

**Changing Vocal Style and Technique in Britain during  
the Long Nineteenth Century**

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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## ABSTRACT

This thesis presents an overview of solo singing styles and techniques prevalent in Britain during the long nineteenth century, drawing upon evidence from didactic writing, correspondence, critical review, biography, voice science research, and early acoustic recordings in order to analyse changing approaches to voice production and musical expression. The discussion of vocal style is underpinned by discussion of a changing approach to larynx height, and concepts of *chiaroscuro*, *bel canto*, and expression are reconsidered in the light of technical discussion. The origins of the continuous larynx-lowering now expected of the modern operatic singer are recognised in early nineteenth-century voice science literature, but notable trends in selective larynx-lowering are identified from the mid nineteenth century onwards. This confirms the ideal of continuous larynx-lowering as a twentieth-century development, and has significant repercussions for current approaches to historically-informed performance and the singing of 'early music'. The changing use of vibrato effects, portamento and *mesa di voce*, and the application of expressive devices more generally throughout this period are considered within the context of nineteenth-century approaches to voice production.

This thesis is accompanied by a four-CD portfolio of recordings that demonstrates experimentation with nineteenth-century styles and voice production techniques, the emulation of early recorded vocal performances, and the realisation of nineteenth-century repertoire using historically-appropriate approaches to style and technique. Repertoire includes didactic material, operatic arias (including those by 'bel canto' composers), repertoire annotated by renowned pedagogue Manuel Garcia II, and works sung by celebrated nineteenth-century performers and early recording artists. Also included is experimentation with audio filtering that seeks to emulate the limited frequency capture of early acoustic recording apparatus with a view to further understanding the evidence of nineteenth-century voices on record.



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## RECORDED PORTFOLIO TRACK LISTING

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1	Vaccai <i>Metodo Pratico</i> Ex. VIII <i>The Appoggiatura</i> ; Neutral	1:35
2	Vaccai <i>Metodo Pratico</i> Ex. XII <i>Roulades (Runs)</i> ; Neutral	0:55
3	Vaccai <i>Metodo Pratico</i> Ex. XIII <i>Portamento Primo</i> ; Neutral	2:53
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5	Nellie Melba: Mozart <i>Voi, che sapete</i> (1907)	3:29
6	Nellie Melba: Mozart <i>Voi, che sapete</i> (1910)	4:09
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8	Emma Albani: Chaminade <i>L'été</i> (1914)	2:12
9	Adelina Patti: Mozart <i>Batti, batti</i> (1904)	4:16
10	Marcella Sembrich: Mozart <i>Batti, batti</i> (1904)	3:37
11	Suzanne Adams: Gounod <i>Jewel Song</i> (1902/3)	2:22
12	Marcella Sembrich: Gounod <i>Jewel Song</i> (1906)	3:30
13	Nellie Melba: Gounod <i>Jewel Song</i> (1910)	3:14

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2	<i>Excerpt:</i> Emma Albani: Chaminade <i>L'été</i> (1914); 100-4000Hz	0:56
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12	Amelita Galli-Curci: Bishop <i>Home, sweet home</i> (1917); 150-2000 Hz	4:43
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2	Bellini <i>Ab! Non credea mirarti</i> from <i>La Sonnambula</i> (1831)	3:19
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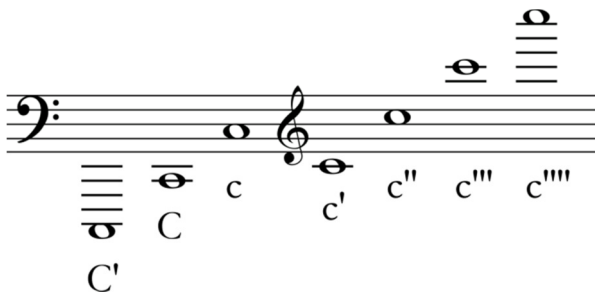
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## NOTES

Referencing in this thesis is based upon the MHRA (Modern Humanities Research Association) system. Additionally, in the main body of text the publication date of each written source is included in brackets after the name of the author to assist with clarity and ease of comprehension where both nineteenth-century and modern theorists are cited. Short titles are used where a publication date is unknown. Any additional emphasis in quoted text (italicisation, bold type) has been noted in the footnotes; all other emphasis is representative of the source. Anonymous sources are listed in the bibliography sorted alphabetically by title.

References to pitch use the Helmholtz system, as depicted below in octaves beginning with C:



## *Chapter One*

# REVIVING THE ART OF SINGING:

## PROJECT OUTLINE

### 1.1. INTRODUCTION

Within the field of professional practice there currently exists an imbalance between expectations of the instrumental performer in historically-informed performance, and expectations of the singer in a comparable role. The modern instrumentalist is often expected to perform using historical techniques and corresponding forms of expression, and can readily access a great number of publications discussing the performance practices of previous centuries. In addition to this, a growing number of professional instrumentalists are engaging in their own historical research in an effort to better understand changing ideals in solo and ensemble performance. There are comparatively few resources easily available to singers that discuss historical voice usage and its practical application in modern performance, and professional singers that actively engage in historical enquiry remain rare.<sup>1</sup>

The nineteenth century offers a wealth of vocal sources currently given very little attention by scholars of historical performance practice. This state of affairs has been perpetuated by entrenched stereotypes of scholars and performers. Performers often dismiss historical enquiry as irrelevant or impractical, and might be seen to be unwilling to make sacrifices to a tried-and-tested method in the name of academic enquiry or historical

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<sup>1</sup> Robert Toft's recent publication, *Bel Canto: A Performer's Guide* (OUP, 2013), has set an inspiring precedent in encouraging performers to engage directly with source material alongside scholarship, and to experiment with the great variety of forms of expression integral to the historically-informed performance of nineteenth-century vocal repertoire.

accuracy.<sup>2</sup> A lack of collaboration between scholars and performers is evident in the approach currently accepted in performances that pertain to be historically-informed. The situation has been exacerbated by a failure to disseminate scholarly research effectively to professional performers and the institutions that train them.

Although singers may specialize in various forms of ‘early music’, singers in period performances are not routinely subject to the expectations of stylistic and technical adjustment that govern instrumental participation. Singers frequently perform repertoire of the seventeenth, eighteenth, and nineteenth centuries in a manner that reflects modern operatic norms: using more-or-less continuous vibrato of some form, seeking uniformity of sound and timbre, and using the projected voice of the modern operatic or ‘classically-trained’ singer. Scholars have already acknowledged the need for modern singers in general to re-adjust their performance values in order to interpret sensitively the repertoire of the eighteenth and nineteenth centuries, and this is particularly true of those that sing in the operatic style.<sup>3</sup> Small concessions towards period performance style are routinely offered in historically-informed performances – the adaptation of vibrato, and the use of cadential trills, for example – but attitudes towards other elements of stylish performance, like the portamento, have yet to be altered.

The contrast that exists between accounts of historical singing and the modern representation of ‘historically-informed’ singing has already been identified in academic scholarship by writers that include Robert Toft, Roger Freitas, Will Crutchfield, and John Potter, but has yet to be acknowledged by performers. Performances may not always be

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<sup>2</sup> Roger Freitas, 'Towards a Verdian Ideal of Singing: Emancipation from Modern Orthodoxy', *Journal of the Royal Musical Association*, 127.2 (2002), 226-257 (p. 226). See also Jessica Duchon, 'Champion of the Baroque: Sir Colin Davis speaks out', *The Independent* (2012) <<http://www.independent.co.uk/arts-entertainment/classical/features/champion-of-the-baroque-sir-colin-davis-speaks-out-7581984.html>> [accessed 20 April 2012].

<sup>3</sup> See Richard Bethell, 'Vocal Vibrato in Early Music', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/bethell/>> [accessed 9 January 2012]. See also Freitas, 'Towards a Verdian Ideal of Singing', (p. 256).



marketed as ‘historically informed’, but the use of harpsichords and period orchestras often tacitly imply to audiences (and participants) a standard of historical accuracy that is not upheld by the vocal contribution.<sup>4</sup> Presenting what are essentially modern singers alongside historically-informed accompaniments often results in performances that exhibit contrasting approaches to musical style and expression. This dichotomy does not reflect a deliberate disengagement from historical vocal practices by modern singers, but rather that professional, commercial, and public expectations of stylish singing in period repertoire have yet to reflect the attributes and requirements of singing that is genuinely informed by knowledge of historical practices.

The aim of this research project is to explore the practices described in didactic writing and accounts of singing dating from throughout the long nineteenth century, effectively learning to sing (again) using the styles and techniques expected of the nineteenth-century singer. This research aims to expand upon existing enquiry into the vocal styles of the nineteenth century by also examining the technical foundation upon which full understanding of singing in this period rests. The reality of a change in approach to larynx height in this period has already been acknowledged by scholars that include John Potter, Gregory Bloch, and Roger Freitas, but detailed enquiry has not yet been completed. An approach that recognises technique as the foundation of vocal performance is both sensible and overdue, allowing the reinterpretation of a great number of sources in their proper context by acknowledging changing approaches to voice production. The aim of incorporating voice science discussion into this interdisciplinary methodology is to ensure a suitable historical, musical, and scientific context in which to consider fully accounts of singers and singing in this period.<sup>5</sup> The consideration of changing trends in voice

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<sup>4</sup> For discussion of vocal contribution in the early music movement see John Potter, *Vocal Authority: Singing Style and Ideology* (Cambridge: Cambridge University Press, 1998), pp. 115-122. See also Richard Wistreich and John Potter, 'Singing early music: a conversation', *Early Music*, 41.1 (2013), 22-26 (p. 25).

<sup>5</sup> George Kennaway has written of the importance of building suitable context for the interpretation of performing editions as records of performance practices; this outlook extends

production, vibrato usage, and the application of expressive devices more generally, encourages us to reconsider our approach to concepts like ‘bel canto’ and *chiaroscuro*.

The practical element of this research project prompts us to ask whether it is indeed possible to retrain the modern singer’s voice, and whether one singer can utilise a wide range of styles and techniques effectively. Practical experimentation is a key component in the effective evaluation of the styles and techniques discussed by nineteenth-century writers and practitioners. Stylistic research questions embrace the contentious issue of appropriate vibrato usage, and the execution and application of the portamento and *mesa di voce*. These research areas, in turn, lead to the discussion of other attributes expected of an accomplished nineteenth-century singer.

The term ‘modern operatic vocal standard’ is used throughout this thesis to describe the traits and techniques commonly employed by modern operatic singers and those who sing non-operatic repertoire in the ‘classical’ style. This is, of course, a generalization, but reflects the ideals of continuous larynx-lowering, (more or less) continuous vibrato of some form, and vocal homogeneity (throughout works, and throughout the range of the voice) commonly expected of professional singers.

Whilst the scope of this project may at first glance appear geographically limited, Britain in this period was home to a variety of international influences as a result of what McVeigh (1993) has called an ‘[e]ver-increasing interaction between diverse musical cultures, encouraged by travel and publishing’.<sup>6</sup> Throughout the eighteenth and nineteenth centuries Italian influence was held in consistent high regard across Europe, dominating the main subscription series and opera scene to the extent that some British singers

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to the consideration of sources that pertain to performing practices more generally. See George Kennaway, 'Bookcases, Fish Pie and My Piñata: Musical Scores Considered as Sets of Instructions', *International Review of the Aesthetics and Sociology of Music*, 42.2 (2011), 355-377.

<sup>6</sup> Simon McVeigh, *Concert Life in London from Mozart to Haydn* (Cambridge; New York: Cambridge University Press, 1993), p. 121.

adopted Italianate stage names in an attempt to prosper.<sup>7</sup> Its continued popularity into the present era is owed not only to the Italian compositional style, but also to the natural advantages that the Italian language offers the singer (pure ‘open’ vowels, in particular).<sup>8</sup> Understandably, then, much of the repertoire and writing analysed in this research project relates to an Italian style of performance, and (notions of) an Italian technical tradition.<sup>9</sup> As this project has evolved the source base has widened to include English-language (and translated) sources that are not necessarily British, but pertain to the dominant vocal style of the period and would have been accessible to British singers at this time. Many were penned by singers who taught, performed, and/or lived in Britain during the long nineteenth century.

## 1.2. SOURCES

Despite the current scarcity of specific inquiry into vocal performance of this period, there is a wide variety of nineteenth-century source material available to the performing musicologist regarding vocal style and technique. This material includes treatises, published writing in journals and newspapers, correspondence and personal records, advertisements, early recordings, and other references to musical practice in society. Sources include not only those that discuss (solo) vocal performance directly, but also those that include relevant discussion of performance on other instruments. Sources relate to both male and

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<sup>7</sup> McVeigh, *Concert Life in London*, pp. 83, 93, 120. See Potter, *Vocal Authority*, pp. 31, 45. Also Derek B. Scott, *The Singing Bourgeois: Songs of the Victorian Drawing Room and Parlour* (Milton Keynes: Open University Press, 1989), p. 130.

<sup>8</sup> Scott notes that the advantages of the Italian language ‘in turn meant steadier pitch and evenness of tone’ – Italian is still considered by many to be the ‘singer’s language’. See Scott, *The Singing Bourgeois*, p. 16. Further comment can be found in Johann Joachim Quantz, *On Playing the Flute: the Classic of Baroque Music Instruction*. trans. by Edward R. Reilly, 2nd ed. (London: Faber, 2001), pp. 327, 334. See also Jean Le Rond d’Alembert, ‘On the Freedom of Music (1759)’, in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 85-91 (p. 89).

<sup>9</sup> The use of the term ‘bel canto’ to describe an Italian vocal tradition has been deliberately avoided in an attempt to avoid confusion or misinterpretation.

female voice parts, but by necessity the Recorded Portfolio consists of repertoire for the soprano (or mezzo-soprano) voice.<sup>10</sup>

### 1.2.1. PRINTED

The dissemination of printed sources in this period was often troublesome, as pricing wars, piracy, and bribery in return for advertisements or reviews were not uncommon.<sup>11</sup> Printed sheet music was certainly managed on a supply and demand basis, and although surviving copies may not truly be indicative of popularity, we can be sure that the sources cited in this research were available to singers in Britain at this time. The dissemination and translation of foreign-language sources became more common as the nineteenth century progressed, and as international travel and trade became both more convenient and increasingly prevalent.

When analysing written sources we must acknowledge that authors may not be representative of their peers, taking into account variation in time period, geographical location, and personal taste. Similarly, one must account for tendencies toward conservatism or liberalism. It might be suggested that reviews of live performances are more useful to musicologists than works (treatises, etc.) that describe an ideal which might not be realistically attainable, and certainly doesn't reflect the idiosyncratic practices of individual performers. The relationship between reality and ideal is one with which the modern performer and musicologist continue to struggle, but careful scholarship can help temper out exceptional or unrealistic sources in the search for convincing accounts of performance practices.

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<sup>10</sup> The nineteenth-century sources consulted by this thesis do not directly reference the castrato; this thesis does not deal with the castrato voice in particular, although much of the stylistic discussion would be applicable to the performance by castrato singers.

<sup>11</sup> Scott, *The Singing Bourgeois*, pp. 37, 125. See also *Music Publishing in Europe 1600-1900: Concepts and Issues, Bibliography*, ed. by Rudolf Rasch, *Musical Life in Europe 1600-1900: Circulation, Institutions, Representation, The Circulation of Music* (Berlin: Berliner Wissenschafts-Verlag, 2005), vol. i.

### 1.2.2. RECORDED

With the digitisation of a great number of early recordings we can now freely consider the available recorded output of those trained, and actively performing, in the latter half of the nineteenth century.<sup>12</sup> Early recordings are invaluable sources, although their interpretation is not without considerable difficulty. Leech-Wilkinson (2009) has written in this context that ‘sound is extremely hard to discuss in non-scientific terms’, and, just as with a live performance, description of recorded musical sound in objective terms remains unsurprisingly difficult.<sup>13</sup> The musicologist must constantly assess the relationship between performance reality and performance ideal, considering that one recorded example may not be representative of a particular performance practice more generally, and might well represent the practices of the singer’s formative years. Arguments that early recording conditions may not have been conducive to a relaxed, spontaneous, impassioned performance must also be considered.<sup>14</sup> Daniel Leech-Wilkinson’s 2009 online publication on the CHARM (Centre for the History and Analysis of Recorded Music) website provides a comprehensive overview of early recording techniques, also discussing best practice for the faithful conversion and re-mastering of acoustic recordings:

[I]f we are to use these recordings for study it is essential that we understand what these compromises and distortions are, how they arise, how they affect what we hear, and how we might be able to compensate for them.<sup>15</sup>

It is important to consider the capabilities and limitations of early acoustic recording apparatus when considering early vocal recordings; Chapter Six details and discusses

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<sup>12</sup> Collections of early recordings available online can be found listed in the Bibliography, and have been cited individually within this thesis where appropriate.

<sup>13</sup> Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performance* ([n.p.]: Centre for the History and Analysis of Recorded Music, 2009) <<http://www.charm.rhul.ac.uk/studies/chapters/chap1.html>> [accessed 27 March 2012]. Chapter 1.1, paragraph 7.

<sup>14</sup> See Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven: Yale University Press, 2000), pp. 7-8, 9. Also Robert Philip, *Performing Music in the Age of Recording* (London: Yale University Press, 2004), pp. 27-28.

<sup>15</sup> Leech-Wilkinson, *The Changing Sound of Music*. Chapter 3, paragraph 21.

experimentation that emulates the reduced frequency capture of early recording techniques (and can be heard on CD 3 of the Recorded Portfolio).

Modern singers need to be aware of the increasing manipulation of modern recordings in post-production when considering and experimenting with vocal styles and techniques. As tenor Stephen Wall commented in Barrett's *A Century of Microphones* (2005):

[T]hey don't hear the stuff that gets filtered out in the recording studio, like breaths and h-sounds and shadow vowels, and so they think they're not supposed to do it. They don't realize that all the greats, Tucker, Gigli, and so on, did all of that stuff.<sup>16</sup>

A sensitive and candid modern recording can, however, be a valuable tool for review (and dissemination) when experimenting with the vocal styles and techniques of any era.

Wood (1930) predicted that the continued development of recording would induce further vocal refinement:

A new technique, more subtle, more true, more refined, is going to be demanded of singers. The day has arrived when they will be expected to work as hard, as intelligently and as sincerely as instrumentalists. For when a singer records for the gramophone, the colour and the beauty of his voice must do everything.<sup>17</sup>

What Wood failed to predict was that recording techniques would eventually evolve to offer the performer the chance to tweak and edit individual notes of a performance (although the extent to which modern editing can improve the 'colour and beauty' of a voice is debatable). Future generations might well disregard highly edited twenty-first-century recordings as unrepresentative of performing practices, unless the addition of some form of editorial commentary to commercial releases becomes commonplace. It is possible to argue that the plethora of editing techniques available to the modern singer has fuelled the entrenchment of the modern operatic vocal standard, as performers seek to emulate the

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<sup>16</sup> Stephen Wall, interview by the author (Barrett), e-mail exchange, Seattle, Washington, 2<sup>nd</sup> April 2004. Cited in Richard Barrett, 'A Century of Microphones: The Implications of Amplification for the Singer and the Listener', *Journal of Singing*, 61.3 (2005), 273-277 (pp. 273-274).

<sup>17</sup> Henry Joseph Wood, *The Gentle Art of Singing: Abridged Edition in One Volume* (London: Oxford University Press, 1930), p. 95.

‘perfection’ of edited recordings in live performance. (Standardisation is very far removed from the nuanced approach suggested by nineteenth-century writers.)

This research project has utilised a variety of recorded sources but has also included the creation of the Recorded Portfolio, details and critical discussion of which can be found in Chapter Six of this thesis. The recorded output includes experimentation with nineteenth-century repertoire, and vocal styles techniques, alongside the emulation of early recorded vocal performances from the turn of the twentieth century, and the realisation of nineteenth-century repertoire using period performance practices. Details of the recording, engineering and mastering of the Recorded Portfolio that accompanies this thesis can be found in Appendix B.

### 1.2.3. SCIENTIFIC

This research project gradually took on an interdisciplinary interest that became fundamental to the consideration of historical vocal techniques. This involved consulting both nineteenth-century and current voice science sources in an effort to consider concepts and theories in the context of changing understanding of voice production, resonance, and the anatomy and physiology of the vocal apparatus. Whilst this thesis has been written by a performing musicologist (and not a voice scientist), care has been taken to ensure that scientific precepts and research have been presented accurately, and in a manner that may be easily understood by others from a non-scientific background.

This project embraces both artistic and scientific discussion of the voice in an effort to offer a well-rounded consideration of nineteenth-century understanding of vocal styles and techniques. As Brereton and Daffern (2011) have recently advised:

Voice science is a relatively new and very much developing interdisciplinary field of research which needs to be embraced by any researcher considering the voice from any perspective, be it musicological, historical or performance based.<sup>18</sup>

### 1.3. RESEARCH METHODOLOGY

The methodology of this research project has combined traditional methods and standards of theoretical scholarship with practical exploration of the subject matter. (The term ‘practice-led’ has been avoided here because elements of both practical and theoretical research have played an active role in this research project.) Each aspect of the submission is integral to the research project as a whole. The Recorded Portfolio is not only the realisation of the research process and thesis contents in practical form, but represents the more general influence of practice upon the project as a whole; without the thesis the Recorded Portfolio lacks its *raison d’être*. The performance element of this submission has not only influenced the conclusions of this thesis, but has also functioned as an active form of research.

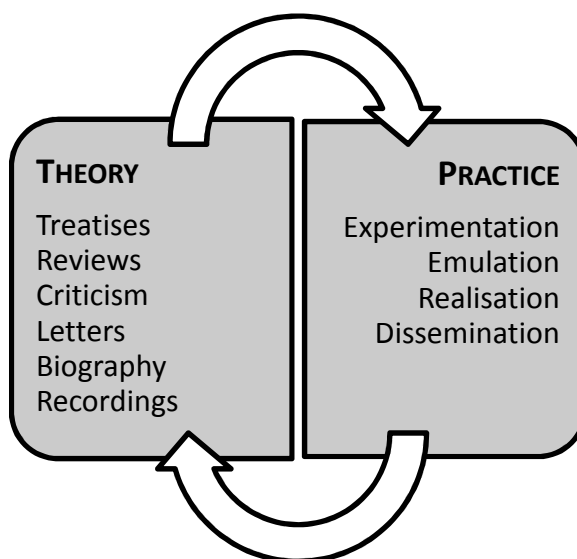
Although beginning with a preliminary period of primary source research, the process as a whole has been largely cyclical. Often active experimentation would follow a period of theoretical research, and might then influence reconsideration of sources and theories, and in turn further practical experimentation. Experimentation and emulation led naturally on to the realisation of nineteenth-century repertoire, allowing individual styles and techniques to be practiced in the context of a larger work, and to influence further thought and research. The stages of this cyclical process (as demonstrated in Figure 1) allowed the constant re-evaluation of each aspect in the context of the other.

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<sup>18</sup> Jude Brereton and Helena Daffern, 'An Introduction to the Science of the Singing Voice', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/daffern-brereton/>> [accessed 9 January 2012].



Figure 1: Illustration of cyclical research process



### 1.3.1. RECORDED PORTFOLIO

The recording, engineering, and mastering of the Recorded Portfolio was completed by Kerry-Anne Kubisa, the resident Studio & Recording Technician at the School of Music, University of Leeds. Keyboard instruments were kindly provided by the School of Music, and comprised an Erard piano dating from c.1855, and a 2004 Steinway Model D concert grand piano.

The aim of these recordings was to provide a faithful record of experimentation with, and realisation of, the styles and techniques discussed in this thesis. With this in mind, editing was kept to a minimum in order to present the recordings as a record of development, and to provide an accurate representation of the performance standard demonstrated in the recording sessions. (A statement outlining this approach more fully is included in Appendix B, and has been certified by Kerry-Anne Kubisa as an accurate description of the recording, editing, and mastering processes involved in the completion

of the Recorded Portfolio.) Individual tracks are referenced alongside discussion of relevant information throughout this thesis, but have been analysed collectively in Chapter Six in order to allow the assessment of the technical, stylistic, and musical success of each track. (One might argue that the Recorded Portfolio demonstrates requisite proficiency as a vocal performer, and therefore suitability to comment in detail upon matters of vocal performance.) Chapter Six also includes full details of the early recordings emulated on CD 2 of the Recorded Portfolio.

#### 1.4. THESIS ARRANGEMENT

The chapters in this thesis have been presented in an order that addresses vocal technique as a fundamental element in the understanding of nineteenth-century singing, and then interprets stylistic devices in the light of the techniques discussed. This is not intended to suggest hierarchical importance in particular, but was felt to be beneficial to the clarity of the thesis as a whole. For that reason this thesis does not employ a purely chronological approach, although individual chapters and specific arguments often take a chronological format to aid clarity of argument.

Tracks in the Recorded Portfolio have been reproduced in the order that they were recorded.<sup>19</sup> This clarifies their place in the thought process of the research project as a whole, although they are referred to out of sequence in the main body of this thesis. It was felt that this was unavoidable given the relevance of each recording to a number of different research questions. It is recommended that cited recordings are listened to as they are individually referenced throughout the thesis in order that they may illuminate the written content, and demonstrate the individual techniques and styles being discussed. Listening alongside the discussion in Chapter Six is also advocated (in consultation with the

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<sup>19</sup> CD 2: Track 4, Adelina Patti: Bishop *Home, sweet home* (1905), is the only exception. This was re-recorded, as detailed in Chapter Six and Appendix B.

repertoire transcriptions in Appendix A where applicable), as not all recordings have been explicitly referenced in the main body of the thesis, but collectively played an integral role in the progression of the research project as a whole.



## *Chapter Two*

# THE RISE AND FALL OF THE LARYNX: TRENDS IN VOICE PRODUCTION

The act of singing is rarely discussed in terms that describe the technical workings of voice production, but rather in terms that allude to the characteristics of its output (tone colour and voice quality, for example). Such an approach is unsurprising given that the vocal apparatus cannot easily be observed by the human eye, and is encouraged by wariness that a focus upon scientific knowledge might distract the singer from artistic considerations. Discussion of vocal technique is complicated by difficulty in connecting sensation and aural output with scientific theories of anatomy and physiology; singers (and those who comment upon singing) are not always aware of the physical or acoustic effect that even a very small adjustment of the vocal apparatus can cause, and, conversely, it is often difficult to describe exactly how a vocal effect is achieved without resorting to vague imagery and imprecise terminology. Freitas (2002) has expertly summarized the advantage that instrumentalists have over singers in the discussion of style and technique:

With instruments, one can take the object in hand and read the treatises on its techniques: for both the original writer and the modern performer, those techniques are visually observable. Communication of vocal style [and technique], however, is always forced to rely on verbal imagery, imagery that often suggests different things to different people.<sup>1</sup>

As a consequence, singers and teachers have developed a range of descriptive concepts (resonance imagery, demonstration and imitation, trial and error) with which to encourage the intended results, and these subjective strategies remain commonplace despite modern

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<sup>1</sup> Roger Freitas, 'Towards a Verdian Ideal of Singing: Emancipation from Modern Orthodoxy', *Journal of the Royal Musical Association*, 127.2 (2002), 226-257 (p. 226).

scientific knowledge of the vocal apparatus and its workings.<sup>2</sup> The indeterminacy of vocal terminology is an ongoing problem for singers and wider discussion of singing.

