall Smith), the Countess (soprano Rebecca Lea), the Earl (baritone Greg Skidmore) and Perot, who is mentioned by name in the score and is here given the title of Huntmaster, played by I Fagiolini director and baritone Robert Hollingworth. The assignment of roles enables the formation of three aristocratic couples plus the huntmaster. These characters represent an aristocracy with a tradition of blood-sports, a critique of which is implied in this production.

The subtitle, "Noble Born Killers", with its punning reference to the 1994 Tarantino/Stone film, gives the first clue as to the position taken by the director and his team on wild animal welfare. The unusual and contemporary setting referred to earlier, together with the final image we are left with, combine to depict a desolate future resulting from the actions of a privileged humanity's actions upon the natural world.

This interesting and refreshing reimagining of a work from nearly 500 years ago upholds the high production values and excellent musical and vocal standards that we have come to expect from I Fagiolini and their creative team. Though short, the film makes for an enjoyable and thought-provoking viewing experience that benefits from multiple re-watchings.

I Fagiolini's *La Chasse* can be purchased at www.ifagiolini.com/thestaghuntfilm for £2.99, £1 of which goes to the Born Free Foundation, a charity devoted to wild animal welfare and to compassionate conservation.

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BIOGRAPHY

Lyric mezzo-soprano **Linda Barcan** trained at the Conservatorium of Newcastle, the Sydney Conservatorium of Music, and the National Institute of Dramatic Art (NIDA). Following professional engagements in France and intense study in Germany, Linda returned to Australia to perform for many years with Opera Australia in Sydney and Melbourne. Linda's affinity for 20th and 21st century opera led to appearances in *Christina's World* (Sydney Chamber Opera), *Abelard and Heloise* (Opera Hunter), *Pecan Summer* (Short Black Opera) and *The Emperor of Atlantis* (Lost & Found Opera). A specialist in art song - specifically in French mélodie and German lieder - Linda has been coached by Graham Johnson and David Harper amongst others, and has performed in recital for companies, festivals and art song societies in Australia, France, Germany and Asia, frequently appearing in French cultural and diplomatic circles. Linda is currently Lecturer in Music (Voice) at the Melbourne Conservatorium of Music, where she is also completing her PhD.

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Editorial

From the Editors ii
Julia Nafisi and Veronica Stewart

Articles

Applying Exercise Science Principles to Voice Pedagogy: Skill Acquisition, Performance Assessment, and Literature Selection 1
Matthew Hoch and Mary J. Sandage

Defining the Expert Voice Teacher: A Narrative Review of the Literature 9
Heather Fletcher, Jane W. Davidson and Amanda E. Krause

Re-examining the Roles of Text and Language in Western Classical Singing 22
Penelope Cashman

The Surprising Benefits of Asynchronicity: Teaching Music Theatre Online 31
Nicole Stinton

The Effects on Acoustic Voice Measures and the Perceived Benefits of a Group Singing Therapy for Adults With Parkinson's Disease 39
Richard Lewellen, David Meyer and Eva Van Leer

The Trouble With Adjectives: Aligning Singing Tuition and Artistic Practice With Procedural Learning Theory 49
Amanda Cole

Reviews

Insights Into the Benefits of Specialist Vocology Training 57
Victoria Lambourn

Diction in Context: Singing in English, Italian, German, and French 61
Linda Barcan

"The Stag Hunt" (2020), Based on *"La Chasse"* by Clément Janequin, Performed by I Fagiolini, Directed by John La Bouchardière 64
Linda Barcan

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