The unchanging nature of the singer's anatomy has long been (mistakenly) interpreted as an indicator of permanence in the way that the voice is (and has been) used. This appearance of continuity is heightened when the singer is observed alongside orchestral instruments that are usually immediately identifiable as 'different' from their modern counterparts. Although remaining physiologically unchanged, the human vocal apparatus is in fact capable of innumerable minute physical manipulations, each of which can affect the various characteristics and capabilities of the singing voice. Of the countless possible configurations of the vocal apparatus, the vertical movement of the larynx is perhaps one of the most important considerations in the study of historical vocal practices.<sup>3</sup> The lowering of the larynx (described in greater detail later in this chapter) is generally accepted to be responsible for the modern operatic singer's characteristic tone and power, immediately distinguishing their voices from those of amateur or untrained singers. This chapter outlines a theory of neutral, transitional, and low-larynx approaches to voice production, tracking the origination and growing use of the lowered larynx through the nineteenth century, and acknowledging the technique as the basis of modern operatic or 'classical' vocal technique.

## 2.1. NEUTRAL LARYNX USAGE

Accounts of voice production dating from the late eighteenth and early nineteenth centuries provide us with valuable insight into theories of voice science before the

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<sup>2</sup> Freitas, 'Towards a Verdian Ideal of Singing', (p. 227).

<sup>3</sup> A change in approach to larynx height has also been outlined in John Potter, *Vocal Authority: Singing Style and Ideology* (Cambridge: Cambridge University Press, 1998). See also John Potter, *Tenor: History of a Voice* (New Haven; London: Yale University Press, 2009).

invention of the laryngoscope allowed more reliable internal examination.<sup>4</sup> Such works rely purely on basic observation of the larynx and vocal folds, and related theories of sound production.

Quantz (1795) related the production of the voice to that of tone production in the flute:

The structure of the flute resembles that of the windpipe, and the formation of the tone in the flute resembles the formation of the tone in the human windpipe. The human voice is produced by the exhalation of air from the lungs, and by the motion of the larynx. [...] A low note results when you expand the opening of the windpipe by means of the appropriate muscles, and thus depress the five cartilages of which the larynx consists so that the said larynx is shortened slightly when you simultaneously exhale the air rather slowly from the lungs; the depth of this note depends upon the degree of expansion of the opening of the windpipe. A higher note results when you contract the opening of the windpipe, with the aid of the other muscles appointed for this purpose, and in consequence the aforementioned five cartilages on the larynx rise, making the windpipe somewhat narrower and longer, while you simultaneously exhale the air from the lungs more rapidly; the height of this note depends upon the narrowness of the opening.<sup>5</sup>

This description of the ‘opening of the windpipe’ at first glance appears to equate to the aperture of the glottis (the opening between the vocal folds), but Quantz has failed to recognize that vocal sound is produced and regulated in pitch by the vocal folds themselves, and not by the width of the windpipe in its entirety. Bayly (1789) and Nathan (1836) also seem to have believed that the dimensions of the windpipe directly affected the

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<sup>4</sup> Contrary to popular belief, the concept of the laryngoscope was not actually invented by Manuel Garcia II, but was refined by Garcia and used in the observation of his own larynx. See Nathalie Henrich, 'Mirroring the voice from Garcia to the present day: Some insights into singing voice registers', *Journal of the British Voice Association: Logopedics Phoniatrics Vocology*, 31.1 (2006), 5. A summary of similar inventions can be found in Emil Behnke and Lennox Browne, *Voice, Song, & Speech: A Practical Guide for Singers and Speakers; from the combined view of Vocal Surgeon and Voice Trainer* (London: Sampson Low, Marston, Searle, and Rivington, 1883).

<sup>5</sup> Johann Joachim Quantz, *On Playing the Flute: the Classic of Baroque Music Instruction*. trans. by Edward R. Reilly, 2nd ed. (London: Faber, 2001), p. 49. The rigid nature of the larynx itself means that it is not possible to change the dimensions of the larynx as a whole as Quantz seems to suggest.

pitch of vocal sound.<sup>7</sup> In the light of knowledge we now have of vocal physiology, an analogy between the voice and the flute is misleading.

It is not uncommon for sources of the eighteenth and early nineteenth centuries to ignore the issue of exactly how vocal sound is produced, instead offering only general remarks about standing up straight, taking breaths in good time, and allowing the easy passage of the voice through a moderately open mouth.<sup>8</sup> Singers in this period were trained in the appropriate expression of tender sentiment, and the application of ornamentation and other stylistic devices, *not* intentional manipulation of the vocal apparatus. This is evident in the focus of eighteenth- and early nineteenth- century didactic works upon the portrayal of appropriate sentiment through the use of musical devices (such as the *mesa di voce*, portamenti, and ornamentation). In this period tone of voice is mentioned only in relation to the varied expression of emotion; Urbani (1795), for example, described variation in tone of voice in the context of the characterization of recitatives that portray varied sentiment, an approach also taken by Nathan (1836), and echoed elsewhere.<sup>9</sup>

There are numerous treatises dating from the early part of the period discussed by this thesis that consist almost entirely of musical exercises and repertoire. Writers placed careful emphasis upon the execution of musical devices, encouraging would-be singers to practice notes in various lengths, rhythms, and ornamental figurations in a variety of keys and time signatures, before eventually allowing the singer to graduate to solfeggio (exercises vocalized on vowels only) in preparation for the addition of text. This rudimentary training was consistently depicted as the basis of good vocal technique, demonstrating an

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<sup>7</sup> Anselm Bayly, *The Alliance of Musick Poetry & Oratory* (London: John Stockdale, 1789), p. 19. Isaac Nathan, *Musurgia Vocalis: an Essay on the History and Theory of Music, and on the Qualities, Capabilities, and Management of the Human Voice* (London: Fentum, 1836), pp. 87-88.

<sup>8</sup> Works that take this approach include those by Tosi (1742), Urbani (c.1795), Corri (1810), and Lanza (1820).

<sup>9</sup> Peter Urbani, *The Singer's Guide* (Edinburgh: J. Johnson, c.1795), p. 11. Nathan, *Musurgia Vocalis*, p. 87. See discussion in Robert Toft, *Heart to Heart: Expressive Singing in England 1780-1830* (Oxford: Oxford University Press, 2000), pp. 23-24. See also Robert Toft, *Bel Canto: A Performer's Guide* (Oxford: Oxford University Press, 2013), p. 85.



expectation of keen muscle memory and comprehensive theoretical knowledge in accomplished performers. It was only in the mid-nineteenth century that the mechanics of voice production assumed greater emphasis in didactic writing, and growing interest and expertise in voice science reflected more widespread changes in theories (and practices) of voice production. By the late nineteenth-century anatomical and scientific information had begun to supplement (and sometimes replace) tables of ornamentation and rudimentary exercises as the florid style gradually retreated in favour of developing low-larynx techniques.

What little physiological description is given in early treatises is crucial to a theory of changing larynx height in the long nineteenth-century. Quantz (1752) described the larynx rising for higher notes, a movement consistent with a neutral-larynx approach to voice production, where singers do not consciously manipulate the vocal apparatus.<sup>10</sup> Garcia (1841) observed that as the voice ascends in a singer employing a neutral approach to larynx height:

[A]ll the parts which constitute the isthmus [walls] of the throat tend to come together, following a progressive course of contraction which corresponds to the gradual rise of the larynx and of the voice. In fact, the velum [soft palate] lowers, and the tongue, although it depresses along the mid line towards the posterior part, lifts at the sides and approaches the velum.<sup>11</sup>

Corri (1810) also reported the larynx moving in a manner consistent with a neutral approach to larynx height, rising and falling in accordance with pitch:

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<sup>10</sup> Johan Sundberg, *The Science of the Singing Voice* (Illinois: Northern Illinois University Press, 1987), p. 97.

<sup>11</sup> Manuel Garcia, *Complete Treatise on the Art of Singing*, trans. by Donald Paschke (New York: Da Capo Press, 1984), vol. i, p. lviii. Garcia's *Ecole de Garcia: Traité complet de l'Art du Chant* was first published in 1840 (volume one only) and 1847 (both volumes). Paschke's edition collates and translates 1841 and 1872 publications. References to the Paschke edition in this thesis refer the 1841 edition unless otherwise stated. See also Manuel Garcia, *Complete Treatise on the Art of Singing*, trans. by Donald Paschke (New York: Da Capo Press, 1972), vol. ii.

To raise the voice an octave, you may perceive it [the larynx] to rise nearly half an inch, and when we sing the octave below, the larynx will be depressed about half an inch[.]<sup>12</sup>

Corri was obviously aware that the height of the larynx can influence the tone of the singing voice, but clearly advocated allowing the larynx to move flexibly without consistent adjustment:

You may observe, that the different tones of the voice are produced by the different positions which the larynx may assume in its rising and falling; therefore, if only accustomed to one set of positions or exertions, it becomes extremely difficult to render it flexible to any other; from hence may be derived imperfect intonation[.]<sup>13</sup>

Nathan (1836) noted unequivocally that the larynx 'is distinctly seen rising in the production of acute tones, and descending in low ones.'<sup>14</sup>

That the larynx rises as pitch ascends in an untrained singer with a neutral larynx approach is corroborated by modern voice science, as Sundberg (1987) has reported: 'In most [professional 'classically trained'] singers, the larynx descends slightly with rising pitch, while nonsingers larynxes tend to rise somewhat.'<sup>15</sup> Toft (2011) has noted that pop and jazz singers often adopt an approach to singing that is in general much more closely related to eighteenth- and early nineteenth-century rhetorical practices than the modern operatic standard.<sup>16</sup> A link can also be made between the voice production of amateur singers and

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<sup>12</sup> Domenico Corri, *The Singer's Preceptor* (London: Longman, Hurst, Rees and Orme, 1810), p. 4. Corri's observation of the larynx being depressed is relative and does not reflect a conscious (or constant) lowering of the larynx. *The Singer's Preceptor* is reproduced in *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volume 4, and The Singer's Preceptor, Volumes 1-2*, ed. by C. R. F. Maunder, Domenico Corri's Treatises on Singing, 4 vols (New York; London: Garland Publishing, 1995), vol. iii.

<sup>13</sup> Corri, *The Singer's Preceptor*, p. 5.

<sup>14</sup> Nathan, *Musurgia Vocalis*, p. 119.

<sup>15</sup> Sundberg, *Science of the Singing Voice*, p. 98. Sundberg references T. Shipp and K. Izdebski, 'Vocal frequency and vertical larynx positioning by singers and nonsingers', *Journal of the Acoustical Society of America*, 58 (1975), 1104-1106.

<sup>16</sup> Robert Toft, 'Bel Canto: the unbroken tradition', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/toft/>> [accessed 9 January 2012].

pre-nineteenth-century singers. Like the singers of the eighteenth (and earlier) centuries, amateur choral singers (and often pop or folk singers) display a neutral approach to the larynx: there is no conscious attempt to manipulate the height of the larynx whilst singing. The sound of a neutral approach to larynx height can be heard in the Recorded Portfolio that accompanies this thesis (CD 1: Tracks 1-5). Moens-Haenen (2011) has suggested that a vibrato-free voice is ‘not an absolute uniform sound, but a sound which already has an inner life of its own, an individual dynamic which is inherent’.<sup>17</sup> This description could also be applied to the neutral-larynx sound. When the voice is produced with a neutral approach to larynx height it is noticeably less focussed and incisive than the modern trained singer’s low-larynx sound, and displays less uniformity of tone and timbre; because the low-larynx technique is now expected of ‘classically-trained’ singers, the variance (and sometimes unpredictability) of a neutral mode of voice production suggests youth, and is reminiscent of teenage performances where a singer has not yet habituated a low larynx position.<sup>18</sup>

When compared to the modern operatic vocal standard, the amateur (neutral) singing voice often displays particular weakness in the upper portion of the range, and is in general unable to produce the same volume or power as its operatic counterpart. The same is repeatedly suggested of the eighteenth- and early nineteenth-century voice; Toft has reported that ‘the head voice was known for its soft, artificial sound’.<sup>19</sup> Tosi (1723) advised that with ‘the higher the Notes, the more it is necessary to touch them with Softness, to avoid Screaming.’<sup>20</sup> Quantz (1752) also warned that a singer should avoid singing high

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<sup>17</sup> Greta Moens-Haenen, 'Vibrato as expressive ornament: translation of summary chapter from *Das Vibrato in der Musik des Barock* (1988) by Greta Moens-Haenen', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and John Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/haenen/>> [accessed 6 May 2014]. Compare, for example, the voices of pop and folk singers with the modern ‘classical’ or operatic singer.

<sup>18</sup> Further commentary on the experience and sensation of using the neutral-larynx technique can be found in Chapter Six.

<sup>19</sup> Toft, *Heart to Heart*, pp. 25-26.

<sup>20</sup> *Introduction to the art of singing by Johann Friedrich Agricola*, ed. by Julianne C. Baird, trans. Julianne C. Baird (Cambridge: Cambridge University Press, 1995), p. 14. This edition is an

notes ‘with a harsh attack or with a vehement exhalation of air from his chest; still less should he scream them out, coarsening the amenity of the voice.’<sup>21</sup> Neither writer seems to have been confident that singers could produce great volume in the highest register. Corri (1810) was dismissive of both extremes of the voice:

altho’ the Voice may contain above four Octaves the part of the Voice below the natural is in general indistinct, inexpressive and destitute of power, that part above the natural is called the feigned or falsetto Voice, with which some effect of Pathos may be produced, but is not capable of energy: therefore the attention and practise [sic] of the Scholar ought to be chiefly directed to the attainment of as much of the Natural voice as he can possible acquire[.]<sup>22</sup>

Writers that pre-date the mid nineteenth century seem to have preferred the chest voice over the head voice or falsetto registers. Galliard, commenting in his 1742 English-language edition of Tosi’s *Observations on the Florid Song*, extolled the virtues of the chest voice over the higher registers:

Voce di Petto is a full Voice, which comes from the Breast by Strength, and is the most sonorous and expressive. Voce di Testa comes more from the Throat, than from the Breast, and is capable of more Volubility. Falsetto is a feigned Voice, which is entirely formed in the Throat, has more Volubility than any, but [is] of no Substance.<sup>23</sup>

Quantz (1752) believed that ‘the most pleasing tone quality on the flute is that which more nearly resembles a contralto than a soprano, or which imitates the chest tones of the human voice.’<sup>24</sup> Bayly (1789) further described that:

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English-language translation of Johann Friedrich Agricola, *Anleitung zur Singkunst* (Berlin: [n.pub], 1757). Agricola’s 1757 edition translates and comments upon Pier Francesco Tosi, *Opinioni de’ cantori antichi, e moderni...* (Bologna: [n.pub], 1723).

<sup>21</sup> Quantz, *On Playing the Flute*, pp. 300-301.

<sup>22</sup> Corri, *The Singer’s Preceptor*, p. 66.

<sup>23</sup> John Ernest Galliard and Pier Francesco Tosi, *Observations on the Florid Song, or Sentiments on the Ancient and Modern Singers* (London: J. Wilcox, 1743), p. 22. The 2000 edition of *The Times English Dictionary* defines an archaic form of the word voluble as meaning ‘easily turning or rotating, as on an axis’, from the Latin ‘volubilis’ meaning ‘turning readily, fluent’. *The Times Dictionary*, ed. By J. M. Sinclair (Glasgow: Harper Collins, 2000), p. 1708.

<sup>24</sup> Quantz, *On Playing the Flute*, p. 50.

The Italian masters very properly distinguish tones into those *di petto* from the breath, which are the natural, deepest, fullest and most agreeable; and those *di testa* of the head, which are the higher and smaller, formed by properly contracting the throat and shaping the mouth.<sup>25</sup>

Garcia (1841) described the chest voice as ‘the basic essential of the woman’s voice as that of the man and child.’<sup>26</sup> Preferential use of the chest register and avoidance of the highest extreme of the voice all support an expectation of neutral voice production in the eighteenth and early nineteenth centuries: a voice with its strength in the lower tessitura.

A preference for moderate vocal pitch is reflected by the repertoire of this period, which in general made little use of the upper part of the voice. A brief survey of the range of exercises and longer vocalize or solfeggio published in treatises discussed in this thesis serves to illustrate this. The consideration of scalic repetitions, through-composed exercises and repertoire provided in treatises presents a more reasonable idea of expected range in practice than is offered by classifications of register that record the extreme possibilities of each voice type. Examples listed in Table 1 appear on the treble clef in each original source, and so represent soprano range (or tenor when sung an octave lower).<sup>27</sup>

Table 1: Repertoire ranges

<i>Publication</i>	<i>Upper Range Limit</i>
Urbani (1795)	g” (occasional a”)
Corri <i>A Select Collection</i> (c.1780s/ c.1790s)	a” (occasional b”/b”)
Corri <i>The Singer’s Preceptor</i> (1810)	g”/a” (optional up to quaver c”)
Lanza (1820)	g” (occasional b”)
Lablache (1840)	g”/a” (occasional b”/c”)

<sup>25</sup> Bayly, *The Alliance of Musick Poetry & Oratory*, p. 19. Bayly’s comment on the narrowing of the throat is also suggestive of neutral larynx height (see section 2.3.).

<sup>26</sup> Garcia, *Complete Treatise vol. i*, p. xliv.

<sup>27</sup> Pitches have been described using the Helmholtz system; see Notes on p. xii.

Treatises by both Lanza (1820) and Lablache (1840) include a prolonged top b<sup>2</sup>, but only as an optional alternative to g<sup>2</sup>; works by Corri (1810) and Lanza offer exercises that extend up to c<sup>3</sup>, but both writers have been careful to include advice that not all voices may comfortably reach such heights without injury.<sup>28</sup> Corri's brief cadential 'Extravagances' (1810) are particularly ambitious in their reach of a to d<sup>3</sup>, but his solfeggio reach only g<sup>2</sup> or a<sup>2</sup>.<sup>29</sup> The highest portion of the voice is sparingly used by these publications, and these notes are very rarely sustained. Corri's *Singer's Preceptor* includes d<sup>3</sup> semiquavers, but these are described 'as sung by Madame Catalani', a performer well known to have demonstrated exceptional ability in florid and virtuosic repertoire.<sup>30</sup> A composition from *Piramo e Tisbe* by Rauzzini in Corri's *Select Collection* (c.1780s) also appears unusual in its use of regular b<sup>2</sup> crotchets and one highly irregular incidence of a sustained b<sup>2</sup>.<sup>31</sup> The only very occasional or optional use, or even complete exclusion, of the high a<sup>2</sup>, b<sup>2</sup>, c<sup>3</sup>, and d<sup>3</sup> by all these writers suggests that these notes were only sustainable for (and regularly used by) exceptional voices. All of these writers have included exercises and repertoire that is often very florid, clearly requiring agility and flexibility. This kind of repertoire is especially suited to the neutral-larynx approach as it does not require strength or sustained tone in the highest section of the voice, and necessitates volubility over tonal strength.

Although referencing a very small snapshot of repertoire and writers, these findings appear to be indicative of compositions of the late eighteenth and early nineteenth

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<sup>28</sup> Gesualdo Lanza, *Lanza's Abridgement of his Work on the Art of Singing* (London: Chappell, 1820), p. 2. Louis Lablache, *A Complete Method of Singing* (London: Chappell, 1840), pp. 38-51. Corri, *The Singer's Preceptor*, p. 44.

<sup>29</sup> Corri, *The Singer's Preceptor*, p. 51.

<sup>30</sup> Corri, *The Singer's Preceptor*, pp. 70-75. See CD 4: Track 8 of the Recorded Portfolio.

<sup>31</sup> Domenico Corri, *A Select Collection of the Most Admired Songs, Duets, &c* (London: John Corri, [n.d.]), vol. i, pp. 69-71. The preface to Maunder's 1993/5 edition states that volumes 1-3 of *A Select Collection* date from the 1780s, and that volume 4 was added in a 1790s reissue of the work. *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volumes 1-3*, ed. by C. R. F. Maunder, *Domenico Corri's Treatises on Singing*, 4 vols (New York; London: Garland Publishing, 1993), vol. i. See also *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volume 4*, and *The Singer's Preceptor, Volumes 1-2*.

centuries. Repertoire of the period surveyed here by no means reaches the extremes of the modern operatic voice (unless composed for an exceptional voice), and the highest part of the voice is rarely sustained.<sup>32</sup> The use of a generally limited compositional range (rarely exceeding the stave) corresponds with Quantz's observation (in 1752) that '[e]xperienced composers don't set words out of chest voice' because 'the chest voice is the natural one used in speaking.'<sup>33</sup>

Writers of this period were concerned with disguising 'breaks' between registers; this also suggests the use of a neutral larynx method of voice production. As we know, when using a neutral approach to voice production the larynx rises as pitch rises. As Sundberg (1987) has described:

A raising of the larynx must result not only in a shortening of the pharynx but also in a narrowing of the lower part of it [...] When the larynx is raised, the wall tissues must pile up and fill part of the lower pharynx.<sup>34</sup>

These movements account for the difficulty that amateur singers encounter in accessing the head voice, and for the stifled tone that often results at the 'breaks' between the chest and head registers. Garcia (1841) also described difficulty in negotiating 'breaks' in the voice in what he termed the clear timbre (using a neutral approach to larynx height):

When the voice rises in the chest register from the lowest tone to the highest tone, if the timbre is clear, the larynx occupies in the first movement a position a little lower than that of the rest; then, by regular ascending movements, it follows the voice in its rise, carrying itself slightly forward. When the voice reaches the extreme of which it is capable in that register, the larynx moves against the jaw by a very pronounced rocking motion which one can verify by touching it. The tones produced in this last period of the ascension of the larynx are thin and straight.

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<sup>32</sup> We must also take into account that performance at this time is likely to have been noticeably below A= 440. Current entries for 'soprano' in Oxford Music Online cite (general) solo soprano ranges as reaching c'''; entries for 'tenor' cite solo ranges as reaching c'' and d''. *Oxford Music Online*, (Oxford University Press, 2014) <<http://www.oxfordmusiconline.com>> [accessed 13 May 2014].

<sup>33</sup> Quantz, *On Playing the Flute*, p. 56.

<sup>34</sup> Sundberg, *Science of the Singing Voice*, p. 114.

The same movement is reproduced when the voice passes through the falsetto and head registers in the clear timbre; the larynx takes for its point of departure the same low position as for the lowest note of the falsetto, then it climbs by very slight movements which correspond to the elevation of the tones. As soon as the voice arrives at the head tones, the larynx rises rapidly to the position of deglutition. In this last period the tones are thin and shrill.<sup>35</sup>

The blending of registers was of the utmost importance to writers of this period, but although singers sought to avoid erratic changes from one register to another, the natural characteristics of each register were used to great effect by late eighteenth- and nineteenth-century performers and composers, and singers (and composers) employed these contrasts to communicate expression.<sup>36</sup> Remnants of this approach can be heard in the register changes of early recording artists. Examples in the Recorded Portfolio are found in the recorded emulation of Mozart's *Voi, che sapete* as performed by Adelina Patti (CD 2: Track 4, 1:38/3:11) and Nellie Melba (CD 2: Track 5, 1:26/3:01; CD 2: Track 6, 1:54/3:35) respectively, and the performance of Verdi's *Ave Maria* (CD 4: Track 6, 3:23/3:46).<sup>37</sup>

The relative delicacy of the neutral-larynx approach to voice production might be considered a negative attribute by those who prize the power and weight of the modern operatic voice, but it is by virtue of its delicacy that the neutral-larynx approach is capable of great dexterity and flexibility. Potter (1998) has also related neutral larynx usage to historical performance practices:

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<sup>35</sup> Garcia, *Complete Treatise vol. i*, p. liv.

<sup>36</sup> Peter Giles, *The History and Technique of the Counter-Tenor* (Aldershot: Scolar Press, 1994), p. 169. See also Toft, *Heart to Heart*, p. 30. Also discussed in Toft, *Bel Canto*, p. 92.

<sup>37</sup> Appendix A, Adelina Patti: Mozart *Voi, che sapete* (1905), p. 200, b. 35-36; p. 201-202, b. 68-69. Appendix A, Nellie Melba: Mozart *Voi, che sapete* (1907), p. 204, b. 33-34; p. 206, b. 66-67. Appendix A, Nellie Melba: Mozart *Voi, che sapete* (1910), p. 208, b. 39-40; p. 210, b. 72-73. The chest voice usage in Verdi's *Ave Maria* was influenced by a specific performance by Nellie Melba. Nellie Melba, 'Matrix C-6705. Ave Maria', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave\\_Maria](http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave_Maria)> [accessed 18 May 2014].



It is reasonable to assume that earlier singers sang with the larynx closer to the higher position used in speaking. This enabled them to distinguish clearly between vowels and made their voices light and agile: exactly the kind of voice one would need for the intimate performance of chamber music or the more florid ornamentation of the late Renaissance, baroque and classical periods.<sup>39</sup>

Although the possibility of adjusting the height of the larynx has not yet filtered into general discussion of historically-informed vocal practices, some modern theorists have acknowledged the positive attributes of a neutral approach to voice production. Plank (2004) has described how:

[a]n elevated laryngeal position, [...] well matched with lower breath pressure, produces a leanness of sound in which agility (musical and textual) is enhanced and vowel distinction strikingly and compellingly enriched. The result is not only clearer articulation of the text but also an expressive timbral variety that occurs with radically differentiated vowels.<sup>40</sup>

He has also acknowledged the scope for ‘beautiful and pleasant’ singing using this mode of voice production.<sup>41</sup>

The use of neutral-larynx voice production by professional singers in this period presents continuity between the childhood or adolescent voice and that of the singer in adulthood. A great number of eighteenth- and early nineteenth-century singers had successful careers that began in adolescence, including Angelica Catalani, Elizabeth Billington, and Fanny Corri. Potter and Sorrell (2012) have highlighted the relevance of the youthful (neutral-larynx) voice to vocal performance of the early nineteenth century, confirming that ‘very few divas were more than sixteen or seventeen when they launched their careers’:

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<sup>39</sup> Potter, *Vocal Authority*, p. 53.

<sup>40</sup> Steven E. Plank, *Choral Performance: A Guide to Historical Practice* (Maryland; Toronto; Oxford: The Scarecrow Press, 2004), p. 23. The description of an ‘elevated laryngeal position’ is relative to the lowered larynx, and equates to the neutral larynx positioning discussed in this thesis.

<sup>41</sup> Plank, *Choral Performance*, p. 85.

What was preserved in the larynx of the castrato was the voice of youth, and it is no coincidence that the female coloratura sopranos who superseded them started very young.<sup>42</sup>

A neutral approach to larynx height makes the teenage debut of singers much more plausible; such vocal precocity is uncommon today, and indeed serious vocal tuition is usually reserved until long after the onset of puberty.<sup>43</sup> The modern ‘classically trained’ singer actively *learns* to produce something radically different from the voice of the untrained singer through the habituation of a lowered larynx position, making it entirely reasonable to assume that there existed a point in time *before* singers were trained to do this as a matter of course, and before audiences expected to hear the recognized effects of this technique in performance. It is extremely unlikely that writers understood the means and effects of changes in larynx height *before* the invention of the laryngoscope allowed proper examination of the larynx and vocal folds, especially in the light of evidence that early writers had yet to determine the general mechanics of voice production.

## 2.2. TRANSITIONAL APPROACHES TO LARYNX HEIGHT

Accounts of voice production dating from the eighteenth and early nineteenth centuries routinely observe a rise in pitch accompanied by the ascension of the larynx, but this understanding was challenged and revised as the nineteenth century progressed. Bloch (2007) has highlighted a section from Francesco Bennati’s *Mémoire sur un cas particulier d’anomalie de la voix humaine pendant le chant* (1834) as an example of change in the discussion of voice physiology. Bennati (1834) observed that:

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<sup>42</sup> John Potter and Neil Sorrell, *A History of Singing* (Cambridge: Cambridge University Press, 2012), pp. 119-120.

<sup>43</sup> Incidence of vocal precocity at an early age (on televised talent shows, for example) often related to the stylistic replication of the modern operatic vocal standard, and not the production of the voice with a low-larynx technique.

Up until now scientists specializing in the vocal organ, if they have not been able to agree on the quality of the instrument, have at least agreed on the mechanism for emitting high and low tones. They have consequently said that when one sings, the larynx raises itself up and narrows itself for high notes, and that the opposite happens during the emission of low notes.<sup>44</sup>

In consideration of this passage Bloch (2007) remarked that:

The one thing scientists were able to agree on in the 1830s – that the larynx could (and should) be observed to ascend during high notes – was, seventy years later, completely overturned.<sup>45</sup>

Narratives of music history often pinpoint a change in vocal style and/or technique in the opening decades of the nineteenth century: Potter and Sorrell have described a ‘dramatic realignment of voices’ during the first quarter of the nineteenth century,<sup>46</sup> whilst Toft has highlighted the early nineteenth century as a period in which writers began to describe ‘a species of voice which partakes of the properties of both the lower and upper registers.’<sup>47</sup> Noticeable difference in the way that singers used and presented their voices in the early nineteenth century reflected the gradual emergence of low-larynx techniques in vocal performance, a transformation that coincided with changes in compositional style, and the ongoing evolution of the orchestra. Accounts of the movement of the larynx during singing hold the key to tracking changing approaches to voice production through the long nineteenth century.

Manuel Garcia II has long been recognised as the first theorist to identify the relationship between changing larynx height and vocal timbre. This passage from *Traité complet de l'Art du Chant* (1841) summarises Garcia’s observation of the physiology and effects of changing larynx height:

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<sup>44</sup> Francesco Bennati, *Mémoire sur un cas particulier d'anomalie de la voix humaine pendant le chant* (Paris: Imprimerie de H. Dupuy, 1834). Cited in Gregory W. Bloch, 'The Pathological Voice of Gilbert-Louis Duprez', *Cambridge Opera Journal*, 19.1 (2007), 11-31 (p. 16).

<sup>45</sup> Bloch, 'The Pathological Voice of Gilbert-Louis Duprez', (p. 16). Bennati, *Mémoire sur un cas particulier d'anomalie de la voix humaine pendant le chant*.

<sup>46</sup> Potter and Sorrell, *A History of Singing*, p. 117.

<sup>47</sup> Toft, *Heart to Heart*, p. 26.

The varieties of *timbre* will correspond to the multitudinous mechanical changes of which the vocal tube is susceptible. We shall understand these movements of the pharynx, if we consider it as a deep and highly elastic pipe, beginning below at the larynx, forming a curve at the arch of the palate, and ending above at the mouth; a tube, which, when at its shortest dimensions, forms only a slight curve, and, at its longest, nearly a right angle, the larynx in the first case rising towards the soft palate, dropping to meet it; whereas in the second case, the larynx drops and the soft palate rises, thus making the distance between them greater. The short and gently curved shape produced the bright timbre, while the sombre is caused by the lengthened and strongly curved form.<sup>48</sup>

Sundberg has more recently confirmed a link between larynx height and vocal timbre:

The general impression is that the vowel quality becomes dark when a speaker's [or singer's] larynx has been depressed, while the voice sounds more shrill when the larynx is elevated. In other words, there seems to be a relationship between larynx height and voice timbre. This comes as no surprise; a change in the larynx height changes the vocal tract length, and hence the formant frequencies.<sup>49</sup>

This relationship is currently well accepted, but the possibility that a neutral approach to larynx height might be of use to the modern historically-informed singer has yet to be considered by performers.

Differences between Garcia's terminology and the terminology commonly used in modern discussion of voice production have the capacity to cause considerable confusion. Modern singers and teachers will often describe an 'open' vocal sound as one where the soft palate is raised and the larynx lowered, and yet Garcia defined this as the 'sombre' timbre, emphasising the richness of the sound as opposed to the 'open' space created at the back of the mouth.<sup>50</sup> Garcia described the different attributes of the two timbres in the following terms:

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<sup>48</sup> Manuel Garcia, *New Treatise on the Art of Singing. A Compendious Method of Instruction, with Examples and Exercises for the Cultivation of the Voice* (London: Hutchings & Romer, [n.d.]), p. 6. Potter has previously noted that publications under this title date from 1857, 1870, and c.1915. John Potter, 'Beggars at the Door: The Rise and Fall of Portamento in Singing', *Music & Letters*, 87.4 (2006), 523-550 (p. 529).

<sup>49</sup> Sundberg, *Science of the Singing Voice*, p. 113.

<sup>50</sup> The definition in this example is by no means universally accepted; modern vocal terminology remains without standardisation, and is the source of ongoing confusion.

The clear timbre is the only one which makes the voice supple [Déliée] and penetrating.  
[...]

The sombre timbre makes the chest voice round, full, and sweet.<sup>51</sup>

He therefore equated neutral larynx height with the clear timbre, and low larynx height with the sombre timbre.<sup>52</sup> Garcia's terminology is indicative of his emphasis on timbral effect, as opposed to modern discussion of perceived benefits of volume or power, and vocal efficiency.

Paschke's translation of the early publications of Manuel Garcia II also includes the report on Garcia's earlier address to the Academy of Sciences on 16 November 1840, which summarises Garcia's theory in the following terms:

The full voice and the falsetto voice, each while keeping its own particular mode of production, can offer two principle varieties in their timbre, varieties which Mr. Garcia designates under the names of *clear timbre* and *sombre timbre*. These two timbres of the voice are ordinarily designated by the artists, the first under the name of *white voice* [*voix blanche*] and the second under the name of *darkened voice* [*voix sombrée*].<sup>53</sup>

In this report it is noted that Garcia's acknowledgement of the *voix sombrée* or 'darkened voice' was predated by Diday and Petrequin on 1 June 1840.<sup>54</sup> Potter and Sorrell (2012) have also identified Garaudé's *Méthode Complète de chant* of 1841 as providing another early account of the physiology and effects of the lowered larynx.<sup>55</sup> The author of the Academy's minutes appears to have been confident that Garcia had developed his theory to a greater

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<sup>51</sup> Garcia, *Complete Treatise vol. i*, pp. 30, 31.

<sup>52</sup> This relationship was also discussed by Bach. See Albert B. Bach, *Musical Education and Vocal Culture: for vocalists and teachers of singing* (Edinburgh: W. Blackwood & Sons, 1883), p. 71.

<sup>53</sup> 'Report on the Memoire on the Human Voice Presented to the Academy of Sciences by Mr. Manuel Garcia (Extracted from the minutes of the sessions of the Academy of Sciences meeting of April 12, 1841)' in Garcia, *Complete Treatise vol. i*, p. xxx. Information in square brackets is included in Paschke's edition.

<sup>54</sup> 'Report on the Memoire on the Human Voice Presented to the Academy of Sciences by Mr. Manuel Garcia (Extracted from the minutes of the sessions of the Academy of Sciences meeting of April 12, 1841)' in Garcia, *Complete Treatise vol. i*, pp. xxx-xxxii. This sequence of events is explored in detail in Bloch, 'The Pathological Voice of Gilbert-Louis Duprez', (pp. 11-19).

<sup>55</sup> Potter and Sorrell, *A History of Singing*, pp. 122, 127.

extent, having provided evidence of communication in which Garcia claims to have been teaching the *voix sombrée* to his students since 1832.<sup>56</sup> The obvious interest in these theories emphasises the novelty of the lowered larynx in early nineteenth-century discussion of voice physiology.

Pinpointing the first *usage* of the lowered larynx is, of course, much more difficult, but the enduring account of Gilbert-Louis Duprez performing the tenor ‘high C’ (C<sup>2</sup>) in what appeared to be an extended chest voice in 1837 remains one of the most well-known accounts of a this approach as a novel, and (to many) impressive, mode of voice production.<sup>57</sup> Bloch (2007) has re-evaluated what he calls the ‘myth’ of Duprez performing the very first ‘chested’ high C by providing alternative context to this apparently sudden change in technical approach.<sup>58</sup> Both Clapton’s *Moreschi* (2008) and Potter and Sorrell’s *A History of Singing* (2012) have identified Domenico Donizelli as an influence in Duprez’s approach, the latter source having noted a change in descriptions of Donizelli’s voice in the 1820s that might well reflect the development of a low-larynx approach to voice production.<sup>59</sup>

Garcia’s identification of a register as ‘a series of consecutive and homogenous tones going from low to high, produced by the development of the same mechanical principle, and whose nature differs essentially from another mechanical principle’<sup>60</sup> is still commonplace, although, as Sundberg’s *Science of the Singing Voice* confirms, ‘there is [still] no

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<sup>56</sup> ‘Report on the Memoire on the Human Voice Presented to the Academy of Sciences by Mr. Manuel Garcia (Extracted from the minutes of the sessions of the Academy of Sciences meeting of April 12, 1841)’ in Garcia, *Complete Treatise vol. i*, p. xxxii.

<sup>57</sup> This incident is said to have occurred at the premiere of Rossini’s *Guillaume Tell*. Rossini is known to have disliked this technique. See Potter, *Tenor: History of a Voice*, pp. 51, 53.

<sup>58</sup> Garcia described this and other similar accounts as ‘chest register in clear timbre’, but this contradictory account does not fit with other descriptions of Duprez’s high Cs. Garcia, *Complete Treatise vol. i*, p. lii. See also Potter, *Tenor: History of a Voice*, pp. 50-53.

<sup>59</sup> Nicholas Clapton, *Moreschi and the Voice of the Castrato* (London: Haus Publishing, 2008), p. 50. Potter and Sorrell, *A History of Singing*, p. 117. The observation of a change in Donizelli’s singing is not explicitly referenced. See also Dan H. Marek, *Giovanni Battista Rubini and the Bel Canto Tenors: History and Technique* (Lanham, MD: Scarecrow Press, 2013), p. 85.

<sup>60</sup> Garcia, *Complete Treatise vol. i*, p. xli.

generally accepted clear definition of the term *register*.<sup>61</sup> The description of a ‘chested’ high C might suggest a direct connection between these tones and those of the chest register, but the laryngeal mechanism for the emission of low and high tones is physiologically different.<sup>62</sup> This makes a common method of production for both extremes of the voice impossible. Notes that are described as ‘chested’ in this manner share in the timbral characteristics of the chest register only (much as notes in the ‘chest’ register do not originate from the chest).

Potter and Sorrell (2012) have put forward a convincing alternative in describing registers as ‘the vocal tract position used for a set of notes’.<sup>63</sup> In this context, the ability of singers like Giuditta Pasta and Maria Malibran (sister of Manuel Garcia II) to use the qualities of the chest register throughout the majority of their range might indicate early use of a low larynx ‘register’ in the production of tones at any pitch with a low larynx position. Garcia himself named Malibran and Benedetta Pisoni as possessing large chest registers, although Pisoni is believed to have cultivated her lower register in particular after having lost the higher section of her voice as a result of smallpox.<sup>64</sup>

When produced with a lowered larynx the higher notes of the soprano voice certainly have more in common with the strength and fullness of the chest register than with the descriptions of weakness that abound in accounts of neutral-larynx singing. Pasta appears to have been identified as somewhat exceptional in the execution of both effects:

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<sup>61</sup> Sundberg, *Science of the Singing Voice*, pp. 49-50. There appears to have been no significant advance in this area since the publication of Sundberg’s text in 1987.

<sup>62</sup> Henrich, ‘Mirroring the voice from Garcia to the present day’, (pp. 8-12). This theory is outlined on the website of the National Center for Voice and Speech, University of Utah. ‘Voluntary Register Changes’, <<http://www.ncvs.org/ncvs/tutorials/voiceprod/tutorial/voluntary.html>> [accessed 19 May 2014].

<sup>63</sup> Potter and Sorrell, *A History of Singing*, p. 51.

<sup>64</sup> Garcia, *Complete Treatise vol. i*, pp. xlv, 17. Elizabeth Forbes, ‘Pisoni, Benedetta Rosmunda’, in *Grove Music Online*, Oxford Music Online.

The middle or mixed voice can be taken very high from the chest or very low from the head, at the pleasure of the singer. Madame Pasta, who is the most remarkable example within our recollection, could take G above the staff either in her breast or her head voice. Thus when she wanted force she employed one, when she desired facility – the other.<sup>65</sup>

Garcia warned against the extension of the chest register above its natural domain (presumably hoping to avoid any forcing or straining), and yet the writers of these accounts felt that they had heard notes higher in the voice that shared in the characteristics of the chest voice.<sup>66</sup> William Gardiner's *The Music of Nature* (1832) provides another account of Pasta's use of the two timbres:

Her tones of the chest are full of the deepest passion, while those of the upper voice are sparkling with brilliancy. In fact she seems to possess two distinct voices — using them at pleasure; as, upon the repetition of a passage, you might suppose it proceeded from the voice of another person.<sup>67</sup>

Bushnell's (1979) has asserted that Malibran, a life-long admirer of Pasta, also cultivated this talent:

She, like Pasta before her, had learned to take the same notes in different registers to vary the color for purposes of expression: her middle voice could be sung in either the brilliance of the soprano register or with the rich power of her chest tones, which she used frequently and with more force than any singer before her.<sup>68</sup>

It is entirely plausible that both Pasta and Malibran were early proponents of a lowered-larynx technique: their links to the Garcia family mean that exceptional skill of this kind is unlikely to be coincidence alone.<sup>69</sup> It seems improbable, however, that Garcia (II) would have subscribed to the interpretation of registers as vocal tract positions, as he specifically

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<sup>65</sup> 'Madame Malibran (née Garcia)', *The Quarterly Musical Magazine and Review*, 10.39 (1828), 323-330 (p. 324).

<sup>66</sup> Garcia, *Complete Treatise vol. i*, p. 16.

<sup>67</sup> William Gardiner, *The Music of Nature* (London: Longman, Rees, Orme, Brown, Green, and Longman, 1832), pp. 144-145.

<sup>68</sup> Howard Bushnell, *Maria Malibran: a Biography of the Singer* (University Park; London: Pennsylvania State University Press, 1979), pp. 9, 44.

<sup>69</sup> Bushnell has noted that Pasta performed with Manuel Garcia I in the years 1821-1825. Bushnell, *Maria Malibran*, p. 8. Marek's work asserts that Pasta, Pisaroni, Donizelli, and Garcia I are known to have performed together. Marek, *Rubini and the Bel Canto Tenors*, pp. 80, 97.



described timbres and registers as distinct concepts, and warned against confusing the two.<sup>70</sup>

The revolutionary nature of Garcia's publications has led to a number of misunderstandings (most notably in his own lifetime regarding the *coup de glotte* and register terminology), but confusion regarding his work on larynx height and timbre endures.<sup>71</sup> Whilst the report of the Academy of Sciences described the 'fixed position' of the lowered larynx, Garcia's published works as a body do not suggest continual larynx-lowering.<sup>72</sup> The following excerpt from *Traité complet de l'Art du Chant* (1841) might also be misinterpreted as encouraging one continual but moderate approach to larynx height:

The timbres temper and correct each other by making the pharynx mechanically take that medium conformation between two extremes which gives to any tone all the qualities which it should combine.<sup>73</sup>

An isolated reading of the following excerpt might also suggest constant moderation:

When the larynx takes a position a little lower than that for the clear timbre, and the velum rises moderately, the column of air straightens out a little and strikes the middles of the palate. The voice is omitted brightly, but more rounded than in the clear timbre. The voice will take some lustre and gain some roundness if the velum is raised still more, so as to leave only a slight communication with the nasal fossae. In this circumstance, the column of air, which is very slightly inclined, strikes in front of the palatal arch.<sup>74</sup>

Contextual reading confirms both these passages as warnings against the extremes of each timbre, and not advocacy of permanent tone moderation. It is unclear by what principle

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<sup>70</sup> Garcia, *Complete Treatise vol. i*, pp. xli, 31.

<sup>71</sup> The concept of the *coup de glotte* proved controversial, with public debate ensuing in newspapers and periodicals. Garcia notes misunderstanding of this concept in *Hints on Singing* (p. 13). See also M. Sterling Mackinlay, *Garcia the Centenarian and his Times: Being a Memoir of Manuel Garcia's Life and Labours for the Advancement of Music and Science* (Edinburgh; London: William Blackwood and Sons, 1908), p. 290. For further discussion of the *coup de glotte* see James A. Stark, 'The *coup de la glotte*: A Stroke of Genius', in *Bel Canto: A History of Vocal Pedagogy* (Toronto; London: University of Toronto Press, 1999), pp. 3-32.

<sup>72</sup> It is likely that Garcia's demonstrators (described in the Academy of Sciences minutes) performed examples of the extremes of the sombre and clear timbres in order to make clear the contrast between the two techniques.

<sup>73</sup> Garcia, *Complete Treatise vol. i*, p. 32.

<sup>74</sup> Garcia, *Complete Treatise vol. i*, p. lxii.

Garcia expected the singer to apply variation of timbre, but the annotated repertoire included in *Traité complet de l'Art du Chant* offers some clues.

In the aria by Cimarosa from *Sacrifizio d'Abraham* Garcia annotations specify both the 'Sombre timbre' (CD 4: Track 9, 1:09/2:08) and the 'Clear timbre' (CD 4: Track 9, 3:36), making it unclear which, if either, might have been considered the default.<sup>75</sup> In the aria by Morlacchi from *Teobaldo ed Isolina* Garcia has specified 'brilliant and clear timbre', the contracting of the pharynx, and 'open timbre' (CD 4: Track 11, 1:19/1:36/1:45).<sup>76</sup> Here the contrast of the two timbres has been used to specific effect in the description to sing 'ringing' notes followed immediately by notes with the 'pharynx contracted' (CD 4: Track 11, 2:33).<sup>77</sup> The instruction to contract the pharynx (thereby raising the larynx) is repeated, and later associated with 'tone imitating an echo' (CD 4: Track 11, 3:37/4:33).<sup>78</sup> The instruction to create an echo effect is used elsewhere in this aria.<sup>79</sup> This variation confirms that larynx height was expected to be regulated for timbral effect, and that singers were not advised to attempt to maintain one continuous larynx position.

A change in approach to larynx usage could account for the emergence in the late nineteenth century of advocates of 'no-register' theories, which suggested that the entire voice could function as one timbral register without noticeable breaks. In the eighteenth century theories of two registers that identified the *voce di petto* (chest voice), and *voce di testa* (head voice) were common, whilst some writers specified an additional falsetto register or central 'mixed' register.<sup>80</sup> From the mid nineteenth-century, however, singers using a selective approach to larynx-lowering could negotiate the breaks in the voice more easily, avoiding the raising of the larynx and contraction of the pharyngeal walls described by

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<sup>75</sup> Appendix A, Cimarosa: Aria from *Sacrifizio d'Abraham*, p. 271, fifth system, b. 4, b. 5; p. 272, fourth system, b. 2.; p. 273, fourth system, b. 4.

<sup>76</sup> Appendix A, Morlacchi: *Teobaldo ed Isolina*, p. 281, fourth system, b. 1, b. 4; p. 282, first system, b. 1.

<sup>77</sup> Appendix A, Morlacchi: *Teobaldo ed Isolina*, p. 282, second system, b. 6-7.

<sup>78</sup> Appendix A, Morlacchi: *Teobaldo ed Isolina*, p. 283, first system, b. 2; third system, b. 4.

<sup>79</sup> Appendix A, Morlacchi: *Teobaldo ed Isolina*, p. 282, third system, b. 6; fourth system, b. 1.

<sup>80</sup> Toft, *Heart to Heart*, p. 25.

Sundberg.<sup>81</sup> A very skilled singer using a continuously low larynx position can disguise register breaks almost completely. Nineteenth-century ‘no-register’ theory advocates included Behnke and Brown (1883), Lehmann (1906), and Caruso’s medical advisor Marafioti (1922):

The soft palate also gradually rises as we sing up the scale, and it occupies a different position for every different pitch[.]<sup>82</sup>

Registers are, accordingly, produced when the singer forces a series of tones, generally ascending, upon one and the same resonating point, instead of remembering that in a progression of tones no one tone can be exactly like another, because the position of the organs must be different for each.<sup>83</sup>

There are no registers in the singing voice, when it is correctly produced, According to natural laws the voice is made up of only one register, which constitutes its entire range.<sup>84</sup>

These directions suggest that the velum should rise continually as pitch ascends, thus lowering the larynx progressively as pitch rises.<sup>85</sup> Lehmann’s treatise (1906) includes particularly insightful plates that illustrate the change in the position of the soft palate and the sensation of emission throughout the range when adopting this approach.<sup>86</sup> Tetrizzini (1909) made reference to raising the soft palate for high notes in particular, perhaps suggesting a similar approach.<sup>87</sup> Toft’s study of singing in England in the period 1750-1830

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<sup>81</sup> Sundberg, *Science of the Singing Voice*, p. 114.

<sup>82</sup> Behnke and Browne, *Voice, Song, and Speech*, p. 214.

<sup>83</sup> Lilli Lehmann, *How To Sing*, trans. by Richard Aldrich (New York; London: Macmillan & Co, 1906), p. 145.

<sup>84</sup> P. M. Marafioti, *Caruso's Method of Voice Production: the Scientific Culture of the Voice* (New York: D. Appleton & Co., 1922), p. 51. Marafioti described himself as having been medical advisor to Enrico Caruso. The treatise carries a brief endorsement by Caruso, but it is difficult to know how well Marafioti’s writing reflected Caruso’s own perception or practice.

<sup>85</sup> Bach noted that ‘[f]or certain parts of the scale one timbre is more suitable than another’ but did not state his approach explicitly. Elsewhere he suggested a timbral approach like that of Garcia. See Bach, *Musical Education*, pp. 79, 160.

<sup>86</sup> Lehmann, *How To Sing*, pp. 81, 105, 111. Lehmann does not appear to have fully understood the relationship between the soft palate and larynx height, but, as she believed that ‘[t]he singer need, will, and must, know a little’ of physiology, this approach is not unexpected (p. 36).

<sup>87</sup> Enrico Caruso and Luisa Tetrizzini, *Caruso and Tetrizzini on the Art of Singing* (New York: Metropolitan Company, 1909), p. 22.

did not report any instances of one- or no-register theorists: such theories were symptomatic of growing use of the lowered larynx.

Moderation was of great concern to all these nineteenth-century writers – not too bright, not too dull, not too uniform. Wood (1930) commented on the failure of some performers to regulate the mixture of timbres in their singing:

Many Italian singers fail to do this: hence the catty, white, bleaty quality, sometimes termed the ‘peasant quality’, in their lower tones. This tinny whiteness in some gramophone records of ‘Voi che sapete’ is familiar.<sup>88</sup>

This account could well have been a slur on Patti’s clean style of singing, although Lehmann accused Melba of relying too much upon her ‘overtones’.<sup>89</sup>

Garcia (1841) always related timbre to the expression of various emotional states, and warned explicitly against exaggerating the sombre timbre (the lowered larynx) in the head voice in particular:

The action of the sombre timbre on the head voice is very pronounced, and preferable to that of the clear timbre, but the exaggeration of the same timbre dulls the voice and makes it cottony and hoarse.<sup>90</sup>

Behnke and Browne (1883) also warned against lowering the larynx to the extreme, but failed to give the singer any specific advice upon the application of selective larynx-lowering:

With regard to the general position of the larynx the most contradictory opinions are entertained by different teachers. Some say that it should be kept rigidly fixed quite low in the throat. This is a mistaken idea; for it is impossible to hold the voice-box *absolutely* in the same position. [...] [C]ontinually to depress the larynx *as far as possible* is an unwise proceeding, involving an unnatural strain upon the vocal organ which must, in the long run, be injurious.

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<sup>88</sup> Henry Joseph Wood, *The Gentle Art of Singing: Abridged Edition in One Volume* (London: Oxford University Press, 1930), p. 60.

<sup>89</sup> Lehmann, *How To Sing*, pp. 74-77.

<sup>90</sup> Garcia, *Complete Treatise vol. i*, pp. lii, 32, 157-158, 160.

[...] Other teachers maintain, on the contrary, that the larynx must have free play, and that its movements must not on any account be interfered with. The result is that the voice-boxes of their pupils fly up and down like shuttlecocks, which not only looks very ridiculous, but certainly impoverishes the tone, though it is not fraught with the injurious effects upon the voice, arising from the attempt to keep the larynx permanently as low as possible.

[...] The proper thing is to avoid both extremes and to give the larynx just that amount of fixity which enables it to offer the necessary resistance to the pressure of the air from below, thus giving the muscles governing the pitch of the voice the best chance of acting with ease and certainty.<sup>92</sup>

The ability to adjust the height of the larynx was repeatedly described as a tool for variation in this period, and was employed selectively to portray emotion and expression. Garcia himself took care to describe the two opposing modes of voice production as ‘timbres’ to be used expressively in accordance to sentiment, and never suggested continuous use. Variation of timbre was presented in the context of selective use, alongside accentuation, ornamentation, and general *chiaroscuro*, a point often overlooked by modern theorists. Potter and Sorrell (2012) have recognised the versatility of Garcia’s selective approach to larynx lowering, commenting that his writings ‘reveal a true understanding of the enormous potential that laryngeal manipulation has for singers who exploit the timbral possibilities of the different registers.’<sup>93</sup>

Garcia mentioned the term *chiaroscuro* only in reference to the musical variety that could illuminate ‘the shadings of passion’: the ideal of *chiaroscuro* appears simply to have guarded against monotony in the application of timbre, dynamics, and expressive devices.<sup>94</sup> Quantz (1752) also wrote extensively on the importance of variation, relating variety to the life-like expression of sentiment; this approach remained common throughout the

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<sup>92</sup> Behnke and Browne, *Voice, Song, and Speech*, pp. 203-204.

<sup>93</sup> Potter and Sorrell, *A History of Singing*, p. 127.

<sup>94</sup> Garcia, *New Treatise*, p. 72. See also discussion of *chiaroscuro* in Denis Diderot and Anton Bemetzrieder, ‘from Keyboard Lessons and Principles of Harmony (1771)’, in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 308-310 (p. 308).

nineteenth century.<sup>96</sup> Like the term ‘bel canto’ (see section 2.5), *chiaroscuro* has acquired associations with the modern operatic vocal standard over time. When nineteenth-century writers discussed *chiaroscuro* in the context of a low-larynx technique there was no suggestion of a continuous tone colour. Bach (1883) wrote of the ‘timbro chiaroscuro’ or ‘semi-dark’ tone, but, like Garcia, discussed the effect as one of many expressive timbral options available to the singer.

Much like the vibrato, portamento, or ornamentation, the various timbres offered by the vertical positioning of the larynx in the vocal tract give opportunity for variety and nuance in vocal performance. A number of scholars have already advocated the free, neutral movement of the larynx in the performance of early nineteenth-century and earlier repertoires, but adjustment of larynx height has yet to be generally accepted as a legitimate approach to historically-informed singing.<sup>97</sup>

### 2.3. SEARCHING FOR THE SINGER’S FORMANT

Lowering the larynx creates a peak in sound energy at around 3kHz that is often referred to as ‘the singer’s formant’.<sup>98</sup> It is generally accepted that the vast majority of modern ‘classically trained’ singers seek to lower the larynx as continuously as possible (whether

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<sup>96</sup> Quantz, *On Playing the Flute*, pp. 116, 124, 126, 128. See also discussion in Bach, *Musical Education*, p. 95. Dynamic variation as an element of *chiaroscuro* is discussed in Chapter Five.

<sup>97</sup> Bloch, 'The Pathological Voice of Gilbert-Louis Duprez'. Freitas, 'Towards a Verdian Ideal of Singing'. Potter, *Vocal Authority*. Potter and Sorrell, *A History of Singing*. Mauro Uberti and Mark Lindley, 'Vocal Techniques in Italy in the Second Half of the 16th Century', *Early Music*, 9.4 (1981), 486-495 (p. 494).

<sup>98</sup> Sundberg, *Science of the Singing Voice*, pp. 118, 119, 142, 143. See also Johan Sundberg, 'Articulatory interpretation of the "singing formant"', *Journal of the Acoustical Society of America*, 55 (1974), 838-844. The singer’s formant was initially observed (and defined) in research of male singers, but an increase in high frequency overtones is of significance to female singers. See Sundberg, *Science of the Singing Voice*, pp. 142-143.

overtly acknowledging this approach, or discussing it in veiled terms of ‘projection’ and ‘open tone’), the aim being to capitalise upon the effects of the singer’s formant.<sup>99</sup>

Spectrograms of the technique examples on CD 4 (Tracks 12 and 13) have confirmed that the low-larynx technique (Track 12) used here contains noticeably greater high-frequency activity than the neutral-larynx approach (Track 13), and an increase in the region of 3kHz.<sup>100</sup> This is the frequency region in which the sound of an orchestra decays, thereby allowing singers using a lowered larynx to ‘project’ their sound over a loud orchestral accompaniment without strain. Lowering the larynx is an efficient way to project the voice, as Sundberg (1987) has described:

The singer’s formant thus seems to facilitate our hearing of the singer’s voice when the orchestral accompaniment is loud. We recall that a singer’s formant can be generated by a clustering of the higher formants and that one way of achieving such a clustering is by lowering the larynx. It does not require any great muscular effort to lower the larynx, so it seems important from the point of view of vocal economy to learn how to sing with a singer’s formant. The singer’s formant improves the audibility of the voice without extra cost in vocal effort.<sup>101</sup>

Modern singers use a variety of terms to allude to the additional resonance produced by a low-larynx technique (‘ring’, ‘blade’, ‘brilliance’, or ‘spin’, for example), but few realise the physiological significance of these terms, which have become confused and misconstrued in general discussion. References emphasising that larynx lowering does not require any additional muscular effort, and should not require straining or forcing, allude to the creation of a gravitational effect upon the larynx.<sup>102</sup> A consistent gravitational (tracheal) pull – effectively anchoring the larynx in the lowered position – requires the singer to inhale a

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<sup>99</sup> A brief period spent listening to broadcasts and recordings of modern concert and operatic singers in Britain will confirm that this observation, whilst a generalization, is correct: there are, of course, those that uphold and use other approaches. Sundberg agreed that ‘[i]n the education of the [modern] singing voice, one generally strives for a comfortably low larynx position, regardless of vowel and pitch.’ See Sundberg, *Science of the Singing Voice*, p. 113.

<sup>100</sup> This was conducted using Sonic Visualiser software <<http://www.sonicvisualiser.org>>. Detailed analysis has not been attempted (or reproduced) here as this thesis is primarily a musicological study, and has been written by a musicologist (not a voice scientist).

<sup>101</sup> Sundberg, *Science of the Singing Voice*, p. 123.

<sup>102</sup> Johan Sundberg, Rolf Leanderson, and Curt von Euler, ‘Activity relationship between diaphragm and cricothyroid muscles’, *Journal of Voice*, 3.3 (1989), 225-232. See also Potter, *Vocal Authority*, p. 53.

greater volume of air than the average person needs for general respiration (much like an athlete), hence preoccupation with breath control strategy in modern vocal discourse. The tracheal ‘pull’ is a by-product of efficient breath control, and actually requires no conscious pulling action on the part of the singer.

Recent voice science research has allowed us to build upon the work of nineteenth-century voice theorists in an effort to identify more clearly the means and effects of the lowered larynx. Described in basic terms, a singer may allow the larynx to drop by raising the soft palate; they do not (or perhaps, should not) attempt to force the larynx downward, but rather learn to habituate the relaxation of their vocal apparatus into this position (and pay special attention to breath control in order to cultivate a consistent tracheal pull). Teachers might reference the raising of the cheekbones and movement of the soft palate in yawning when guiding singers towards this configuration of the vocal apparatus.<sup>103</sup> Behnke and Browne (1883), like Lehmann (1906), identified the role of the soft palate in regulating the various forms of vocal resonance.<sup>104</sup> The action of lowering the larynx occurs simultaneously with a widening of the pharynx (the opening of the throat), increasing the space available for resonance:

[A] lowering of the larynx lengthens the vocal tract by increasing the pharynx length. [...] a lowering of the larynx apparently widens the bottom part of the pharynx.<sup>105</sup>

When the singer maintains a sensation of inhaling throughout the act of vocalization, the throat remains comfortably open and the soft palate (velum) is lifted. The result is often referred to as the ‘arched tone,’ a sensation of vertical stretch that enlarges the throat (pharynx) and lowers the larynx to create a larger resonance chamber.<sup>106</sup>

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<sup>103</sup> References to yawning (or similar actions) do not encourage the singer to replicate this action in the extreme, but seek to make the singer aware of the sensation of the movement of the larynx and associated musculature.

<sup>104</sup> Behnke and Browne, *Voice, Song, and Speech*, p. 82. Lehmann, *How To Sing*, p. 36.

<sup>105</sup> Sundberg, *Science of the Singing Voice*, p. 120.

<sup>106</sup> Clifton Ware, *Basics of Pedagogy: The Foundations and Process of Singing* (Boston: McGraw-Hill, 1998), p. 107.



This sensation is encouraged by proponents of ‘open throat’ technique as ‘a way of maximising pharyngeal space’ (and lowering the larynx) to achieve optimum vocal resonance.<sup>107</sup> The expansion of the pharynx and lowering of the larynx is commonly encouraged by the emulation of laughing or sobbing (where the singer can feel the action of the larynx through the raised soft palate and flattened tongue), which is often accompanied by a sensation of space at the opening to the throat.<sup>108</sup> Wood (1930) described the sensation of the open throat, and related the action to the raised soft palate:

The very good singers do not open their mouths widely, at least for middle tones, but they do open their chests and throats. It is always difficult to describe to a beginner what the teacher means by an open throat, but the pupil can get a very fair idea of it if he will open his mouth normally, without stretching it, and take in a deep, slow breath, and be conscious of the cool air against the back of his throat and palate. This is the open throat. Can the student maintain this feeling of indrawn breath, and sing a tone without any conscious change from his deep-breathing position, with the feeling that he is keeping a high palate and a deep, yawning, gaping throat?

The problem is to sing tones in the deep-breathing position of the throat.<sup>109</sup>

Sundberg (1987) added the following caveat to his discussion of larynx lowering in

*The Science of the Singing Voice*:

This is not to say that it is impossible to generate vowels with a singer’s formant without a lowering of the larynx. The individual shape of the pharynx and larynx may well be such that there is no need for lowering the larynx in order to obtain a singer’s formant. Also, there may be articulatory and phonatory configurations that generate it.<sup>110</sup>

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<sup>107</sup> Helen F. Mitchell and Dianna T. Kenny, 'The effects of open throat technique on long term average spectra (LTAS) of female classical voices', *British Voice Association: Logopedics Phoniatrics Vocology*, 29.3 (2004), 99-118. See also Helen F. Mitchell, Diana T. Kenny, M. Ryan and others, 'Defining 'open throat' through content analysis of experts' pedagogical practices', *British Voice Association: Logopedics Phoniatrics Vocology*, 28.4 (2003), 167-180. See also Johan Sundberg, 'Acoustics, VI: The Voice', in *Grove Music Online*, Oxford Music Online. Wood suggests an exercise on 'b' to encourage the expansion of the pharynx. Wood, *The Gentle Art of Singing*, p. 36.

<sup>108</sup> Sundberg, 'Acoustics, VI: The Voice', in *Grove Music Online*. A ‘feeling of space’ is a matter of personal experience, but one to which I would attest.

<sup>109</sup> Wood, *The Gentle Art of Singing*, p. 9.

<sup>110</sup> Sundberg, *Science of the Singing Voice*, p. 121.

The acknowledgment of other configurations that might produce the singer's formant does not negate evidence for the growing discussion and use of the lowered larynx during the nineteenth century. It is entirely plausible that some singers may have a natural predisposition to this form of resonance, although claims of the following type are impossible to corroborate:

Luciano Pavarotti sounded as he did because he had a very steep vertical hard palate. Both Joan Sutherland and Maria Malibran could put an entire orange in their mouths and did so as a dinner party trick... they had a cavernous pharyngeal space and that was the key to the extraordinary sound they made.<sup>111</sup>

Singers may well have developed additional techniques and approaches to vocal resonance, but the manipulation of the soft palate (and its resultant effect) is clearly described and promoted in discussion of singing that dates from the early/mid nineteenth-century onwards.<sup>112</sup>

There are teachers and theorists who continue to reject the concept of the lowered larynx as a desirable option for vocal performance, as Clapton (2008) has noted:

[M]any singing-teachers still consider the forceful lowering of the larynx unnecessary and indeed dangerous, smacking of artificiality and forcing, though some encourage it as a way of producing a darker and supposedly larger sound. However, it is certainly not necessary to hold the vocal mechanism down to produce powerful high notes: the human larynx floats in a complex system of muscles and ligaments, which, with correct use of the breath, can achieve remarkable results without resorting to such extreme measures.<sup>113</sup>

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<sup>111</sup> Sally Bradshaw, 'Taste and Common Sense in the Singing of Baroque Opera', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival* ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/bradshaw/>> [accessed 9 January 2012]. There is no reference given for this assertion. There is little evidence that Maria Malibran would have used a modern, continuous low-larynx technique, even if blessed with a cavernous pharyngeal cavity, as she undoubtedly wore corsets that constricted the airflow available. See section 2.4.2.

<sup>112</sup> The same can be said of formant tuning, a strategy that female singers may use at high pitch to improve clarity of vowel sound and efficiency in terms of volume output. See Sundberg, *Science of the Singing Voice*, pp. 124-129.

<sup>113</sup> Clapton, *Moreschi*, p. 50.

Clapton was correct to note that a neutral approach to larynx height can indeed yield ‘remarkable results’, but the loaded term here is ‘forceful’ – advocates of a lowered larynx technique would describe the *relaxation* of the muscles that suspend the larynx without resorting to the ‘extreme measures’ of ‘holding’ or ‘forcing’ the larynx.<sup>114</sup>

### 2.3.1. EFFECT UPON VOLUME

There are conflicting views on whether the perceived volume of performances in the eighteenth and nineteenth centuries might have differed from the vocal performances of the present.<sup>115</sup> A change in volume (and vocal sound) has long been dismissed on the grounds that the larynx has remained unchanged, in contrast to the obvious and easily identifiable differences between modern instruments and ‘period’ or ‘authentic’ instruments. This assumption needs to be re-evaluated with the acceptance that, whilst the vocal instrument may have remained static, vocal technique has not.

The effect of a low-larynx vocal technique is perhaps most easily noted in the perceived volume of the singer’s voice; Sundberg reported that a trained low-larynx singer usually produce a ‘soft’ dynamic ‘between 20 and 40dB louder than the minimum sound level produced by untrained subjects’, with the difference between female voices at the top of the range most obvious.<sup>116</sup> This is immediately apparent in the comparison of amateur (neutral-larynx) singers with formally trained (low-larynx) singers in solo performance.

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<sup>114</sup> This is an assertion with which my own experience corresponds – I cultivated my own vocal technique without any knowledge of the lowered larynx (or the workings of the vocal apparatus in general), and therefore only connected the means and effects of the technique later whilst exploring voice science. It is possible to habituate this setup using discussion of resonance imagery, and emulation of others *without* tensing or forcing.

<sup>115</sup> We speak of perceived volume, as we are dealing with subjective assessments based upon the aural effect of vocal sound, not actual measurements of sound pressure.

<sup>116</sup> Sundberg, *Science of the Singing Voice*, p. 116. Sundberg’s text refers to G Bloothoof, ‘Spectrum and Timbre of Sung Vowels’ (unpublished doctoral thesis, Vrije Universiteit te Amsterdam, 1985). Also referenced is R. F. Coleman, J. H. Mabis, and J. K. Hinson, ‘Fundamental Frequency - Sound Pressure Level Profiles of Adult Male and Female Voices’, *Journal of Speech, Language, and Hearing Research*, 20 (1977), 197-204.

Accounts of eighteenth-century Italian opera suggest that the audience members cared little about the audibility of the singing because it formed part of a larger social event, and was rarely the primary focus:

[I]t is very much the fashion at Naples, and, indeed, through all Italy, to consider the Opera as a place of rendezvous and visiting, that they do not seem in the least to attend to the musick, but laugh and talk through the whole performance, without any restraint[.]<sup>117</sup>

[S]inging is only a diversion, and attended to with no more seriousness than a diversion deserves.<sup>118</sup>

Everyone knows that in Italy people do not assemble in the theaters[sic] only to see the show; the boxes have become so many conversation circles that start, and stop, and start up again many times during the performance. The custom is to spend five or six hours at the opera, but not in order to give it five or six hours of attention. [...] When the composer has managed to set those famous passages that everyone knows by heart in a manner both new and worthy of his art, they are delighted, they are ecstatic, they abandon themselves to enthusiasm; but once the scene is over, they no longer listen. [...] they are indifferent to the drama as a whole, provided it has produced three or four delightful moments, and that it lasts the amount of time they had intended to spend at the opera house.<sup>119</sup>

A number of eighteenth- and early nineteenth-century British sources depict a similar scene. The following complaints describe comparatively more engagement from audience members, but noticeably poor levels of audibility:

[W]e all went to hear Mrs Siddons in *Macbeth*. The house is too large [and] attention becomes a wearisome task to my eyes and ears.<sup>120</sup>

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<sup>117</sup> Samuel Sharp, 'Letters from Italy (1767)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 209-213 (pp. 209-210).

<sup>118</sup> Guiseppe Baretti, 'from An Account of The Manners and Customs of Italy (1768)', in *Music and Culture in Eighteenth-Century Europe*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 214-216 (p. 215).

<sup>119</sup> Friedrich Melchior Grimm, 'from the article "Poème lyrique" in the Encyclopédie (1765)', in *Music and Culture in Eighteenth-Century Europe: A Sourcebook*, ed. by Enrico Fubini (Chicago; London: The University of Chicago, 1994), pp. 120-128 (p. 127 'On Italian Opera').

<sup>120</sup> Anna Larpent's Diary, US-Cn HM 01201, 20 March 1792, cited in Michael Burden, 'The lure of aria, procession and spectacle: opera in eighteenth-century London', in *Cambridge History of Eighteenth-Century Music*, ed. by Simon P. Keefe (Cambridge: Cambridge University Press, 2009), pp. 385-401 (p. 395).

[M]ore than half the verse [was] entombed in the performer's stomach[.]<sup>121</sup>

Since the stages of Drury lane and Covent Garden have been so enlarged in their dimensions as to be hence forth theatres for spectators rather than playhouses for hearers... there can be nothing very gratifying in watching the movement of an actor's lips, when we cannot hear the words that proceed from them.<sup>122</sup>

Bradshaw (2011) has argued that the prestige of the singer in eighteenth-century society tells us that '[s]ingers were clearly important enough to be listened to' and that 'the voices heard were unique and specially worth importing and paying to hear', but singers were one of many fashionable commodities, and not necessarily appreciated (in terms of the concentration usually afforded modern classical performers in concert) by all who attended performances primarily as a form of social gathering.<sup>123</sup> Accounts that describe the eighteenth-century voice as delicate and incapable of great volume support a theory that posits a neutral-larynx approach to voice production until the early-mid nineteenth century. Bradshaw (2011) has also cited the incidence of large or purpose-built theatres as being indicative of an attentive audience and an expectation of reasonable audibility,<sup>124</sup> but it is clear that on the whole the neutral-larynx voice was regarded as a delicate instrument incapable of any particular power:

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<sup>121</sup> *Thoughts upon the Present Condition of the Stage and Upon the Construction of a new Theatre* (London, 1808), pp. 4-5. This account is cited in Burden, 'The lure of aria, procession and spectacle: opera in eighteenth-century London', in *Cambridge History of Eighteenth-Century Music*, p. 395.

<sup>122</sup> Richard Cumberland, *Supplement to the Memoirs of Richard Cumberland* (London, 1807), pp. 57-58. This account is cited in Burden, 'The lure of aria, procession and spectacle: opera in eighteenth-century London', in *Cambridge History of Eighteenth-Century Music*, p. 395. See also Friedrich Melchior Grimm, 'The Little Prophet of Behmischbroda (1753)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 112-128 (p. 113).

<sup>123</sup> Bradshaw, 'Taste and Common Sense'.

<sup>124</sup> Bradshaw, 'Taste and Common Sense'. Bradshaw cites a specially built theatre in Vienna as an example.

The amazing extent of the stage, with the prodigious circumference of the boxes, and height of the ceiling [sic], produce a marvelous [sic] effect on the mind, for a few moments; but the instant the Opera opens, a spectator laments this striking sight. He immediately perceives this structure does not gratify the ear, how much soever it may the eye. The voices are drowned in this immensity of space, and even the orchestra itself, though a numerous band, lies under a disadvantage: It is true, some of the first singers may be heard, yet, upon the whole, it must be admitted, that the house is better to contrived to see, than to hear an Opera.<sup>125</sup>

What singer can raise his voice above the roar of the harmony, the many sounds heaped one upon the other, the millions of notes required by the number and variety of the parts?

[...]

Furthermore, by following one another so rapidly and confusedly, the notes choke the singer's voice so that little or nothing is heard. And so, instead of instrumental and vocal music going together, instead of instruments supporting the voice, as order and nature would require, the former overwhelms the latter, so that it can reasonably be said that it is the instruments that sing, not the singer.<sup>126</sup>

The practice of seeing one opera in every performance of its season has also been given as an example of an attentive audience, but it could also be a practice indicative of opera-goers who were more concerned with the social event (being seen in society, witnessing anything of interest, scandal or gossip, for instance) regardless of any repetition in the musical entertainment.<sup>127</sup> Austin (1806) wrote of:

the carelessness and even clamour of the audience, which is not chargeable on the nature of the opera itself; but upon the frequent repetition of the same entertainment till all become weary of it, when afterwards the favourite airs of the favourite singers appear alone to arrest the attention. So that in an opera there appear only certain brilliant points by which the attention of the audience can be excited, all the rest seems as if calculated to induce conversation, or contrived in order to prolong the occasions of polite intercourse.<sup>128</sup>

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<sup>125</sup> Sharp, 'Letters from Italy (1767)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, p. 209. Sharp's letter describes the King's Theatre, Naples.

<sup>126</sup> Esteban de Arteaga, 'from Revolutions of the Italian Musical Theater from Its Origin to the Present (1785)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 346-351 (pp. 350-351). Metastasio (1770) also suggested that floridity adversely affects the audibility of the voice. See Pietro Metastasio, 'Letter to Saverio Mattei, at Naples (1770)', in *Music and Culture in Eighteenth Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 264-269 (p. 269).

<sup>127</sup> Bradshaw, 'Taste and Common Sense'.

<sup>128</sup> Gilbert Austin, *Chironomia; or A Treatise on Rhetorical Delivery* (London: W. Bulmer & Co., 1806), p. 246.

Whilst nineteenth-century writers tended to advocate the selective use of the lowered larynx for reasons of artistic and timbral variety, Wood (1930) noted its usefulness in improving audibility in venues with unfavourable acoustic properties:

a heady falsetto tone [...] will not get over the footlights and tell through the tutti pianissimi of the orchestra[.]<sup>129</sup>

Garcia made only fleeting reference to the effect of the *voix sombrée* on perceived volume, commenting in the 1841 edition of *Traité complet de l'Art du Chant* that the moderate lowering of the larynx ‘amplifies the tone and is favourable to the emission of it.’<sup>130</sup> Other comments in this work (correctly) assert that volume requires ‘a large pharyngeal capacity and the lowered position of the larynx’, and confirm that only the sombre timbre allows the singer to utilise ‘all the volume which the individual can impart to the organ.’<sup>131</sup> Garcia, like other writers of the period, does not appear to have encouraged singers to use this technique solely for its projection qualities. This excerpt from Nathan’s *Musurgia Vocalis* (1836) also suggests that skilful or expressive singing was preferable to a merely powerful voice:

Quality more than quantity of tone should be the chief consideration. A judicious singer, with even a weak voice, will frequently, from nice management, excite more pleasure than another whose magnificent volume of tone leads him to loftier flights.<sup>132</sup>

This research project has encountered very few early or mid nineteenth-century references to vocal volume, and no references that extol projection as a primary reason to advocate or practise larynx-lowering.

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<sup>129</sup> Wood, *The Gentle Art of Singing*, p. 92. Wood described very clearly the sensation of the lowered larynx and open throat (p. 9).

<sup>130</sup> Garcia, *Complete Treatise vol. i*, p. 37. See also p. lx.

<sup>131</sup> Garcia, *Complete Treatise vol. i*, pp. li, lxiv, 30.

<sup>132</sup> Nathan, *Musurgia Vocalis*, p. 92. Nathan noted that the arching of the roof of the mouth can aid audibility (p. 162) but in general described a neutral approach to larynx height. Much of his comment on physiology is confused or incorrect.

Dart's *Interpretation of Music* (1954) offers the following description of domestic performance venues:

[I]t is often forgotten that the average seventeenth- or eighteenth-century music room was acoustically very different from those of the present day [...] An eighteenth-century music-room contained far less furniture than a twentieth-century one, the walls of the room were often panelled or painted and the wooden floors were polished and uncarpeted. The resonance of the room was therefore high and chamber music had a lustre which was, and should be, an integral part of its texture.<sup>133</sup>

Such venues were in great contrast to later furnishing styles, the average heavily furnished Victorian parlour, for instance. Consideration of the recordings accompanying this thesis will confirm that the neutral-larynx technique does not lack in audible resonance altogether, and is certainly adequate for an intimate performance, particularly in the acoustically favourable eighteenth-century conditions that Dart has described (See CD 1: Tracks 1-15, and accompanying commentary in Chapter Six).

It has been commented that a marked contrast in volume and performance style seems unlikely,<sup>134</sup> but many 'period' orchestras now project their sound in a manner more obtrusive than the eighteenth-century aesthetic would permit, matching the modern vocal technique (and style) and utilising the maximised acoustic of custom-built venues to meet modern expectations of audibility.<sup>135</sup> Lehmann's comments below suggest that power began to be categorised as a desirable vocal quality around the turn of the twentieth

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<sup>133</sup> Thurston Dart, *The Interpretation of Music* (London: Hutchinson's University Library, 1954), pp. 57-58. This excerpt must be considered on the understanding that vocal performance at this time used a neutral larynx position; it does not corroborate the use of a low-larynx strategy in Baroque repertoire.

<sup>134</sup> Bradshaw, 'Taste and Common Sense'.

<sup>135</sup> There is evidence that eighteenth-century orchestras could produce a larger sound when necessary, but this sound may not have been loud by modern standards, and must have been coupled with an acute sensitivity during the arias. Milizia wrote that 'The overture is both the opening of our operas and their first drawback. The ingredients of every overture are a pair of allegros, a slow section, and a deafening noise'. Francesco Milizia, 'from Complete Formal and Material Treatise on the Theater (1794)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 252-259 (p. 254).



century, when frequent gesture was no longer considered necessary (or commonplace), and truly quiet singing so unusual that she considered it a specific expressive device:

The quieter the singer or artist, the more significant is every expression he gives; the fewer motions he makes, the more importance they have. So he can scarcely be quiet enough. Only there must be a certain accent of expression in this quietude, which cannot be represented by indifference. The quietude of the artist is a reassurance for the public, for it can come only from the certainty of power and the full command of his task through study and preparation and perfect knowledge of the work to be presented. An artist who is based on power cannot appear other than self-possessed and certain of himself.<sup>136</sup>

Attempts to emulate the dynamic capabilities of the low-larynx tone with forcing or straining did not go un-noticed at the turn of the twentieth century, as Wood's comments illustrate:

The besetting sin of the modern singer is over-blowing. As he strives to make a poor, thin voice into a big, warm, resonant one, he overtaxes his natural vocal physique, and his voice in consequence is generally unsteady, wobbly, breathy, with a dull, veiled, hooty quality. It is only a bright, clean tone which really carries over an orchestra in a theatre or concert room. Ring in the tone is the great quality for which to work. [...] Fundamental vocal tone should always be bright, clear, clean, intense and ringing. And this takes many years of careful listening and diligent practice to obtain. We have no use in the singing world for dull, hooty, foggy, phlegmy, breathy tone. In fact, it is ring in the tone which distinguishes the highly trained, cultivated voice from the merely pretty amateur voice.<sup>137</sup>

Lehmann (1906) reiterated this point in *How to Sing*.<sup>138</sup> Behnke and Browne (1883) also agreed that sheer power was less desirable than a resonant low-larynx tone:

We have all heard and admired the ringing pianissimo tones of our great singers, which so completely fill even the largest buildings that they are not only distinctly heard, but almost felt, while the voice of a mere shouter, however loudly he may sing, does not penetrate to any distance. A singer who can produce a fine piano tone will have no difficulty in increasing its power, but he who relies upon mere force will never be able to sing a true pianissimo. He may certainly sing less loudly, but he will also in the same proportion become more inaudible.<sup>139</sup>

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<sup>136</sup> Lehmann, *How To Sing*, p. 257.

<sup>137</sup> Wood, *The Gentle Art of Singing*, p. 7.

<sup>138</sup> Lehmann, *How To Sing*, p. 160.

<sup>139</sup> Behnke and Browne, *Voice, Song, and Speech*, p. 221.

MacKinlay (1908) reminisced that Garcia himself warned against being too concerned about volume in singing:

He was careful to impress on one the fact that any visible effort took away from the charm of the singer. If one gave too free play to the lungs, and sang beyond oneself, he would remark, 'You must not forget the advice my father gave me: 'Do not let anybody see the bottom of your purse; never spend all you possess, nor have it noticed that you are at your last resource.'"<sup>140</sup>

Forcing of the voice betrayed untrained singers who sought to emulate the sound of low-larynx singers without understanding the means required. A distinction between singers trained in low-larynx strategy and amateur singers (without specialist low-larynx training) is still recognisable today; as Wood (1930) remarked, 'unless you can rely unfailingly on a bright, ringing, clear [low-larynx] quality for your fundamental tone, you are not a trained singer.'<sup>141</sup> The identification of choral singers as amateur singers has had to be re-evaluated in recent years, as many now have some degree of formal vocal training, and ensembles comprising professional (solo) singers are becoming more and more common. Wood (1930) commented that 'a singer who has to dominate a modern orchestra ought to have a greater concentration and intensity of tone than the men and women who sang to our grandparents', confirming a noticeable change in approach to voice production during the long nineteenth century.<sup>142</sup>

## 2. 4. BREATH CONTROL

### 2.4.1. HOW TO BREATHE

There is very little technical information about breathing and breath control in eighteenth- and early nineteenth-century treatises, partly due to a lack of available technical and

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<sup>140</sup> Mackinlay, *Garcia the Centenarian*, p. 283.

<sup>141</sup> Wood, *The Gentle Art of Singing*, p. 16.

<sup>142</sup> Wood, *The Gentle Art of Singing*, p. 6.

anatomical information and understanding at the time of writing. Much of the advice is general in nature, recommending upright deportment to allow the free flow of air, and that singers breathe in good time before producing sound. As Duey (1980) summarised, '[w]e know that singers were told when and where to breathe but not how.'<sup>143</sup>

The omission of any specific approach to breath control suggests that singers of the eighteenth and early nineteenth centuries breathed for singing as they did for any other form of activity, using their intuition. In the late nineteenth century Bach (1884) described the need for singers to alter their natural breathing instincts in order to avoid sound that was 'strained and breathless':

Ordinarily, in speaking, we breathe with the upper part of the chest. In singing, however, we must breathe with the lower portions of the lungs also, and retain the air by the diaphragm. Simple as it may appear, it is very difficult for the beginner to do it correctly.

Superficial or slight breathing, which is not only useless, but also most injurious to the singer, consists in the elevation of the upper ribs and the breast-bone, and is therefore sometimes called collar-bone breathing.<sup>144</sup>

This marks a change in approach that can be related to the growing expectation of the (selectively) lowered larynx in vocal performance.

There is difficulty in deciphering accounts from this period, as the role of the diaphragm was often misunderstood. In Paschke's translation of the 1841 and 1872 editions of *Traité complet de l'art du chant* we can see from Garcia's amendments that his thoughts on breath control were still under development. In the following excerpt italicisation denotes text that is not present in the 1841 edition, but has been *added* by Garcia to the 1872 edition; bold text denotes text that was present in the 1841 edition, but has been **removed** by Garcia from the later edition:

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<sup>143</sup> Philip A. Duey, *Bel Canto in its Golden Age. A Study of its Teaching Concepts*. (New York: Da Capo Press, 1980), p. 42.

<sup>144</sup> Bach, *Musical Education*, pp. 23, 24.

In order to inhale freely, hold the chest erect, the shoulders back without stiffness, and the chest free. *Lower the diaphragm without jerking*, raise the chest by a slow and regular movement, **and set the hollow of the stomach**. From the moment when you begin these two movements the lungs will dilate until they are filled with air.<sup>145</sup>

It is notable that reference to the diaphragm was only added at a later date, and that at this time the instruction to bring the stomach inward was removed. These two actions are thought to be physiologically incompatible, as this summary by Sundberg (1987) outlines: ‘by contracting, the diaphragm presses the abdominal content downward which, in turn, presses the abdominal wall outward.’<sup>146</sup> Garcia appears to have clarified his stance in the 1872 edition, having added the following advocacy of thoracic and abdominal breathing combined:

This double procedure, on which I insist, enlarges the envelope of the lungs, first at the base, then by the circumference, and allows the lungs to complete all their expansion and to receive all the air which they can contain. To advise the abdominal breathing exclusively would be to voluntarily reduce by one half the element of strength most indispensable to the singer, the breath.<sup>147</sup>

This advice is also repeated in the English-language edition of Garcia’s *New Treatise*.<sup>148</sup> Behnke and Brown (1883) also advised a combination of thoracic and abdominal breathing to ‘inflate the lungs where they are largest, and where consequently we can get the largest amount of air into them’.<sup>149</sup> This advice seems sensible, and is common in current teaching.

Garcia’s writing in *Hints on Singing* (1894) added further confusion to the discussion by reverting to the instruction to draw the stomach inward in inspiration, and, incomprehensibly, advocating only the thoracic technique, an approach that Garcia himself termed ‘incomplete’:

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<sup>145</sup> Garcia, *Complete Treatise vol. i*, p. 33.

<sup>146</sup> Sundberg, *Science of the Singing Voice*, p. 28. Sundberg references K. P. Strohl and J. M. Fouke, ‘Dilating forces on the upper airway of anesthetized dogs’, *Journal of Applied Physiology*, 58 (1985), 452-458.

<sup>147</sup> Garcia, *Complete Treatise vol. i*, p. 33.

<sup>148</sup> Garcia, *New Treatise*, pp. 3-4. This recommendation is repeated on page 8.

<sup>149</sup> Behnke and Browne, *Voice, Song, and Speech*, p. 179.

Q. How does the diaphragm control respiration?

A. In the first attempt to emit a sound, the diaphragm flattens itself. The stomach slightly protrudes, and the breath is produced at will by the nose, by the mouth, or by both simultaneously. During this partial inspiration, which is called *abdominal*, the ribs do not move, nor are the lungs filled to their full capacity, to obtain which the *diaphragm must and does contract completely*. Then, and only then, are the ribs raised, while the stomach is drawn in. This inspiration – in which the lungs have their free action from side to side, from front to back, from top to bottom – is incomplete, and is called *thoracic* or *intercostal*. If by compression of any kind the lower ribs are prevented from expanding, the breathing becomes external or clavicular.

Q. Which do you approve?

A. The thoracic; and to obtain it the breath must be taken slowly and deeply.<sup>150</sup>

Moreno's thesis on bassoon performance practices also refers to early nineteenth-century accounts that specifically advised bringing the stomach in and the chest out when inhaling.<sup>151</sup> Lehmann (1906) also (incorrectly) related the drawing in of the abdomen to the use of the diaphragm during inspiration.<sup>152</sup> Caruso (1909) advocated raising the chest and allowing the stomach to move inward during inspiration, and described contrary motion during expiration:

To take a full breath properly, the chest must be raised at the same moment the abdomen sinks in. Then with the gradual expulsion of the breath a contrary movement takes place. The diaphragm and elastic tissue surrounding and containing the stomach and vital organs and the muscles surrounding, by practice acquire great strength and assist considerably in this process of respiration and are vital factors in the matter of controlling the supply which supports the tone.<sup>153</sup>

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<sup>150</sup> Manuel Garcia, *Hints on Singing*, trans. by B. Garcia (London: E. Ascherberg & Co, 1894), p. 4.

<sup>151</sup> Bernardo Mengozzi, *Méthode de chant du conservatoire de musique contenant les principales de chant; des exercices pour la voix; des solfège tirés de meilleurs ouvrages anciens et modernes; et des airs dans tous les mouvements et les différents caractères*. (Paris: Imprimerie du Conservatoire de Musique., 1804), p. 2. Cited in Áurea Domínguez Moreno, 'Bassoon Playing in Perspective: Character and Performance Practice from 1800 to 1850', (doctoral thesis, University of Helsinki, 2013), p. 87. Franz Thaddäus Blatt, *Méthode complète de clarinette pour apprendre à jouer de cet instrument avec facilité et perfection: Conçue d'après ses expériences comparées aux meilleurs méthodes et dédî a les élèves du Conservatoire de musique a Praga: première partie. Françaisch und deutsch*. (Mayence, Paris et Anvers: Chez les fils de B. Schott, 1829), p. 18. Cited in Moreno, 'Bassoon Playing in Perspective', p. 88.

<sup>152</sup> Lehmann, *How To Sing*, pp. 20-23.

<sup>153</sup> Caruso and Tetrizzini, *Caruso and Tetrizzini on the Art of Singing*, p. 55.

Lamperti (1905) too suggested this form of abdominal movement, although his writing indicates some awareness of the downward movement of the diaphragm in inspiration.<sup>154</sup> These accounts suggest that understanding of respiration remained without standardisation throughout the nineteenth century, and that diaphragmatic breathing was uncommon at this time. Potter (1998) has noted that the use of the diaphragm in singing was often misunderstood in this period, and that confusion continues to surround the issue of respiration in current discussion.<sup>155</sup>

Both Lehmann (1906) and Wood (1930) suggested that the chest should be expanded as opposed to being lifted, and that it should not be allowed to return to its resting position during expiration:

In inhaling, the chest should be raised not at all or but very little. [...] As soon as the pressure of the abdomen and chest ceases, the tone and the breath are at an end. Not till toward the very end of the phrase, should the pressure be slowly relaxed, and the chest slowly sink.<sup>156</sup>

In singing, as in public speaking, it is an important law that the chest should fall as little as possible. Imagine you have a piece of string round your waist, and that as you use your breath it becomes looser and looser.<sup>157</sup>

This technique ensures that the enlarged thoracic space is not allowed to collapse at the end of a phrase (or during expiration more generally), and accounts for the often proud, inflated appearance of the modern operatic singer whilst singing. Allowing the ribs to return to their resting position would disrupt the gravitational effect needed to uphold a consistent tracheal pull, allowing the larynx to rise and resulting in the need to ‘reset’ the apparatus to continue with a bright, resonant tone after taking breath. This direction has not been identified in earlier sources, perhaps suggesting a change in approach around the turn of the twentieth century linked to a more continuous application of larynx lowering.

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<sup>154</sup> Giovanni Battista Lamperti, *The Technics of Bel Canto*. trans. by Dr Th. Baker (New York: Schirmer, 1905), pp. 6, 7.

<sup>155</sup> Potter, *Vocal Authority*, p. 54.

<sup>156</sup> Lehmann, *How To Sing*, p. 171.

<sup>157</sup> Wood, *The Gentle Art of Singing*, p. 23. See also p. 44.

Garcia (*New Treatise*) did not instruct that the ribs were to be held in their open position during expiration, instead writing that ‘the mechanical act of expiration is precisely the reverse of inspiration, consisting simply in effecting a gentle, gradual pressure of the thorax and diaphragm on the lungs, when charged with air’.<sup>159</sup> This account could suggest that the act of expiration requires action on the part of the singer, but it is likely that Garcia sought to describe the natural forces of the musculature system, and did not advocate conscious effort on the part of the singer.

Transitional breath control methods are often tied to the growing use of low-larynx techniques, as also demonstrated in what Lehmann termed the ‘propagation form’, where the lowered larynx is prepared in the raising of the soft palate during inspiration.<sup>160</sup> As expected, modern breath control advice is inherently tied in with the ideal of low-larynx singing: as Chapman (2006) has emphasised, ‘[t]he interaction of airflow and the resonating system cannot be ignored. Inadequate airflow will cause the pharyngeal space to reduce which will affect the beauty of the tone’ (by allowing the larynx to rise).<sup>161</sup> Most modern singers would advocate the combination of middle- and low-torso breath control that Wood and Lehmann described in order to uphold a consistent tracheal pull and lowered larynx. Descriptions by late nineteenth-century and early twentieth-century singers must, however, be considered relative to other factors affecting breath control. One particularly significant factor is the widespread popularity of the corset throughout this period.

#### 2.4.2. CONSTRICTION AND RESTRICTION

It is well-documented that female singers throughout the nineteenth century wore corsets in an effort to appear both fashionable and respectable; a direct connection between diaphragmatic breathing and larynx-lowering means that the effects of this trend upon

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<sup>159</sup> Garcia, *New Treatise*, p. 8.

<sup>160</sup> Lehmann, *How To Sing*, p. 56.

<sup>161</sup> J. L. Chapman, *Singing and Teaching Singing: A Holistic Approach to Classical Voice* (Abington: Plural Publishing, Inc., 2006), p. 84.

respiratory function are significant to discussion of voice production techniques. As has already been noted, efficient (diaphragmatic) breathing is vital to maintaining a consistent tracheal pull, and the visible expansion of the abdomen has been observed to signify the active use of the diaphragm in inspiration; abdominal expansion is not possible when a singer is significantly constricted by their clothing, and therefore consistent larynx-lowering and corset-wear are physiologically incompatible.<sup>162</sup> Steele (2001) has confirmed that ‘even a moderately tight corset restricts the respiration, causing a reliance on upper-diaphragmatic [thoracic] breathing’;<sup>163</sup> Behnke and Browne (1883) observed a reduction of lung capacity by ‘nearly one third’ with a moderately-laced corset.<sup>164</sup>

Adverts, discussion of voice science, and accounts by singers confirm that it was only in the late nineteenth-century that singers and theorists began to question and gradually understand the adverse effect of corseting upon respiratory function.<sup>165</sup> The lateness of such discussion confirms that singers remained significantly constricted throughout the nineteenth century.<sup>166</sup> Singers do not appear to have refused to wear corsets (even at the turn of the twentieth century), and although singers might reasonably have loosened their corsets to some extent when performing there is no record of this. There

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<sup>162</sup> Sundberg, *Science of the Singing Voice*, p. 28. See also Strohl and Fouke, 'Dilating forces on the upper airway of anesthetized dogs'.

<sup>163</sup> Valerie Steele, *The Corset: A Cultural History* (New Haven; London: Yale University Press, 2001), p. 21. The somewhat misleading description ‘upper-diaphragmatic’ is not an accepted term in voice physiology and has been interpreted here as referring to thoracic breathing using the body *above* the diaphragm.

<sup>164</sup> Behnke and Browne, *Voice, Song, and Speech*, p. 185. See also Bernard Roth, *Dress: its Sanitary Aspect* (London: Churchill, 1880), pp. 8-11. Cited in Behnke and Browne, *Voice, Song, and Speech*, pp. 109-113.

<sup>165</sup> See Maurice Vitrac, *Le livre d'or des fiancailles et du mariage/ The Golden Book of Engagement and Marriage* (Paris: [n.pub.], 1910), p. 259. Also John Harvey Kellogg, 'Experimental Researches Respecting Relation of Dress to the Pelvic Diseases of Women', *Transcripts of the Michigan Medical Society* (1888), 322-343. Referenced in Colleen Ruby Gau, 'Historical Medical Perspectives of Corseting and Two Physiological Studies with Reenactors' (unpublished doctoral dissertation, Iowa State University, 1998), p. 67. For discussion of corset wear in vocal treatises see the following references: Francesco Lamperti, *The Art of Singing* (New York: Schirmer, 1890), pp. 21-22. Garcia, *Complete Treatise vol. i*, p. 208. Bach, *Musical Education*, pp. 37-38. Caruso and Tetrazzini, *Caruso and Tetrazzini on the Art of Singing*, p. 34.

<sup>166</sup> Béatrice Fontanel, *Support and Seduction: The History of Corsets and Bras*. trans. by Willard Wood (New York: Harry N. Abrams, inc., 1997), p. 39. Steele, *The Corset: A Cultural History*, p. 109. David Kunzle, *Fashion and Fetishism: Corsets, Tight-Lacing and other Forms of Body-Sculpture* (Stroud: Sutton Publishing, 2004), pp. 22-23.



was both contention and confusion over breath control strategies throughout this period, but it is clear that even moderate constriction inhibits respiratory function.<sup>167</sup>

This is not simply an issue for the consideration of female singers of this period; Gau's 1998 thesis names a number of well-known male corset advocates, and also reproduces advertisements for men's corsets.<sup>168</sup> Records of 'dandy' fashions confirm that male corset-wear was particularly popular during the first half of the nineteenth century.<sup>169</sup> In the context of the silhouettes of nineteenth-century fashions it is likely that men who chose not to wear corsets wore well-fitted evening wear whilst singing; no references have been found that suggest that men were perceived to have greater vocal power than women at any point during this period, and there is no evidence in performance accounts or didactic writing to suggest that methods of voice production differed between the sexes. Neither men nor women of this period are known to have employed diaphragmatic breathing techniques consistent with continuous and intentional larynx lowering.

#### 2.4.3. WHERE TO BREATHE

In *Select Collection* (c.1780s) Corri offered two breath signs to assist the performer in dividing phrases with proper regard to sense and melody: a breath that was to be 'about as long as that made by a Comma in reading', and a smaller breath that was to be made 'as imperceptible as possible; because (as has been remarked) it is only to be done on account of a period being too long, or when a particular exertion of the voice is necessary, as before a Cadence &c. &c.'<sup>170</sup> In *New Treatise* Garcia also notated a full and half breath. He

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<sup>162</sup> The case of modern operatic singers wearing nineteenth-century costumes is not directly comparable; modern costumiers are well aware of the needs and expectations of the modern singer, and introduce modifications such as elastic lacings, alternative lacing patterns, elasticated or bias cut panels, and spiral steel bones to add ease to historical styles. This information originated from an email exchange with the Costume Supervisor of Opera North, 23-24 April 2013.

<sup>168</sup> Gau, 'Historical Medical Perspectives of Corseting', pp. 148-149, 218-219.

<sup>169</sup> Shaun Cole, *The Story of Men's Underwear* (New York: Parkstone International, 2012), p. 46.

<sup>170</sup> Corri, *A Select Collection vol. i*, p. 3.

described the ‘slow and complete inspiration’ as ‘what the Italians term *Respiro*’, in contrast to the ‘slight and hurried inspiration, which gives the lungs a slight supply, merely sufficient for a moment, and technically termed the *Mezzzo Respiro*.<sup>171</sup> Examples of both of these devices can be seen on Garcia’s annotated scores, as reproduced in Appendix A. Both writers used the same symbols to denote the two types of breath (as depicted in Figure 2 below) and their placement in the annotated works that form part of their treatises is extremely valuable to the study of patterns of breathing in this period.

Figure 2: Notation of full and half breath

<i>Respiro</i> (full breath)	✱
<i>Mezzzo Respiro</i> (half breath)	✱

The patterns of breathing in the repertoire both Corri and Garcia annotate might well seem irregular to the modern singer. Examples in Corri’s *Select Collection* include breathing mid-phrase before a high note (Example 1) and even mid-word to allow a top-up of breath before the end of a phrase (Example 2), and far more frequent breathing than the modern singer would ever contemplate (Example 3). Similar examples can be observed in Corri’s *Singer’s Preceptor*.

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<sup>171</sup> Garcia, *New Treatise*, p. 8. Lamperti (1890) also described full and half breaths, but they are not illustrated in musical examples or annotated repertoire. See Lamperti, *The Art of Singing*, pp. 6, 7.

Example 1: Taking breath before high notes<sup>172</sup>

miò\_ ben. Sen - za il miò ben. Sen - za il miò\_\_\_\_\_ ben.

Example 2: Taking breath mid-word<sup>173</sup>

thy Mis-tress to de - light thy Mis-tress to de - light

Example 3: Frequent breathing<sup>174</sup>

cor. mái quès - to cor. mái quès - to cor.

Garcia commented that '[b]reath ought never to be taken in the middle of a word, or between words intimately connected', and yet similar examples of breathing mid-word before a high note (in order to preserve the integrity of a cadenza), and the use of the *mezzo respiro* in the middle of a phrase can be seen in Garcia's annotated repertoire.<sup>175</sup> Nathan (1836) noted explicitly that this was done where the phrases were too long to be executed in one breath:

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<sup>172</sup> Corri, *A Select Collection vol. i*, p. 71.

<sup>173</sup> Domenico Corri, *A Select Collection of the Most Admired Songs, Duets, &c.* (London: John Corri, [n.d.]), vols. ii-iv. Vol. ii, p. 22.

<sup>174</sup> Corri, *A Select Collection vol. i*, p. 94.

<sup>175</sup> Garcia, *New Treatise*, p. 49. Appendix A, Crescentini: Aria inserted into *Romeo e Giulietta* by Zingarelli, p. 279, third system, b. 4.

Breath should be taken with care at the commencement of a long division of notes, a cadence, or pause, that the effect of the music may not be destroyed by stopping in the middle for that purpose.<sup>176</sup>

Cadences and subdivisions of phrases in the repertoire surveyed here are not long by modern expectations, but performing repertoire with a neutral approach to larynx height using corresponding low breath pressure means that preserving their integrity is much more of a challenge than when using a low-larynx technique.

Frequent instruction to breathe suggests not only that opportune moments had arisen in which to replenish the air supply, but also that the singer might have taken these opportunities to articulate the phrase using an expressive device whilst breathing (See section 2.4.4.). Corri (c.1780s) emphasised the link between breathing and preservation of the proper sense of the text:

[O]ne of the most important articles in the execution of music (vocal music in particular) is the proper division of the PERIODS; as is evident from hearing good singers often break up the sense and the melody, for want of knowing how to take breath in the proper places.<sup>177</sup>

A close relationship between spoken and sung text means that observation of punctuation in the delivery of text was very important, particularly to late eighteenth- and early nineteenth-century singers.<sup>178</sup> Unusual breathing instructions are symptomatic of changes in technique; instructions to take breath before a long climactic note or cadenza (as in Example 1), or very frequently (as in Example 3) suggest less efficient breath control than that expected of the modern singer today, seeming wholly unnecessary in the context of low-larynx efficiency. Instructions to breathe before a cadenza still occur in late nineteenth-century annotations, but specifically in order to protect the integrity of the cadenza, which,

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<sup>176</sup> Nathan, *Musurgia Vocalis*, p. 122.

<sup>177</sup> Corri, *A Select Collection vol. i*, p. 2.

<sup>178</sup> See Robert Toft, 'The Expressive Pause: Punctuation, Rests, and Breathing in England, 1770-1850', *Performance Practice Review*, 7.1 (1994), 1-32.

by this time, had grown considerably longer and more virtuosic. This is explicitly referenced in Garcia's annotated repertoire.<sup>179</sup>

#### 2.4.4. BREATHING AS ARTICULATION

Breathing had two primary functions in nineteenth-century singing: replenishing the power source of the voice, and providing a form of articulation in the sung phrase. This articulation could be used as punctuation, as mentioned in the previous section, but could also be used to create expressive exclamation, as Garcia described in *New Treatise*:

Sighs, in all their variety, are produced by the friction – more or less strong, more or less prolonged – of the air against the walls of the throat, whether during inspiration or expiration of the breath. [...] the friction may be changed into sobs, or even into a rattle in the throat, if the vocal ligaments be brought into action. [...]

When the second method [aspiration] is adopted, the expulsion of air – the sigh in its proper sense – and the moan are heard. If it precedes a vowel, the note is aspirated; if a consonant, the breathing sound is then heard before it.<sup>180</sup>

This passage suggests that sighs could consist purely of noisy air, or also incorporate some form of pitched movement. Garcia also described an expressive laugh, but specified that the device was reserved exclusively for 'opera-buffa', unless the singer was depicting malice or madness.<sup>181</sup> Toft (1994) has noted that these forms of expressive device are currently neglected in historically-informed vocal performances: realisation of sighing and sobbing as annotated by Garcia can be heard in the Recorded Portfolio.<sup>182</sup>

This form of expressive device had lost favour by the close of the nineteenth century as it did not reflect the changing aesthetic of low-larynx singing.<sup>184</sup> The creation of

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<sup>179</sup> Appendix A, Crescentini: Aria inserted into *Romeo e Giulietta* by Zingarelli, p. 279, third system, b. 4.

<sup>180</sup> Garcia, *New Treatise*, p. 64.

<sup>181</sup> Garcia, *New Treatise*, p. 65.

<sup>182</sup> Toft, 'The Expressive Pause'. See CD 4: Track 9, Cimarosa: *Sacrifizio d'Abraham*; Appendix A, p. 270, first system, b. 1, b. 4; p. 273, first system, b. 5. Also CD 4: Track 11, Morlacchi: *Teobaldo ed Isolina*; Appendix A, p. 283.

<sup>184</sup> Wood warned against sobbing and aspiration, writing that 'It is a pity some British singers ape a style which belongs to the Italian mentality.' Wood, *The Gentle Art of Singing*, p. 19.

dramatic emphasis using additional devices was gradually replaced by the use of the (low-larynx) voice itself to communicate dramatic intention through deeper tone colour and the growing use of vibrato effects.

## 2.5. THE CONCEPT OF BEL CANTO

The concept of bel canto is one that receives frequent mention in vocal scholarship, but largely remains without an appropriate definition. In general usage it is often used to conjure up images of a 'golden age' of singing, as Toft (2011) has suggested:

Over the past hundred years, the bel canto style, as practiced by many in the world of art music, has evolved to centre almost exclusively on the production of 'beautiful' tone and the exhibition of that tone through the uninterrupted delivery of long, heavily vibrated lines. But historically, the manner of singing embodied in the words bel canto embraced much more than bel suono (beautiful sound), for the old Italian singers, just like modern pop performers, valued the entire range of techniques listed above [emphasis, accent, tone of voice, pauses, legato, staccato, portamento, messa di voce, rhythmic rubato, vibrato, and ornamentation].<sup>185</sup>

As Toft's description highlights, modern performances of historical repertoire rarely encompass true *chiaroscuro*.<sup>186</sup> Ware's description of bel canto as 'the Italian singing style founded on complete vocal control' is, like that of many others, typical of the ambiguity surrounding the concept.<sup>187</sup>

The ideal of bel canto is often tied to the continuing supremacy of Italian vocal music and singers, and despite contrast in style and technique (as demonstrated in this thesis), scholarship that links modern low-larynx performers directly to the neutral-larynx performers of the early nineteenth and eighteenth centuries continues.<sup>188</sup> A failure to acknowledge change in vocal performance practices perpetuates the notion of one

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<sup>185</sup> Toft, 'Bel Canto: the unbroken tradition'.

<sup>186</sup> Toft, 'Bel Canto: the unbroken tradition'.

<sup>187</sup> Ware, *Basics of Pedagogy*, p. 250.

<sup>188</sup> See Duey, *Bel Canto in its Golden Age*, p. 73. Also Mackinlay, *Garcia the Centenarian*, p. 25.

continuous tradition of voice production, and encourages unfounded claims about vocal style and technique:

From *my own experience* it seems clear to me that there has been no huge shift in voice production between then [the baroque period] and now [2009][.]<sup>189</sup>

The “Garcia Method” is still known today and has a record of impressive successes: both Beverly Sills and Joan Sutherland can trace their artistic ancestry back to Garcia, as have countless others including Nellie Melba and Emma Eames.<sup>190</sup>

In this YouTube clip note Beverly Sills’ superb technical control and style, aware that her school of singing goes seamlessly back to Porpora.

I am personally more interested in Porpora, because he taught Farinelli and because Haydn greatly respected him [...] and because he provides an unbroken line to Beverly Sills, Joan Sutherland, Marilyn Horne and Dietrich Fischer-Dieskau.<sup>191</sup>

Rogers (1940) described bel canto as ‘that magic system which every self-respecting teacher of singing professes to teach and which every self-respecting newspaper critic says is an extinct art.’<sup>192</sup> Controversy over the existence of a bel canto ‘tradition’ is by no means a new phenomenon, although scepticism has yet to infiltrate mainstream discussion.

The fundamental error in much discussion of ‘bel canto’ is the on-going presumption that vocal technique has remained static, when, despite the constant physical state of the larynx, the usage of the vocal apparatus has changed dramatically. The association of the term ‘bel canto’ to compositional trends around the turn of the nineteenth century, and specifically to the work of Rossini, Bellini, and Donizetti, is often confused with stylistic and technical connotations associated with the term. Works by each of these composers, and also by Verdi, have been included in the Recorded Portfolio to highlight the differences in approach between performances in the modern operatic vocal

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<sup>189</sup> Bradshaw, 'Taste and Common Sense'. Italicisation added for emphasis.

<sup>190</sup> Bushnell, *Maria Malibran*, p. 232.

<sup>191</sup> Bradshaw, 'Taste and Common Sense'.

<sup>192</sup> Francis Rogers, '[Article in Educational Department]', *Musical America*, 25 (1940) (p. 35). Cited in Duey, *Bel Canto in its Golden Age*.

standard and the application of the styles and techniques discussed in this thesis (CD 4: Tracks 1-3, and 6).

The term 'bel canto' is certainly retrospective, with the first references to the term appearing in musical publications in the late nineteenth century.<sup>193</sup> As Potter (1998) has suggested, the notion of bel canto was convenient for those who did not encourage the growing inclusion of voice science in vocal pedagogy:

Teachers who disagreed with (or could not understand) the science could call on a bygone age of excellence to which they claimed unique access, giving rise to the myth of bel canto.<sup>194</sup>

The notion of bel canto continues to offer modern singers comfortable refuge when they are faced with uncertainty about the vocal performance practices of the past.

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<sup>193</sup> Bach, *Musical Education*, pp. 151, 247. See Duey, *Bel Canto in its Golden Age*, p. vi. The retrospective nature of this term is discussed in Potter, *Vocal Authority*, pp. 47, 63.

<sup>194</sup> Potter, *Vocal Authority*, p. 47. See also Ware, *Basics of Pedagogy*, p. 193.



### *Chapter Three*

# DEFECTS, DEVIATION, AND ‘GOOD SINGING’: THE DISCUSSION AND USAGE OF VIBRATO EFFECTS

There are a variety of definitions of the term ‘vibrato’ in current literature; an ‘[u]ndulation of a pitch or a note’, ‘[a] wavering of pitch used to enrich and intensify the tone of a voice or instrument’, and ‘[a] regular fluctuation of pitch or intensity (or both), either more or less pronounced and more or less rapid’ being just a selection.<sup>1</sup> Whilst a vibrato may combine elements of ‘frequency (pitch), loudness (intensity), and/or timbre (tone quality)’ in various degrees, vibrato effects can generally be perceived as either primarily of pitch, or primarily of intensity.<sup>2</sup> It is possible to differentiate (aurally) between a vibrato effect in which the oscillation of pitch is the most prominent feature, and a vibrato effect in which a fluctuation in intensity is the defining feature: it may not be possible (scientifically) to isolate one effect entirely from the other, but it is possible to make an artistic judgment of prominence based upon the aural effect perceived.

A noticeable proportion of modern singers appear to utilise only the pitch vibrato described above, despite evidence that a vibrato of intensity might provide a keener realisation of the expressive vibrato mentioned in early sources. The argument as to whether continuous vibrato effects are appropriate for period performance is on-going,

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<sup>1</sup> ‘Vibrato’, in *Grove Music Online*, Oxford Music Online. David Milsom, ‘Vibrato’, in *Oxford Companion to Music*, Oxford Music Online. Greta Moens-Haenen, ‘Vibrato’, in *Grove Music Online*, Oxford Music Online.

<sup>2</sup> Greta Moens-Haenen, ‘Vibrato as expressive ornament: translation of summary chapter from *Das Vibrato in der Musik des Barock* (1988) by Greta Moens-Haenen’, in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and John Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/haenen/>> [accessed 6 May 2014].

and the literature of the eighteenth and nineteenth centuries is similarly varied in opinions of vocal vibrato effects. As Brown (1999) has written, it is clear that the term ‘vibrato’ did not adopt its current meaning ‘until well into the nineteenth century, and even at the end of the century its meaning was not fixed; the contexts in which it is found in earlier periods show clearly that it was not meant to convey the same as now.’<sup>3</sup> This chapter will use nineteenth-century accounts of vocal vibrato to confirm this, and outline a technical theory as a possible influence upon the changing use of vocal vibrato during the long nineteenth century.

### 3.1. SEMANTICS

Changing terminology in the discussion of vibrato makes the study of vibrato effects (and their reception) rather difficult, but the acknowledgement of two main forms of vibrato (pitch and intensity) can bring a degree of clarity to texts that have caused confusion in the past.

Brown (1999) has noted a differentiation between discussion of vibrato and tremolo in the nineteenth century, citing descriptions of vibrato as a movement of intensity, and tremolo as a repeated ‘departure from true intonation’.<sup>4</sup> Both Breen and Donington have also made a distinction between the two effects, but with very little discussion of *forms* of vibrato happening in the field of professional vocal performance such a distinction has never been accepted into general usage.<sup>5</sup> Seashore (1936) asserted

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<sup>3</sup> Clive Brown, *Classical and Romantic Performing Practice 1750-1900* (Oxford: Oxford University Press, 1999), p. 518.

<sup>4</sup> Brown, *Classical and Romantic Performing Practice*, pp. 520-521. See ‘Tremolo’ in *A Dictionary of Music and Musicians*, ed. by George Grove (London: [n.pub], 1879-1889), vol. iv, p. 116.

<sup>5</sup> Edward Breen, ‘David Munrow: thoughts on vibrato and a glimpse into his records collection’, in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/breen/>> [accessed 9 January 2012]. Breen

that ‘the average pitch vibrato, .5 of a tone, is about eight times as perceptible as the average intensity vibrato when present’, an assessment which could explain why the use of the intensity vibrato as an expressive device has been somewhat overshadowed by the more noticeable continuous pitch tremolo in scholarship and performance of recent years.<sup>6</sup>

To aid clarity in the discussion of this complicated topic the differentiation common in nineteenth-century vocal sources has been adopted throughout this chapter (and clarification given elsewhere in the thesis); the term *tremolo* is used to describe pitch variation, and the term *vibrato* to describe variation in intensity. Discussion of ‘vibrato effects’ refers to both these forms of tone variation.

Nineteenth century accounts of vibrato effects are often confused, but there are examples of (late) nineteenth-century writers attempting to address the confusion directly by making a clear distinction between the vibrato and the (less desirable) tremolo:

I should remark that tremulousness must not be confounded with oscillation, which is a good effect produced by a strong, vibrating, sonorous voice.<sup>7</sup>

What have you to say of the tremolo so often noticed in singers? That comes from the explosive use of the breath [forcing]. It is a defect, but the vibrato, often confounded with the tremolo, is a natural effect.<sup>8</sup>

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cites passages to this effect from Robert Donington, 'Vibrato', in *Grove's Dictionary of Music and Musicians*, ed. by Eric Blom (London: Macmillan, 1954), p. 764.

<sup>6</sup> *Psychology of the Vibrato in Voice and Instrument*, ed. by Carl E. Seashore, Studies in the Psychology of Music (Iowa City: University of Iowa, 1936), vol. iii, p. 73.

<sup>7</sup> Francesco Lamperti, *The art of singing according to ancient tradition and personal experience: technical rules and advice to pupils and artists*. trans. by Walter Jekyll (New York: Ricordi, 1884). Cited in Richard Bethell, 'Vocal Vibrato in Early Music', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/bethell/>> [accessed 9 January 2012]. Bethell has also referenced text from an 1877 edition that matches the text in the 1890 edition cited elsewhere in this thesis; Francesco Lamperti, *The Art of Singing* (New York: Schirmer, 1890).

<sup>8</sup> 'About the Old Italian System of Tone Production - Many Hints to Singers and Teachers', *Boston Daily Globe*, 1886. Cited in Bethell, 'Vocal Vibrato in Early Music'.

Bethell (2011) has suggested that differentiation between the terms in the late nineteenth-century accounted purely for pitch extent, but this interpretation fails entirely to acknowledge the existence of the vibrato (of intensity):

[I]n the last two decades [of the nineteenth century], commentators start to discriminate between oscillation levels. If narrow, it was called vibrato and the singer was sometimes praised. If wider, it was dubbed tremolo and the singer censured.<sup>9</sup>

In *Vocal Vibrato in Early Music* (2011) Bethell included a number of late nineteenth-century reviews that describe Emma Albani's use of (intensity) vibrato as extreme and disagreeable, and yet by modern standards the singer appears to have employed only sparing use of the device:

[S]he appears unable to sing without using the vibrato to an unpleasant extent.<sup>10</sup>

Mdme. Albani indulged rather freely in an obnoxious vibrato.<sup>11</sup>

... very much marred her rendering of 'O come unto Him' by persistent and excessive vibrato.<sup>12</sup>

Her performance of Chaminade's *L'Été* (emulated in the Recorded Portfolio, CD 2: Track 8) demonstrates very little vibrato, only allowing the (intensity) vibrato to develop on high sustained notes. A general survey of recordings of Albani shows that she varied her use of vibrato quite considerably from extremely little variation of the tone, to an undulation one might recognise in a modern singer, although (even at its extreme) its intermittent nature remained far from modern expectations of vibrato usage.<sup>13</sup> It is possible that Albani could

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<sup>9</sup> Bethell, 'Vocal Vibrato in Early Music'.

<sup>10</sup> 'Music and Drama, Faust, Auditorium', *Chicago Daily Tribune*, 1889. Cited in Bethell, 'Vocal Vibrato in Early Music'.

<sup>11</sup> 'Messiah, St. George's Hall, Bradford', *Leeds Mercury*, 1892. Also in Bethell, 'Vocal Vibrato in Early Music'.

<sup>12</sup> 'Messiah, Birmingham Festival', *Bristol Mercury and Daily Post*, 1894. Also in Bethell, 'Vocal Vibrato in Early Music'.

<sup>13</sup> See *Virtual Gramophone*, Library and Archives Canada <<https://www.collectionscanada.gc.ca/gramophone/index-e.html>> [accessed 7 May 2014].

have changed her vocal style in response to criticism, but she displays varied vibrato usage in recordings that date from the same calendar year, and there does not appear to have been a noticeable trend of change across time. The reviews collated by Bethell illustrate changing tolerance of vibrato effects in expressive singing over time, and it is plausible that Albani's somewhat varied approach to vibrato was relatively unusual at the time of writing.

Nellie Melba also varied her vibrato usage, as is demonstrated in her recorded performances of Mozart's *Voi, che sapete* in both 1907 and 1910 (emulated on CD 2: Tracks 5 and 6), and her performance of Bishop's *Home, sweet home* in 1905 (CD 2: Track 2).<sup>14</sup> In the 1905 *Home, sweet home* recording Melba's vibrato is swift and small scale, but fairly continuous. The 1907 Mozart performance also demonstrates a frequent flickering variation of intensity, but in the 1910 performance of the same aria the incidence of vibrato usage is much less frequent and the extent of the vibrato much less noticeable. Melba's vibrato in the 1905 and 1907 examples is particularly interesting as it seems to be glottal in nature, and not induced purely by breath flow; this suggests that Melba was indeed making a conscious stylistic decision to vary her vibrato usage.<sup>15</sup> Later recordings suggest that she continued this varied approach. Melba does not seem to have been widely criticised for her vibrato use, although in some recorded performances her usage appears noticeably more widespread than Albani's.

Some late nineteenth-century reviews describe growing acceptance of a more continuous vibrato (and demonstrate further changes in, and confusion with, terminology):

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<sup>14</sup> All three recordings can be heard online. Nellie Melba, 'Matrix C-4353. Voi che sapete', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200006070/C-4353-Voi\\_che\\_sapete](http://victor.library.ucsb.edu/index.php/matrix/detail/200006070/C-4353-Voi_che_sapete)> [accessed 4 May 2014]. Nellie Melba, 'Matrix 523c. Home, sweet home', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/1000003607/523c-Home\\_sweet\\_home](http://victor.library.ucsb.edu/index.php/matrix/detail/1000003607/523c-Home_sweet_home)> [accessed 4 May 2013].

<sup>15</sup> This technique was employed in the emulation of the 1907 *Voi, che sapete* recording (CD 2: Track 5), and the emulation of the 1905 *Home, sweet home* recording (CD 2: Track 2).

Many singers, especially young singers, fall into the habit of using the ‘tremolo’ or ‘vibrato’. The former is, as the word implies, a trembling of the voice, and may be dismissed as simply vulgar and offensive. The ‘vibrato’ stands on a different footing. It is impossible to pass a sweeping condemnation upon it, seeing that it is adopted by nearly the whole Italian school – that school to which we are accustomed to look for the proper production of the voice.<sup>16</sup>

The romance in the first scene, ‘Quando il cor’, at once showed that Signor Tamberlik’s voice was in excellent condition, while the richness of his tones, accompanied by that peculiar ‘vibrato’, which, after some discussion, has been accepted not merely as a peculiarity, but (when under entire control, as now) a beauty, gave additional effect to his large and finished style of phrasing, leaving the ear and judgment equally satisfied.<sup>17</sup>

Lehmann (1906) also seems to have acknowledged a similar differentiation between vibrato and tremolo, although, like others, she adopted a ‘slippery slope’ argument to warn against overuse:

Even the vibrato, to which full voices are prone, should be nipped in the bud, for gradually the tremolo, and later even worse, is developed from it. Vibrato is the first stage, tremolo the second; a third and last, and much more hopeless, shows itself in flat singing on the upper middle tones of the register.<sup>18</sup>

Bethell (2011) has suggested that nineteenth- and twentieth-century singers continued to avoid any negative connotation that might remain from previous negative characterisation of vibrato effects: ‘[s]ingers in particular found euphemisms to replace the word [vibrato]’.<sup>19</sup> This has in fact continued in the ambiguous discussion of ‘sweetening’ or ‘warming’ vocal sound, which modern singers often interpret as being a direction to use (additional or different) vibrato effects.

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<sup>16</sup> ‘Ingleby’, *Murray’s Magazine*, 1888. Cited in Bethell, ‘Vocal Vibrato in Early Music’.

<sup>17</sup> ‘Messiah, St. George’s Hall, Bradford’, *Leeds Mercury*, 1892. ‘Royal Italian Opera, Donizetti’s Maria di Rohan’, *The Times*, 1852. Both cited in Bethell, ‘Vocal Vibrato in Early Music’.

<sup>18</sup> Lilli Lehmann, *How To Sing*, trans. by Richard Aldrich (New York; London: Macmillan & Co, 1906), p. 174. Lehmann also described how poor breath control and consequent ‘overstraining’ could result in unsteadiness of vocal sound: ‘the hideous tremolo to which so many singers fall victim’ (p. 152-153).

<sup>19</sup> Bethell, ‘Vocal Vibrato in Early Music’.

### 3.2. PITCH VARIATION: ‘TREMOLLO’

Discussion of pitch deviation in the nineteenth century commonly used the terminology of the tremolo. Pitch deviation was often described as a fault, as is the case in these excerpts from *The Times* (1801), *The Examiner* (1848), *The Arts* (1851), and Wood’s *Gentle Art of Singing* (1930):

Some of her lower notes were rather tremulous at the commencement of the Opera; but this circumstance must be attributed to her emotions on again coming forward as a candidate for public favour after so long an interval.<sup>20</sup>

... we must enter our protest once more against this lady’s imitation of the infirmity of age – against that tremulousness of voice which many of the Italian singers of the present day affect. This is what they call *vibrazione di voce* – a vice which can only be accounted for by supposing that the constant practice of singing occasionally damages the brain.<sup>21</sup>

But Tamberlik – the glorious Tamberlik!... I don’t like the constant tremulousness of his voice; it is a defect in him as in Rubini; but what singers they are in spite of their defects!<sup>22</sup>

There has been a good deal written and said lately about the vocal tremolo which is out of place, but it is no new fault. [...] If it is not taken in hand at the very first singing lesson, it grows rapidly into a habit, and becomes so firmly established that it is most difficult to eradicate and is always liable to crop up from time to time. A tremolo often reaches the audience as out-of-tuneness. [...] The voice with the tremolo never blends with the still tones of the other. The sharpness and flatness of tremolo become clear. Why is it that, in an orchestral concert of classical music, the public would not stand a trumpet player with a tremolo, but submits to it from a singer?

In the modern, agitated world of music, we had become so accustomed to the tremolo, as part of musical expression, that we were forgetting what fine, steady, still singing tone really is.<sup>23</sup>

Confusion regarding the changing terminology of vibrato effects was ongoing throughout this period, sometimes encouraged by the incorrect classification of poorly controlled

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<sup>20</sup> 'Mrs Billington as Mandane in Ataxerxes, at Covent Garden', *The Times*, 1801. Cited in Bethell, 'Vocal Vibrato in Early Music'.

<sup>21</sup> 'Fourth Concert of Ancient Music under the Direction of the Prince Albert', *Examiner*, 1848. Also in Bethell, 'Vocal Vibrato in Early Music'.

<sup>22</sup> 'Leader', *The Arts*, (Masaniello) 1851. Cited in Bethell, 'Vocal Vibrato in Early Music'.

<sup>23</sup> Henry Joseph Wood, *The Gentle Art of Singing: Abridged Edition in One Volume* (London: Oxford University Press, 1930), pp. 80, 95.

singing as examples of an intentional vibrato effect. The aesthetic value of the tremolo has always been a source of disagreement, and accusations of weak breath control and poor muscle control were regularly aimed at those deemed guilty of tremolo abuse in the mid-late nineteenth century.<sup>24</sup> A wavering of pitch was certainly avoided by many, and both Rubini and Malibran are said to have developed expressive mannerisms to cover an involuntary ‘tremolo’.<sup>25</sup>

Bériot (1858) specifically warned against allowing the voice to appear tremulous:

This habit, *involuntarily acquired*, degenerates into a goat-like noise [chevrottement] or nervous trembling, which one can no longer master, which produces a fatiguing monotony.<sup>26</sup>

It is curious that Bériot derided this effect whilst also suggesting that singers were powerless to prevent its acquisition; this suggests that Bériot was describing the audible effects of poor muscle control (perhaps caused, or exacerbated by, performance anxiety). This incredulous account from the celebrated singer Maria Malibran also links unsteadiness and stage fright, making clear that she did not expect an accomplished performer to display any tremulousness of voice:

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<sup>24</sup> James A. Stark, *Bel Canto: a History of Vocal Pedagogy* (Toronto; London: University of Toronto Press, 1999), p. 136.

<sup>25</sup> Howard Bushnell, *Maria Malibran: a Biography of the Singer* (University Park; London: Pennsylvania State University Press, 1979), p. 127. Bushnell wrote that ‘[h]er soprano voice was sonorous as formerly, but on sustained high notes it seemed occasionally to reveal an incipient tremolo that she cleverly countered with successive accents’, referring the reader to *La Revue de Paris* Volume 20 (1830): 256-57. See also M. Sterling Mackinlay, *Garcia the Centenarian and his Times: Being a Memoir of Manuel Garcia's Life and Labours for the Advancement of Music and Science* (Edinburgh; London: William Blackwood and Sons, 1908), pp. 281-282. Stark has asserted that Mackinlay’s anecdote refers to Rubini, a singer who was often cited as having indulged in tremolo. Stark, *Bel Canto*, p. 136. Age does not seem to have been a factor in these cases, although a decrease in vibrato rate and increase in vibrato extent has been noted as singers advance in age, suggesting that slow or wide vibrato/tremolo effects may often be attributed to poor muscle control. See Johan Sundberg, Marie Niska Thörnvik, and Anna Maria Söderström, ‘Age and voice quality in professional singers’, *British Voice Association: Logopedics Phoniatrics Vocology*, 23.4 (1998), 169-176.

<sup>26</sup> Charles de Bériot, *Méthode de Violin* (Mainz: [n.pub.], [1858]), p. 242. Translated in Clive Brown, ‘Singing and String Playing in Comparison: Instructions for the Technical and Artistic Employment of Portamento and Vibrato in Charles de Bériot’s *Méthode de violon*’, in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, ed. by Claudio Bacciagaluppi, Roman Brotbeck, and Anselm Gerhard (Schliengen: Argus, 2009), pp. 83-108 (p. 100).



The recitative began ... her voice shook so badly that I could not judge whether it was sour, sweet, or otherwise. I patiently awaited the cavatina so I could judge. Begins the cavatina... She spun out a sound like ~~~~~ . There I was, pitying this unfortunate woman who could not find her courage. She finished her aria, which is very pretty and which she consistently sang with that bad wobble. [...] Next came the beautiful duet, which you know. She sang this coldly and always with the tremble. [...] I have discovered that this manner of singing and the sound like ~~~~~ is an unchangeable trait, fixed, eternal! You can guess how well our voices will go together... two by two like three goats.<sup>27</sup>

A review in the *Magazine of Music* (1890) suggests a general change in attitude toward vibrato effects as the nineteenth century drew to a close, telling us that '[f]ifty years ago a singer would have been hissed as incompetent whose voice quavered in this preposterous fashion.'<sup>28</sup> Late nineteenth-century reviews can also be found to suggest a greater tolerance of tremolo in the opera house:

Signor Rawner is a robust tenor of the school now popular in Italy. He has a powerful voice, which he uses unsparingly; and although not free from the vibrato, the defect is not so pronounced as to become unpleasant.  
... his voice might have been steadier with an advantage; an amount of tremolo which is scarcely noticed on the stage at the present day is most obtrusive in the concert-room.<sup>29</sup>

[Denis] O'Sullivan was an ideal Shamus O'Brien... In Concert he is afflicted with a vibrato that borders on a tremolo, but in opera this defect is scarcely apparent, and otherwise his singing leaves nothing to be desired.<sup>30</sup>

This might be considered true of modern opera also, where the occasion and spectacle of a staged opera distracts the tremolo-sensitive listener, and the allowance of uncontrolled tremolo on the operatic stage perpetuates the stereotype of the warbling opera star. The wavering of pitch does not appear to have been directly encouraged at any point during this

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<sup>27</sup> Bushnell, *Maria Malibran*, p. 112.

<sup>28</sup> 'Vocalists and Wobblers', *Magazine of Music*, 1890. Cited in Bethell, 'Vocal Vibrato in Early Music'.

<sup>29</sup> 'Il Trovatore at Covent Garden', *Daily News*, 1890. Also in Bethell, 'Vocal Vibrato in Early Music'.

'Mr William Ludwig at Crystal Palace Concert', *The Times*, 1891. Also in Bethell, 'Vocal Vibrato in Early Music'.

<sup>30</sup> 'Shamus O'Brien at the Tivoli', *San Francisco Call*, 1897. Also in Bethell, 'Vocal Vibrato in Early Music'.

period.

### 3.3. INTENSITY VARIATION: ‘VIBRATO’

Positive accounts of vibrato effects that date from the eighteenth and early nineteenth centuries refer to a neutral-larynx vibrato of intensity, execution of which is ‘dependent on the intensity of the air pressure’.<sup>31</sup> Variation in the air pressure a singer exerts can affect intonation, but the execution of this effect causes only ‘insignificant variation’ in pitch that is indiscernible to the listener.<sup>32</sup> Controlled variation in intensity can be used to expressive effect, as Leopold Mozart (1778) described:

The tremolo is an ornament which arises out of nature itself. It can effectively be used not only by good instrumentalists, but also by trained singers, especially on long notes. One’s own nature is the best teacher thereof. For if we strike a slack string or a bell, so we hear after the stroke a certain wave-like vibration (ondeggiamento) [sway] of the tone. This trembling sound we call the tremolo, or also den Tremulanten.<sup>33</sup>

This reference emphasises once more the difficulty inherent in dealing with changing terminology in the discussion of vibrato effects. It is my belief that descriptions of bell-like vibration or ‘sway’ on ‘a single tone’ refer to intensity vibrato, *not* pitch tremolo. Early nineteenth-century reviews also described intensity variation as a pleasing effect in singing:

[Miss Tree’s voice] is not at all powerful; but it is perfectly clear and sweet in the upper notes, and some of the lower ones have a fine, rich glowing tone – like the musical murmur of the honey-bee.<sup>34</sup>

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<sup>31</sup> Jochen Gärtner, *The Vibrato, with particular consideration given to the situation of the Flutist: Historical Development, New Physiological Discoveries, and Presentation of an Integrated Method of Instruction*. trans. by Einar W. Anderson (Regensburg: Gustav Bosse Verlag, 1981), p. 45.

<sup>32</sup> Gärtner, *The Vibrato*, p. 45.

<sup>33</sup> Leopold Mozart, *Versuch einer gründlichen Violinschule* (Augsburg: [n.pub.], 1756), p. 238. Cited in translation in Gärtner, *The Vibrato*, p. 24. Nicholson (1821) also likened (flute) vibrato to that of the glass or bell. See Charles Nicholson, *Preceptive Lessons for the Flute* (London: [n.pub.], 1821), p. 5.

<sup>34</sup> ‘Miss Tree and Mr Phillips’, *Blackwood’s Edinburgh Magazine*, 1819. Cited in Bethell, ‘Vocal Vibrato in Early Music’. Although the honeybee can change the pitch of its sound, its general

The more we see of this lady [Mademoiselle Bonini], the more we like her... This effect, moreover, is greatly heightened by the fascinating quality (timbre) of her voice, in which there are some beautiful notes of the sweetest tremulousness that vibrate to the heart of the hearer. It was a similar quality of tone which proved irresistibly sweet in Miss Tree's voice, and rendered her singing more effective than that of a rival of greater professional skill.<sup>35</sup>

Although differentiation between varying forms of vibrato effects is uncommon in current discussion, some writers have sought to make a distinction between pitch tremolo and intensity vibrato. Moens-Haenen (2011) argued that 'a slow intensity vibrato cannot always be distinguished from a multiple *messa di voce*', but this seems an unlikely reading of Baroque treatises that reference ringing bells or low harpsichord strings. Her comment could suggest an effect like the inflections described by Garcia – a device entirely distinct from vibrato (see Chapter Four, Section 4.1.4.) – or relate to the use of *messa di voce* symbols to represent (string) vibrato in the nineteenth century.<sup>36</sup> Even in the transitional early-mid nineteenth century period, pitch variance was clearly considered secondary to passionate excitement of the vocal tone using air pressure, as this comment by Fürstenau suggests:

The *Bebung* or shaking of the tone [on a single pitch] is an imitation of a similar expression of the human voice while singing, where it is often natural and of a gripping effect on the listener as a revelation of a passionate inner feeling and excitement.<sup>37</sup>

The vibrato of intensity can be executed consciously by variation of air flow (as discussed by Quantz), but can also be observed in a different form when a performer sings

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effect is not of pitch oscillation, but rather undulation of intensity upon the same pitch. See Martyn Stewart, 'Honey Bee', *The Sound of Critters: Bird and Animal Sounds Across the Planet* (2014) <<http://soundofcritters.com/archives/1306>> [accessed 18 May 2014].

<sup>35</sup> (Reviewer, *New Monthly Magazine and Literary Journal*, Bonini as Agia in *Pietro l'Eremita* (version of Moses) 1826). Cited in Bethell, 'Vocal Vibrato in Early Music'.

<sup>36</sup> Justus Johann Friedrich Dotzauer, *Méthode de violoncelle/Violonzell-Schule* (Mainz: [n.pub.], [c.1825]), p. 47. Cited in Brown, *Classical and Romantic Performing Practice*, pp. 538, 552. This convention has not been observed in vocal sources.

<sup>37</sup> Anton Bernard Fürstenau, *Flöten-Schule* (Leipzig: [n.pub.], [1826]), p. 79. Translated in Gärtner, *The Vibrato*, p. 32. The term 'bebung', having originated as a keyboard technique, refers to a vibrato effect specifically upon one pitch. See Edwin M. Ripin and G. Moens-Haenen, 'Bebung', in *Grove Music Online*, Oxford Music Online.

at high frequency with a lowered larynx.<sup>38</sup> In unpublished research that used conceptual manipulations of the two sections of the vocal tract (the larynx tube and the pharynx tube), Delvaux has observed an oscillation between two patterns of the singing formant that occurred only when particular ratios between the dimensions of the larynx and pharynx tubes were present.<sup>39</sup> Further research is needed to confirm any possible link between Delvaux's observation and intensity vibrato effects, but creating the conditions required to produce this effect would, in theory, require only minute movement of the vocal tract, and could result in an audible variation of timbral intensity (*not* pitch variation).<sup>40</sup> A physiological influence of this kind could be responsible for the low-larynx vibrato of intensity hinted at above – the sensation of oscillation and 'spin' in a resonant (low-larynx) sound that displays a beating of intensity that it not consciously controlled by the singer. This 'spin' is demonstrated on CD 4: Track 14.<sup>41</sup> Convincing examples can be heard in performances that display little stylistic vibrato (as the presence of both effects can often cause confusion). It is plausible that the effect would be more noticeable in soprano voices; formants occur at wider intervals as pitch ascends, meaning that the difference between the two formant patterns would be more easily identified in the soprano range.<sup>42</sup> Further scientific research in this area would be of great interest to discussion of historical approaches to voice production and vibrato.

One possible explanation for the growing use of stylistic tremolo during the nineteenth century is that tremolo was (and remains) more easily executed by amateurs than the involuntary fluctuation of intensity (vibrato) that occurs when a trained singer sings at high frequency with a lowered larynx. The production of this novel effect by singers and teachers would gradually create an expectation of some form of vibrato effect

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<sup>38</sup> Johann Joachim Quantz, *On Playing the Flute: the Classic of Baroque Music Instruction*. trans. by Edward R. Reilly, 2nd ed. (London: Faber, 2001), p. 140.

<sup>39</sup> These (unpublished) observations were shared by Bertrand Delvaux in conversation at the University of York on 6 August 2013.

<sup>40</sup> Discussion with Bertrand Delvaux at York University, 6 August 2013.

<sup>41</sup> The vocal onset on this track is not perfect, but the effect can be clearly heard from 0:01.

<sup>42</sup> Discussion with Bertrand Delvaux at York University, 6 August 2013.

as an indicator of vocal training, and then encourage imitation, first on high notes where this phenomenon naturally occurs, and eventually throughout the range. Bethell (2011) has already noted the role of imitation in growing vibrato usage:

In this phase the innovators were followed by numerous imitators. Around the mid-1850s, reviewers reported that continuous vibrato was becoming common [...]. The proportion of favourable or neutral reviews on vibrato fell to about 5%. From 1860, critical notices on vibratoists come thick and fast[.]<sup>43</sup>

Lawson and Stowell (1999) have also noticed a link between changing vocal technique and the growing usage of vibrato effects:

During the nineteenth century the need for greater vocal power influenced technique, not least in the matter of vibrato, which began to be specified by composers as an expressive device and was to grow in continuity and strength.<sup>44</sup>

The following review in *The Musical World* also suggests emulation by amateurs, and the use of stylistic vibrato (or tremolo) in an attempt to (falsely) signify proficiency in singing:

The pure female voice is fast disappearing from the opera, the concert, the performing church choirs, and all other places of pretentious singing. We mean not the voice of the pure female, but the pure voice of a female. It is fast degenerating into that shaking palsy which is sometimes called the tremolo, sometimes the vibrato, but which is more correctly described by the vernacular term, wabbling. Singers accepted as prima donne in opera practice [sic] this wabbling until they cease to have a single correct note. Such shallow tricks and meretricious ornaments are always more quickly imitated than any correct manner, because this affords an easy way to sing like an opera singer. Fond mammas think their girls are quite up to prima donne when they get this shaking palsy. [...]  
Nor is it of women alone. The same wobble has grown among men singers in the opera during the last twenty years, and thus all singing is getting shattered. [...] This condition of the people does not encourage the highest attainments in the singer's art, but it gives a chance to captivate in an easier way by false ornamentation. So corrupted has the public taste become by this that it tolerates and even applauds such a wabblers as \* \* \* \* who in a whole opera never strikes a correct note, scattering herself all around the note, like a charge of bird shot. She has no distinct note, only a blurr. She can make runs by semi-tones or quarter-tones

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<sup>43</sup> Bethell, 'Vocal Vibrato in Early Music'. Bethell has not acknowledged a distinction between vibrato and tremolo.

<sup>44</sup> Colin Lawson and Robin Stowell, *The Historical Performance of Music: An Introduction*, Cambridge Handbooks to the Historical Performance of Music (Cambridge: Cambridge University Press, 1999), p. 91.

as well as by whole tones; nobody can tell which they are, for they have no single tones. In florid music she makes no articulation of notes; it is simply a mixing up of all – a muddle. Add to this her strokes of tremulous force in the prolonged high notes, on which her voice becomes a scream, and a manner of drawing out some particularly favoured low notes into a prolonged howl[.] [...] But this singer goes down the public throttle, and most of those that rank lower are cultivating the shaking palsy more or less.<sup>45</sup>

Growing use of the tremolo in attempts to emulate the low-larynx intensity vibrato might also account for the gradual acceptance of pitch variation in vocal sound, and subsequent derision only of particularly pronounced tremolo.

Current theorists often interpret the abundance of a particular vibrato effect as a sign of good or desirable singing. The subjective comments below are from scientific research of vocal vibrato:

The regularity of this modulation [vibrato] is considered a sign of the singer's vocal skill: the more regular the vibrato, the more skilled the singer.<sup>46</sup>

[V]ibrato is considered a key indicator of good singing.<sup>47</sup>

Vibrato tends to increase in regularity as voice training proceeds successfully.<sup>48</sup>

Seashore (1938) believed that 'a pulsating quality of tone in the form of periodic rise and fall in pitch is almost universal in good singing, is freely imitated by instruments, notably by the string instruments, and frequently is present in emotional speech'.<sup>49</sup> He failed to acknowledge that, even in times of great stress, the speaking voice does not usually present a continuous or uniform pulsation. Bériot (1858) described the vibrato as a device that mirrored 'the emotion of the soul' at particularly passionate moments, and was therefore not designed to be used continuously:

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<sup>45</sup> D.B., 'A Mild Wobble about Wabbling', *Musical World*, 57.52 (1879), 821.

<sup>46</sup> Johan Sundberg, *The Science of the Singing Voice* (Illinois: Northern Illinois University Press, 1987), p. 163.

<sup>47</sup> Helen F. Mitchell and Dianna T. Kenny, 'The effects of open throat technique on long term average spectra (LTAS) of female classical voices', *British Voice Association: Logopedics Phoniatrics Vocology*, 29.3 (2004), 99-118.

<sup>48</sup> Johan Sundberg, 'Acoustics, VI: The Voice', in *Grove Music Online*, Oxford Music Online.

<sup>49</sup> Carl E. Seashore, *Psychology of Music* (New York: McGraw Hill Book Company, 1938), p. 44.

We understand that a certain undulation or trembling of sustained notes which, in singing, indicate the emotion of the soul transmitted by the voice. The vibrato is an accomplishment in the hands of the artist who knows how to use the effects sparingly and to abstain from it when appropriate, but it becomes a fault when one uses it too frequently.

[...] Vibrato, therefore, must not be used except where the dramatic action requires it; but the artist should not seek to acquire this dangerous ability, which he must not use except with the greatest moderation.<sup>50</sup>

The theory that an increase in the use of vibrato effects in the mid nineteenth century was related to a change in vocal technique is strengthened by the increased prevalence of discussion of vibrato in this period. Bethell (2011) has described the increasing use of vibrato as ‘a gradual phenomenon from 1825 or so onwards’; his discussion of the reception of vibrato also supports the theory that vibrato usage gradually became more common during the nineteenth century, and was noticeably different from previous usage.<sup>51</sup> As Potter (1988) has summarised:

In the sixteenth- and seventeenth-century treatises vibrato is rarely discussed, but by the second half of the nineteenth century the term appears in musical dictionaries and is clearly an issue.<sup>52</sup>

### 3.4. VIBRATO AS AN EXPRESSIVE ORNAMENT

To the average listener modern vocal vibrato effects may be ‘perceived by the ear as a quality characteristic of the tone rather than a pitch deviation’, but this outlook is the antithesis of the approach described by eighteenth- and nineteenth-century writers.<sup>53</sup> In this period vibrato effects were expressive devices that imitated the natural effects of emotion upon breath control and voice production, and were in no way associated with quality of

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<sup>50</sup> Bériot, *Méthode de Violin* p. 242. Translated in Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 100.

<sup>51</sup> Bethell, 'Vocal Vibrato in Early Music'.

<sup>52</sup> John Potter, *Vocal Authority: Singing Style and Ideology* (Cambridge: Cambridge University Press, 1998), p. 56.

<sup>53</sup> Clifton Ware, *Basics of Pedagogy: The Foundations and Process of Singing* (Boston: McGraw-Hill, 1998), p. 180.

vocal tone.<sup>54</sup> As Dart commented in *The Interpretation of Music*, ‘a vibrato was an ornament, comparable to a mordent, a trill, a messa di voce or a slide, and it is to be used no more and no less frequently than the other graces’.<sup>55</sup>

In the repertoire from *Traité complet de l'Art du Chant* (1847) Garcia’s annotations specify infrequent use of the tremolo. There are but two instances, in Crescentini: Aria inserted into *Romeo e Giulietta* by Zingarelli (CD 4: Track 10); one direction of ‘tremolo’ and another that implies its conjunction with portamento in the direction ‘trembling and soft portamento’.<sup>56</sup> Both these instances occur in a passage of desperation and despair, portraying emotions that would reasonably affect the speaking voice also.

During the late- nineteenth and twentieth centuries vibrato effects were gradually redefined as an integral element of vocal tone. Moens-Haenen (2011) has summarised the current position in the following terms:

A clearly audible, continuous vibrato intentionally produced by the musician is widely considered today as normal, especially among string players and singers. A vibratoless tone is often rejected as unnatural, above all by singers. Consequently, a relatively strong vibrato is assumed a priori to be a part of the tone quality.<sup>57</sup>

Moens-Haenen’s writing on this topic reinforces the theory that the vibrato of intensity began as an expressive ornament in singers with a neutral approach to larynx height, and that substantial wavering of pitch was certainly *not* perceived as a desirable part of vocal tone in the nineteenth century.<sup>58</sup> Acknowledging the use of vibrato effects as ornaments, Moens-Haenen has commented that ‘[c]omplaints about too-frequent use of vibrato [in Baroque music] are therefore often directed toward a vibrato that does not suit the character of the piece or else toward its use in pieces whose emotional content is not

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<sup>54</sup> Friedrich Wilhelm Marpurg, 'from Guide to Playing Keyboard Instruments (1755-61)', in *Music and Culture in Eighteenth-Century Europe: A Source Book*, ed. by Enrico Fubini (Chicago; London: The University of Chicago Press, 1994), pp. 290-292 (p. 292).

<sup>55</sup> Thurston Dart, *The Interpretation of Music* (London: Hutchinson's University Library, 1954), p. 50.

<sup>56</sup> CD 4: Track 10, Crescentini: Aria inserted into *Romeo e Giulietta* by Zingarelli, 0:42, 0:57; Appendix A, p. 276, third system, b. 3, b. 6.

<sup>57</sup> Moens-Haenen, 'Vibrato as expressive ornament'.

<sup>58</sup> Moens-Haenen, 'Vibrato as expressive ornament'.



designed for vibrato'.<sup>59</sup> Her writing confirms that '[n]owhere [in the Baroque period] is a noticeable continuous vibrato approved of. The fact that from time to time warnings are made about it, of course, proves that such a thing existed, but it was at least theoretically not tolerated'.<sup>60</sup> Continuous vibrato was still considered undesirable by many at the turn of the twentieth century; Joachim (1905) would accuse a violinist of 'the worst sort of bad taste':

[...] if he were to use the same vigorous vibrato during a melody of piano, dolce, or grazioso character as he would use in places which were indicated with forte, molto espressivo, appassionato, or similar expressions. But it would also be of bad effect, even in a melody indicated as molto or con gran espressione, if the performer were to vibrate without interruption on every note of every measure simply out of habit or because the notes 'lie well' in the hand. This would more or less be the viewpoint of some Italian tenors who give preference to those notes, holding them out the longest, which their voices produce the best, without concern about the sense of the musical phrase.<sup>61</sup>

A brief survey of early vocal recordings can serve to demonstrate growing vibrato usage in the opening decades of the twentieth century, charting the transformation of an expressive ornament into a fundamental component of vocal tone. Brown (2009) has observed this change in string performances also:

By the beginning of the twentieth century, recordings indicate that few players retained the older aesthetic, and during the next decades the increasingly frequent use of ornamental vibrato shaded into the continuous vibrato of the later twentieth century, employed by singers, string players and on some wind instruments as a fundamental element of a 'beautiful' tone.<sup>62</sup>

Compare, for example, the relatively clean performance style of Adelina Patti (and, in the case of Chaminade's *L'Été*, Emma Albani) with the vibrato usage of Nellie Melba, Lille Lehmann, Marcella Sembrich et al, and in turn with the continuous vibrato employed in

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<sup>59</sup> Moens-Haenen, 'Vibrato as expressive ornament'.

<sup>60</sup> Moens-Haenen, 'Vibrato as expressive ornament'.

<sup>61</sup> Joseph Joachim, *Violinschule*, (1905). Cited in Gärtner, *The Vibrato*, p. 37. The edition Gärtner cited is presumably the 1905 English translation by Alfred Moffat. Joseph Joachim and Andreas Moser, *Violinschule*. trans. by Alfred Moffat (Berlin: N. Simrock, 1905).

<sup>62</sup> Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 87.

many modern performances of similar repertoire (See Chapter Six and CD 2 of Recorded Portfolio). Patti is well-known as a representative of mid nineteenth-century singing, and as a particular favourite of Verdi, who described her as ‘an artist so complete that there has never been her equal!’<sup>63</sup> This is surprising in the face of vibrato-laden modern operatic renditions of Verdi’s work. As Brown (1999) has observed, ‘many practices that would have been categorized as *vibrato* or *tremolo* in the nineteenth century would not now be readily recognised as vibrato.’<sup>64</sup>

In *Classical and Romantic Performing Practice* Brown confirmed that the interpretation of vibrato as an integral or desirable part of vocal tone was, at the very earliest, a twentieth-century development:

During the period from 1750 to about 1900 the various types of vibrato then in use were regarded almost exclusively as ornamental. [...] [T]here seems to have been a broad consensus among the great majority of musical authorities that the basic sound should be a steady one and that vibrato, along with other ornamental techniques, should occur as an incidental colouring or embellishment on particular notes.

[...]

Universal acceptance of continuous vibrato in singing and on other instruments followed even later. At least until the 1930s there were still many influential performers and teachers who remained unreconciled to this new attitude towards vibrato, continuing to believe that its too-frequent use impaired rather than improved tone quality, that it deprived performance of an important level of expressiveness, and that it was inimical to purity of intonation and ensemble.<sup>65</sup>

The modern operatic vocal standard tends to strive for continuous vibrato that colours every note in its entirety, but the over-arching application of the principle of *chiaroscuro* in nineteenth-century singing would suggest that a more intermittent, ornamental approach is most appropriate for the realization of nineteenth-century repertoire. Tosi (1723) commented upon the application of the (intensity) vibrato directly, writing that:

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<sup>63</sup> Correspondence from Verdi to Count Opprandino Arrivabene (December 1877). Reproduced in Franco Abbiati, *Giuseppe Verdi* (Milan: [n.pub.], 1959), vol. iv, p. 38. Translated in Roger Freitas, 'Towards a Verdian Ideal of Singing: Emancipation from Modern Orthodoxy', *Journal of the Royal Musical Association*, 127.2 (2002), 226-257 (p. 231).

<sup>64</sup> Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 87.

<sup>65</sup> Brown, *Classical and Romantic Performing Practice*, p. 521.

[t]he vibrato on one note – which is achieved on string instruments by rocking the fingertip back and forth on the same note, making the pitch neither higher nor lower, but gently beating it – is also an ornament that in singing is especially effective on long sustained notes, particularly when applied towards the end of such notes.<sup>66</sup>

The use of vibrato only at the close of a phrase is also an issue for future research. References neither advocate nor warn against the vibration of tone at the close of a phrase in this period, suggesting that this approach might have been appropriate where it was used for ornamental effect, but that it was not common enough to warrant particular comment. As became evident during phases of practical experimentation, this device can occur unconsciously in the context of generally frequent vibrato (and tremolo) use in modern classical singing; further consideration of phrase-endings in relation to the application of vibrato effects is necessary.<sup>67</sup> The presence of continuous vibrato can often confuse the clarity of other ornamentation: it is notable that it is often difficult to distinguish between the trill and vibrato in modern performances (and indeed some early vocal recordings).

### 3.5 PHYSIOLOGICAL CONSIDERATIONS

Modern singers often view vibrato as ‘a natural part of healthy singing’, and it is certainly true that the formation of vocal sound requires the vibration of the vocal folds.<sup>68</sup> The vibration of the vocal folds does not, however, involve the mechanism responsible for pitch control; such an argument cannot be used to encourage the application of a permanent, continuous vibrato effect in repertoire that pre-dates the twentieth century.

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<sup>66</sup> *Introduction to the art of singing by Johann Friedrich Agricola*, ed. by Julianne C. Baird, trans. Julianne C. Baird (Cambridge: Cambridge University Press, 1995), p. 149. This reference suggests that vibrato need not be applied to a note in its entirety, particularly where the note is of considerable duration: further research into the exact application of vibrato in early vocal recordings would be beneficial.

<sup>67</sup> A personal tendency to add vibrato to the close of phrases was noted in early experimentation. This effect was not consciously intended, but had become habit.

<sup>68</sup> Martha Elliot, *A Guide to Vocal Performance Practice* (New Haven: Yale University, 2006). Cited in Bethell, 'Vocal Vibrato in Early Music'.

Stark (1999) has reported a theory that vocal vibrato is an integral part of singing caused by a neuro-muscular tremor that muscles naturally display when under stress.<sup>69</sup> As many singers display a pronounced vibrato when first beginning to sing on a given day, and display a fairly constant vibrato rate across large time periods, it cannot be argued that the cause of their vibrato is muscle fatigue or stress. This argument appears to be one of convenience for those who prefer stylistic vibrato effects that are pronounced and/or continuous. Stark has also asserted that uncontrollable muscular tremor can involuntarily include the tongue and side walls of the pharynx and jaw, but such movement is considered unnecessary by many, and derided by some as a vocal defect.<sup>70</sup> American soprano Vivica Genaux (b. 1969) is well known as a singer that allows the lips and mouth in general to take an active role in her singing of coloratura passages, although these movements do not appear to influence, or be influenced by, her vibrato usage.<sup>71</sup>

The muscular exertion argument seems to present vibrato as an unavoidable element of vocal sound; in summarising Bjørklund's 1961 study, Sundberg (1987) concluded that '[a]lmost all professional opera singers develop vibrato without thinking about it and without trying to actually acquire it.'<sup>72</sup> The very notion that vibrato *develops* over time confirms that it must be cultivated, and is not an inevitable element of vocal sound. It may be true that some degree of 'vibrato develops more or less by itself as voice training proceeds successfully', as Sundberg has alleged, but in my experience this development or 'maturing' of the modern operatic voice standard is the singer learning to create a free, open sound in the higher tessitura as they habituate the ability to lower the larynx and access (and enhance) the resultant vibrato of intensity.<sup>73</sup>

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<sup>69</sup> Stark, *Bel Canto*, pp. 139, 143, 151.

<sup>70</sup> Stark, *Bel Canto*, p. 140.

<sup>71</sup> There are a number of videos on YouTube of Genaux performing coloratura baroque repertoire that illustrate this kind of extraneous movement.

<sup>72</sup> Sundberg, *Science of the Singing Voice*, p. 163. See Alf Bjørklund, 'Analysis of soprano voices', *Journal of the Acoustical Society of America*, 33 (1961), 575-582.

<sup>73</sup> Sundberg, *Science of the Singing Voice*, p. 163. Cited in Stark, *Bel Canto*, p. 146.

The rate and extent of vibrato effects are rarely discussed objectively in eighteenth- and nineteenth-century treatises and accounts, and remain very hard to describe in detail without some form of quantitative analysis. This is an area that needs greater consideration, and would benefit from the computer analysis of early vocal recordings. Stark (1999) has written that a 'normal or acceptable vibrato rate' is currently between 5-8 pulsations per second, a slower rate than that of early twentieth-century singers heard in recordings.<sup>74</sup> Brown (1999) has also commented that, despite variations in usage the vibrato in these early recordings 'is always very narrow and controlled, and indeed in many cases it seems to be more a vibrato of intensity than one of pitch'.<sup>75</sup> Metfessi (1932) observed that listeners (whether or not musicians) often had difficulty distinguishing between variations in intensity, and variations in pitch, suggesting, as we might expect, that 'those who are most critical of the [pitch] vibrato are generally those with very sharp ears for pitch discrimination.'<sup>76</sup> This must surely have been an influence in the vast number of accounts deriding the tremolo in the late nineteenth century, and indeed in the continued discussion of vibrato effects.

Claims that audible tremolo or vibrato is naturally present in untrained voices are to be rejected – small children do not sing with the vibrato that is expected of the modern operatic singer: it is learnt through habituation and from example.<sup>77</sup> Theories on the physical origins of vibrato effects discussed in Seashore's collection *The Vibrato* (1938) range from the involuntary tremor of antagonistic muscles under stress, or the movement

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<sup>74</sup> Stark, *Bel Canto*, pp. 140-141. The ability to change the rate of vibrato effects has been demonstrated across the Recorded Portfolio. As tremolo was received negatively throughout this period experimentation with pitch extent was limited.

<sup>75</sup> Brown, *Classical and Romantic Performing Practice*, p. 535. Data regarding the rate and extent of vibrato used in early vocal recordings is not currently available; this is an area for future analysis.

<sup>76</sup> Milton Metfessi, 'The Vibrato in Artistic Voices', in *The Vibrato*, ed. by Carl E. Seashore, Studies in the Psychology of Music (Iowa City: University of Iowa, 1932), vol. i, pp. 14-117 (pp. 52-53, 60, 85, 88).

<sup>77</sup> Seashore noted that vibrato in children is 'spasmodic, far from universal, and increases with age' but failed to relate this to the development of stylistic vibrato (or tremolo) for aesthetic effect. See *The Vibrato*, ed. by Carl E. Seashore, Studies in the Psychology of Music, vol. i (Iowa City: University of Iowa, 1932), p. 351. Cited in Stark, *Bel Canto*, p. 146.

of the diaphragm, to involuntary ‘beats or interference of overtones’, changes in resonance in the mouth and nose, and a ‘fluttering’ of the throat.<sup>78</sup> Current discussion of vibrato remains as varied and passionate, but it is clear that the modern attitude to vibrato usage is directly opposed to the selective approach of nineteenth-century singers. The assertion that vibrato is ‘a primary element in the sophisticated vocal matrix of the cultivated voice’ may be considered true in the context of the modern operatic vocal standard, but it cannot be used to substantiate the use of continual pitch tremolo or intensity vibrato in eighteenth- and nineteenth-century repertory.<sup>79</sup>

### 3.6. NON-VIBRATO APPROACH

Many theorists have taken (or accused others of having taken) a polarised approach to the debate on vibrato usage. Singers have been accused either of wanton vibrato usage that shows little regard for historical practice, or of producing dull, lifeless performances that fail to capture the emotive capacity of a particular work. A failure to acknowledge the vastly different vocal technique of earlier eras has entrenched confusion about vibrato effects and the singing voice. Colin Davis has recently been reported as saying ‘I’ve never heard a voice sing with no vibrato. It doesn’t make sense.’<sup>80</sup> This kind of counter-argument is misleading to the casual reader as he has referred only to the professional solo voices of the modern operatic vocal standard. Plank (2004) has suggested a ‘physical *need* for continuous vibrato’ in modern singing, especially on the operatic stage, as:

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<sup>78</sup> Arnold H Wagner, 'Remedial and Artistic Development of the Vibrato', in *The Vibrato*, ed. by Carl E. Seashore, Studies in the Psychology of Music (Iowa City: University of Iowa, 1932), vol. i, pp. 166-212 (pp. 168-169). Metfessi, 'The Vibrato in Artistic Voices', in *The Vibrato*, pp. 80-81, 84.

<sup>79</sup> Stark, *Bel Canto*, p. 151.

<sup>80</sup> Jessica Duchon, 'Champion of the Baroque: Sir Colin Davis speaks out', *The Independent* (2012) <<http://www.independent.co.uk/arts-entertainment/classical/features/champion-of-the-baroque-sir-colin-davis-speaks-out-7581984.html>> [accessed 20 April 2012].

attempts at straight-tone singing with high breath pressure can produce a problematic tension, but again, the high breath pressure required on the modern opera stage is rarely, if ever, required in the more intimate contexts of earlier repertoires.<sup>81</sup>

The recognition of the context of early performances is important to this discussion; the early singer (with a neutral approach to larynx height) was never expected to create the same effect as the modern singer, and neutral-larynx singing remains perfectly compatible with an intimate performance context.

Stark (1999) has suggested that a pure, straight tone ‘requires the *inhibition* of the natural vibrato by preventing the pitch-controlling muscles from engaging in the work-rest cycle’, but even if this claim could be proven it provides no reason why pitch vibrato cannot (or should not) be significantly suppressed for a more appropriate realisation of historical repertoire.<sup>82</sup> One might interpret the inhibition or suppression of vibrato effects as demonstration of superior muscle control, and, conversely, the cultivation of the vibrato impulse as the relaxation (or deficiency) of that muscle control. Lawson and Stowell (1999) have suggested that ‘[v]ibrato was probably suppressed entirely on dissonant notes, appoggiaturas, leading notes, chromatic notes or augmented fourths, to avoid mollifying the joint expressive effect of text and music’, but this image of ‘suppression’ appears to be based upon the assumption of a modern low-larynx technique with unavoidable vibrato/tremolo.<sup>83</sup> The assertion that singers must suppress an inherent vibrato to create a clean tone perpetuates the notion that singing earlier repertoire with sensitivity to vibrato usage results in tension or vocal strain. This idea is erroneous, since modern singers cultivate their vibrato over many years; vibrato effects were considered an additional effect

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<sup>81</sup> Steven E. Plank, *Choral Performance: A Guide to Historical Practice* (Maryland; Toronto; Oxford: The Scarecrow Press, 2004), p. 22.

<sup>82</sup> Stark, *Bel Canto*, p. 146. Sundberg has suggested that the laryngeal muscles might be responsible for vibrato, acknowledging that ‘[t]he neural origin of these rhythmical contractions is unknown.’ See Sundberg, ‘Acoustics, VI: The Voice’, in *Grove Music Online*.

<sup>83</sup> Lawson and Stowell, *The Historical Performance of Music*, p. 104.

for the vast majority of the nineteenth century because vibrato (or tremolo) is not an inherent component of the neutral-larynx vocal tone.

Some singers might defend the (more or less) continuous use of tremolo as a tool to disguise a misalignment of intonation against an accompaniment (especially when performing with accompaniments that have limited or no vibrato, where deviation from the intended pitch without vibrato would be immediately obvious to the ear). Metfessi (1932) acknowledged this perk as a by-product of artistic vibrato:

It has been said that artists find the vibrato useful in covering up off-pitch. This is one of the small but none the less valuable by-products. That the vibrato serves in this capacity does not detract from its artistry. Not that the artists intentionally use the vibrato expressly for the purpose of hiding a defect. It is part and parcel of vocal vibrato composition not to have a razor-edge pitch. Compared to the tuning fork, the pitch of the vibrato, while steady and salient, is somewhat vague.<sup>84</sup>

Despite this assessment of utility, Sundberg (1987) has confirmed that '[t]he vocal apparatus is most certainly capable of a high degree of pitch accuracy.'<sup>85</sup> Any suggestion that vibrato is *necessary* to be heard over an orchestra is misleading, adding to the confusion between resonance and vibrato.<sup>86</sup>

Brown (1999) has confirmed what we have surveyed here, and what many modern singers and theorists fail to acknowledge:

There is nothing in the nineteenth-century literature [...] to suggest that any kind of background vibrato was assumed either in singing or string playing.<sup>87</sup>

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<sup>84</sup> Metfessi, 'The Vibrato in Artistic Voices', in *The Vibrato*, p. 59.

<sup>85</sup> Sundberg, *Science of the Singing Voice*, pp. 170-171, 177-179.

<sup>86</sup> See Breen, 'David Munrow: thoughts on vibrato and a glimpse into his records collection'. See also Helena Daffern, 'Distinguishing Characteristics of Vocal Techniques in the Specialist Performance of Early Music' (unpublished doctoral thesis, University of York, 2008), p. 169. Whilst a contrast between a relatively vibrato-free orchestral sound and a vocal sound with noticeable vibrato could possibly aid the listener in differentiating between the voice and its accompaniment, the addition of vibrato to a voice already utilising low-larynx resonance strategies is superfluous.

<sup>87</sup> Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 106.



Knowledge of a change in voice production during the nineteenth century is the key to accepting this evidence; theorists that reject this evidence often fail to acknowledge the role of a neutral approach to larynx height in singing of this period. Although some may subscribe to the view ‘that any extraneous element in the vocal sound, be it simply vibrato or perhaps other acoustical complexes which the modern ear might describe simply as vocal timbre or “grain”, would have been regarded as undesirable’ in pre-Romantic singing, we must remember that nineteenth-century singers adhered to the concept of *chiaroscuro*, and that the neutral-larynx voice presents a lot more breath and variability in the tone than is expected from the modern trained singer. Moens-Haenen (2011) has observed that vibrato (as a continuous quality of vocal tone) seems unnecessary in singing that already demonstrates a high degree of variety:

[T]he so-called vibratoless sound in the Baroque contained a large amount of tone enhancement, which in itself already implied a certain degree of fluctuation without the musician needing to add anything to it.<sup>88</sup>

This general culture of variety is better suited to the neutral-larynx voice than to the uniform and consistent low-larynx voice of the modern operatic vocal standard.

Bethell (2011) has suggested that the excerpt below describes a ‘straight voice’ (which he describes as ‘non-vibrato singing’), but, as with analogies of ringing bells, the vibrato of intensity is a plausible reading where the pitch vibrato (or complete absence of vibrato) is inappropriate:

Miss Clara Novello sang ‘Agnus Dei’ most sweetly; her voice was soft as the tones of musical glasses, yet full of expression.<sup>89</sup>

This review extract is followed by Bethell’s assertion that ‘Benjamin Franklin’s Glass Harmonica couldn’t produce a vibrato’, but this evaluation fails to acknowledge that both

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<sup>88</sup> Moens-Haenen, 'Vibrato as expressive ornament'.

<sup>89</sup> Reviewer, Hull Packet, Messiah at York Musical Festival 1835 cited in Bethell, 'Vocal Vibrato in Early Music'.

the glass harmonica and musical glasses can reverberate audibly on one pitch, producing the effect of a vibrato of intensity.<sup>90</sup>

Donington (1982) has suggested that a completely vibrato-free approach to performing historical vocal repertoire is inappropriate:

Vibrato should not always be present, particularly in early music, but requires excellent technique and very great discretion. At no period, however, does the pure and uncoloured voice, without vibrato, and sometimes called *voce bianca*, white voice, appear to have been recommended or tolerated except for rare and special effect.<sup>91</sup>

In the context of the modern operatic vocal standard, a 'white' sound is usually defined as one without enhanced resonance in the region of the singer's formant, and thus no hints of the low-larynx vibrato of intensity ('spin'). In the context of a neutral approach to larynx height (without the singer's formant) a 'white voice' could simply be one which is poorly phrased, monotonous, or muffled; the 'white voice' Donington described is not necessarily undesirable purely because of its lack of vibrato or tremolo. Daffern's research has highlighted the fact that modern 'classically trained' singers often confuse the use of resonance strategies with the application of vibrato effects, whilst other singers identifying themselves as 'early music' singers were able to introduce the use of a resonance strategy separately from the introduction of vibrato effects.<sup>92</sup> Singers and teachers are systematically led to believe that 'vibrato is an indicator of good singing', and when confronted with matters of resonance and vibrant singing often confuse the different forms of aural interest, and instead of adjusting their approach to resonance introduce a greater degree of vibrato/tremolo. Failure to differentiate between resonance or 'spin' and the use of stylistic vibrato effects is an issue that can be encountered first hand with conductors and singers,

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<sup>90</sup> See Robert Tiso, *Glass Harp - Toccata and Fugue in D minor - Bach - BWV 565*, (YouTube, 2009) <<http://www.youtube.com/watch?v=XKRj-T4l-e8>> [accessed 14 August 2013]. See also John Tamaro, *Glass Harmonica*, (YouTube, 2007) <[http://www.youtube.com/watch?v=\\_XPfoFZYso8](http://www.youtube.com/watch?v=_XPfoFZYso8)> [accessed 14 August 2013].

<sup>91</sup> Robert Donington, *Music and its Instruments* (London: Methuen & Co, 1982), p. 174. In this work Donington refers generally to vibrato effects; he does not make any distinction between vibrato and tremolo.

<sup>92</sup> Daffern, 'Distinguishing Characteristics', p. 291.

even with groups that routinely work with period orchestras and are widely presumed to be historically-informed to some degree.

The following excerpt from the *Musical Times* (1943) derides the characterisation of the vibrato- and tremolo-free voice as an undesirable voice that is, by default, less moving than its vibrating counterpart:

At present a well-rounded sustained note is a rare experience. There is even a superstition that such a note sounds 'dead.' So one singer after another adopts the wobble. And the tragedy is that once it has become a habit, it cannot be eradicated. I was told the other day that singers' palsy is pathological and incurable, beyond the reach even of hospital treatment. That was when the lethal chamber was recommended.<sup>93</sup>

Accusations of dull or lifeless singing are still levelled at those who choose to limit or vary their usage of vibrato effects. Judicious use of vibrato is certainly possible (without any discomfort or tension), and has obvious advantages for the more florid repertoires of the eighteenth century in particular:

The minimalist approach to vibrato encourages clarity not only of pitch and harmony but also of timbre, itself. The leanness of sound, the incisive edge, the focus and forwardness of the sound remain unveiled by the blur of vibrato.<sup>94</sup>

The next generation of early music singers must acknowledge the fact that vibrato is not the sole factor that indicates 'good' singing, and that voices with selective vibrato can be shaped with musicality and expression. This is essential if they are to counter accusations of 'breathy, dull, straight, spread, or yell-like' singing with shapely phrasing and nuanced interpretation.<sup>95</sup> Musical shaping of the vocal line (using the *messa di voce*, portamento, etc.) can provide an abundance of vibrancy and interest, as Plank (2004) has acknowledged:

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<sup>93</sup> Edwin Evans, 'The Art of Singing in Decline', *Musical Times*, 84.1205 (July 1943), 201-202 (p. 202).

<sup>94</sup> Plank, *Choral Performance*, p. 23.

<sup>95</sup> Ware, *Basics of Pedagogy*, pp. 181-182.

[S]haping notes becomes highly significant in straight toned singing, for the shaping of notes, the molding [sic] of contours, keeps the straight tone from having a flat lifelessness or a machinelike quality.

[...]

Singing should be pleasant for the listener as well as for the singer. Vibrato-less singing can be beautiful and pleasant, but that is only achieved when each note has a direction, the direction towards the next note. [...] Vibrato-less singing succeeds only by guiding a musical line by breath control.<sup>96</sup>

A need for direction should not be confused with unyielding vocal intensity (in terms of breadth of tone, and often also vibrato) – an approach that is often heard in professional consorts, but can rob ‘early music’ of its natural ebb and flow. This approach is achieved using modern breath control techniques and staggered breathing, techniques apparently unknown to the early singer.

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<sup>96</sup> Plank, *Choral Performance*, p. 85.

## *Chapter Four*

# ‘THE SOUL OF MUSIC’: MESSA DI VOCE AND PORTAMENTO

In the eighteenth and nineteenth centuries vocal performance was often discussed in reference to expression, and the appropriate portrayal of sentiment was uppermost in the mind of the stylish singer. The expressive devices most discussed by literature of this period are the *mesa di voce* and the portamento – devices now given relatively little emphasis in vocal training. These elements were very rarely omitted from eighteenth- and early nineteenth-century treatises, and remained a symbol of stylistic and technical prowess right into the twentieth century. Scholarly consideration of these two highly emotive elements of expressive singing is vital if we are to present (solo) vocal performances that are truly historically-informed.

### 4.1. MESSA DI VOCE

In the period discussed by this thesis the *mesa di voce* was considered a fundamental component of ‘the art of good singing’.<sup>1</sup> As with all expressive devices, the notation of the *mesa di voce* (usually as two hairpins: < >) does not appear to describe every possible aspect of its execution.

In the light of the technical changes discussed in Chapter Two, the *mesa di voce* has been discussed here in two contexts: when produced with a neutral approach to larynx height, and when produced using a lowered larynx.

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<sup>1</sup> John Potter, ‘The tenor–castrato connection, 1760–1860’, *Early Music*, 35.1 (2006), 97-110. ‘Some Singers of the Month’: Umberto Urbano’, *Musical Times* (1924), 260.

#### 4.1.1. NEUTRAL LARYNX HEIGHT

Writers in this period tended to identify the *messa di voce* solely using its dynamic contours, describing a controlled crescendo followed by an equivalent decrescendo.<sup>2</sup> There is very little technical information on how exactly the *messa di voce* was executed in the neutral-larynx technique, suggesting that its defining feature really was simply dynamic gradation – presumably achieved by variation in airflow, as described by Quantz (1752) and Pulte (2005).<sup>3</sup> Toft (2011) has remarked that in this period ‘performers allowed the voice to rise and fall with the idea expressed’, setting the scene for the use of the *messa di voce* within a landscape of nuance and *chiaroscuro*.<sup>4</sup> He has also noted that modern pop singers continue to employ phrasing in this way, allowing the natural decay of the voice (as the available airflow diminishes) to end the phrase gently in a way that most trained singers now avoid.<sup>5</sup>

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<sup>2</sup> Johann Joachim Quantz, *On Playing the Flute: the Classic of Baroque Music Instruction*. trans. by Edward R. Reilly, 2nd ed. (London: Faber, 2001), p. 132. Domenico Corri, *The Singer's Preceptor* (London: Longman, Hurst, Rees and Orme, 1810), p. 14. Reproduced in *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volume 4, and The Singer's Preceptor, Volumes 1-2*, ed. by C. R. F. Maunder, Domenico Corri's Treatises on Singing, 4 vols (New York; London: Garland Publishing, 1995), vol. iii. Gesualdo Lanza, *Lanza's Abridgement of his Work on the Art of Singing* (London: Chappell, 1820), pp. 5, 6, 8. Louis Lablache, *A Complete Method of Singing* (London: Chappell, 1840), p. 25.

<sup>3</sup> Quantz, *On Playing the Flute*, pp. 165, 194. Diane M. Pulte, 'The Messa di Voce and its effectiveness as a training exercise for the young singer' (unpublished doctoral dissertation, Ohio State University, 2005), p. 10.

<sup>4</sup> Robert Toft, 'Bel Canto: the unbroken tradition', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/toft/>> [accessed 9 January 2012]. In this passage Toft has cited early nineteenth-century writers in particular.

<sup>5</sup> Toft has related this 'dying of the voice' to *chiaroscuro*. Robert Toft, 'The Expressive Pause: Punctuation, Rests, and Breathing in England, 1770-1850', *Performance Practice Review*, 7.1 (1994), 1-32 (p. 25).

#### 4.1.2. LOW-LARYNX HEIGHT

From the mid nineteenth-century onwards definitions of the *messa di voce* began to incorporate reference to larynx-lowering, although the defining feature of this device remained controlled dynamic change.

Garcia defined the *messa di voce* by describing its dynamic qualities, and, like Lanza (1820), demonstrated the device on semibreves; the *messa di voce* was considered truly expressive on notes of long value, and often implied (perhaps in conjunction with a cadenza element) by a fermata.<sup>6</sup> Garcia described the pharynx widening as the dynamic increased, ‘returning afterwards by degrees to its original shape, as the sound becomes weaker’, suggesting some use of larynx-lowering to strengthen the dynamic peak of the device.<sup>7</sup> Wood (1930) noted specifically the timbral effect of changing larynx height in the execution of the *messa di voce*, and described the relative ease of the low-larynx approach:

Firstly, you can start your pp with a very light heady falsetto tone [neutral larynx height]; then you increase your breath pressure, as far as it will last comfortably in this production, then, as you pass to the mf, you feel a kick in the larynx. There has to be much patient study before the artist can know he is making this change while the public is unaware of it. The difficulty is to keep the throat still during this change of production. When you pass back from f to pp, there is the reverse process with similar difficulty. Use your full set tone down to the greatest piano before you change to heady falsetto. Secondly, you can take the whole *Messa di voce* in one production. This is the better and certainly the easier method for the first two or three years. [...] The word, the character he is portraying, the mood of the moment, the hall or theatre, and the nature of the accompaniment, will help him to decide if he can risk starting pianissimo with the heady falsetto tone. It is used for pianissimo in *Messa di voce* too exclusively, for it keeps piano tone from carrying in a hall or theatre. With the other method there is no change of production from ff to pp, only variation of breath pressure.<sup>8</sup>

The ‘kick in the larynx’ describes the readjustment of the height of the larynx, similar to that felt when rising pitches are sung with a neutral-larynx approach, and the larynx must

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<sup>6</sup> Manuel Garcia, *New Treatise on the Art of Singing. A Compendious Method of Instruction, with Examples and Exercises for the Cultivation of the Voice* (London: Hutchings & Romer, [n.d.]), p. 31. See also Manuel Garcia, *Hints on Singing*. trans. by B. Garcia (London: E. Ascherberg & Co, 1894), p. 39. Lanza, *Lanza's Abridgement of his Work on the Art of Singing*.

<sup>7</sup> Garcia, *New Treatise*, p. 31.

<sup>8</sup> Henry Joseph Wood, *The Gentle Art of Singing: Abridged Edition in One Volume* (London: Oxford University Press, 1930), p. 87.

be adjusted to allow for further ascension (as described in Chapter Two).<sup>9</sup> Wood emphasised that the two techniques offered differing timbral effects, much in keeping with the timbral approach to larynx-lowering that Garcia advised.<sup>10</sup>

#### 4.1.3. VIBRATO AND THE MESSA DI VOCE

In *Grove Music Online* the *messa di voce* is described as '[t]he singing or playing of a long note so that it begins quietly, swells to full volume, and then diminishes to the original quiet tone'.<sup>11</sup> Limiting the expressive quality of the *messa di voce* to dynamic volume alone may not give an accurate representation of the device in its entirety. Moens-Haenen (2011) has discussed a connection between the vibrato and the *messa di voce*, particularly in French viol music:

After the climax of the *messa di voce* comes an added slow vibrato along with a tapering off of the sound. [...] [T]heorists regularly cite it as an instance for the possible use of vibrato.<sup>12</sup>

The possible location of vibrato in the latter portion of the *messa di voce* is also suggested by Quantz (1752) in his treatise on flute-playing:

[B]egin pianissimo, allow the strength of the tone to swell to the middle of the note, and from there diminish it to the end of the note in the same fashion, making a vibrato with the finger on the nearest open hole[.]<sup>13</sup>

A relationship between vibrato and the *messa di voce* also appears to have been commonplace in string music of this period:

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<sup>9</sup> Johan Sundberg, *The Science of the Singing Voice* (Illinois: Northern Illinois University Press, 1987), p. 114.

<sup>10</sup> See also Wood, *The Gentle Art of Singing*, p. 92.

<sup>11</sup> Ellen T. Harris, 'Messa di voce', in *Grove Music Online*, Oxford Music Online.

<sup>12</sup> Greta Moens-Haenen, 'Vibrato as expressive ornament: translation of summary chapter from *Das Vibrato in der Musik des Barock* (1988) by Greta Moens-Haenen', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and John Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/haenen/>> [accessed 6 May 2014].

<sup>13</sup> Quantz, *On Playing the Flute*, pp. 165-166.



In nineteenth-century string music particularly the sign <>, evidently related to the traditional *messa di voce* which was normally associated with vibrato, came increasingly to imply a vibrato when placed over a single note.<sup>14</sup>

Vocal vibrato usage in the late-eighteenth and early-nineteenth centuries is most likely to have been of intensity (as discussed in Chapter Three), the use of which in the singing of the *messa di voce* seems entirely plausible, although an explicit reference to this approach has not yet been found. Modern singers might relate the use of vibrato effects in this context to the ‘warming’ of notes in an attempt to avoid monotony.

Bayly (1789) warned that the *messa di voce* should be executed ‘steadily, without any shaking or trembling’, an opinion echoed by Wood (1930) in the early twentieth century.<sup>15</sup> It is difficult to know whether a warning against ‘shaking or trembling’ precluded the use of an intensity vibrato as well as that of pitch, but in the use of the word ‘tremolo’ Wood probably meant to exclude the latter.<sup>16</sup>

#### 4.1.4. NOTES ON USAGE

The *messa di voce* was (and remains) an ornament synonymous with technical stamina and good breath management, requiring judicious muscle management for controlled execution.<sup>17</sup> The device was certainly utilised where long notes required movement, and, in later use, perhaps introduced to add resonance interest to an otherwise static note. There does not appear to have been a marked change in execution of the *messa di voce* during this period, other than the later addition of the option to use the device with a low larynx

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<sup>14</sup> Clive Brown, *Classical and Romantic Performing Practice 1750-1900* (Oxford: Oxford University Press, 1999), p. 552.

<sup>15</sup> Anselm Bayly, *The Alliance of Musick Poetry & Oratory* (London: John Stockdale, 1789), p. 45. Wood, *The Gentle Art of Singing*, p. 87.

<sup>16</sup> CD 4: Track 6, Verdi *Ave Maria* from *Otello* (1887), 3:39. This performance was influenced by a rendition of the same aria by Nellie Melba; Victor 6211 (25 August, 1910). Melba also used intensity vibrato throughout the *messa di voce* (from 3:53 onward). Nellie Melba, 'Matrix C-6705. Ave Maria', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave\\_Maria](http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave_Maria)> [accessed 18 May 2014].

<sup>17</sup> Pulte, 'The Messa di Voce', p. 12.

height; regardless of the larynx height employed, both forms of execution rely on the regulation of airflow by the singer.

Garcia related the *messa di voce* to the use of ‘inflections’ or ‘echoed notes’, which are depicted in his annotated repertoire as a succession of small *messa di voce* (<> <> <> <>) over just one note:

*Swelled Sounds with Inflections or Echoed Notes* (Flautati)

These consist in an uniformly continued series of small swelled sounds, multiplied to as great an extent as the breath will allow. These inflections may be arranged in different ways; that is, they may be of equal duration and power; may follow an increasing or decreasing progression; and so on. Great singers usually employ them according to the following method: - they first hold out a sustained sound, with a third of the breath, which sound is followed by another of less power and duration; after which follows a long succession of echoes, becoming gradually weaker as they approach the end – the last, indeed, can scarcely be heard. The throat must contract and dilate with elasticity at each inflection.<sup>18</sup>

Examples can be heard in the realisations of the annotated repertoire from Garcia’s *Traité complet de l’Art du Chant* (CD 4: Tracks 10-11),<sup>19</sup> and as an ornament in the realisation of Bellini’s *Ab! Non credea mirarti* from *La Sonnambula* (CD 4: Track 2, 2:55).

There is some disagreement over whether the *messa di voce* was intended for beginners or only for more experienced singers. In discussing the period 1750-1830, Toft has written that ‘[o]ne of the first things students of singing learned was to control the emission of sound through the *messa di voce*’, an assessment that has been echoed by Pulte (2005) and described by Nathan (1836), who wrote that the device was ‘one of the easiest requisites to acquire, if judiciously treated’.<sup>20</sup> Later writers like Garcia (*New Treatise*), Behnke and Brown (1883), Mathilde Marchesi (1887), and Wood (1930), described the practice as a

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<sup>18</sup> Garcia, *New Treatise*, p. 31.

<sup>19</sup> CD 4: Track 10, Crescentini Aria inserted into *Romeo e Giulietta* by Zingarelli, 1:38; Appendix A, p. 277, first system, b. 5. CD 4: Track 11, Morlacchi Aria from *Teobaldo ed Isolina*, 1:55, 4:42; Appendix A, p. 282, first system, b. 4; p. 283, third system, b. 5.

<sup>20</sup> Robert Toft, *Heart to Heart: Expressive Singing in England 1780-1830* (Oxford: Oxford University Press, 2000), p. 69. Pulte, ‘The *Messa di Voce*’. Isaac Nathan, *Musurgia Vocalis: an Essay on the History and Theory of Music, and on the Qualities, Capabilities, and Management of the Human Voice* (London: Fentum, 1836), p. 150.

technique for the more accomplished singer.<sup>21</sup> This might be explained by the changing technique required to execute the *mesa di voce* properly; whilst Toft's earlier sources used an un-modified neutral larynx technique and focussed primarily on regulating air flow to create dynamic variation, the late nineteenth-century singer could incorporate the conscious lowering of the larynx in an effort to utilise the additional resonance and volume offered by the technique. It is entirely plausible that these later writers viewed the technique as an advanced technique because they expected its execution to involve the conscious manipulation of larynx height. Pulte (2005) has reported that the use of the *mesa di voce* early in modern vocal training is controversial, presumably because of the added difficulty inherent in the widespread expectation of a consistently lowered larynx.<sup>22</sup> There seems to be little criticism of over-use of the *mesa di voce*, probably due to the rather limited frequency of opportunities for its use (in relation to portamento or vibrato, for example).

As the *mesa di voce* was so often admired as a display of skill, and a technique handed down by the 'masters', it would be easy to presume that the role of the *mesa di voce* ended there. Writers of this period frequently associated the *mesa di voce* with expressive singing, but failed to pinpoint exactly the emotional content of the device. Although the device is best suited to long notes, nineteenth-century writers did not suggest that the *mesa di voce* was better suited to music of a particular character or sentiment (as they did with other expressive devices). Nathan (1836) noted the versatility of dynamic variation in phrasing more generally, as is briefly discussed in Chapter Five.<sup>23</sup>

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<sup>21</sup> Garcia, *New Treatise*, p. 32. Mathilde Marchesi, *Bel Canto: a Theoretical and Practical Vocal Method* (New York: Dover Publications, 1970), p. 39. Emil Behnke and Lennox Browne, *Voice, Song, & Speech: A Practical Guide for Singers and Speakers; from the combined view of Vocal Surgeon and Voice Trainer* (London: Sampson Low, Marston, Searle, and Rivington, 1883), p. 186. Wood, *The Gentle Art of Singing*, p. 87.

<sup>22</sup> Pulte, 'The *Messa di Voce*', pp. 30, 32.

<sup>23</sup> Nathan, *Musurgia Vocalis*, pp. 150, 187-189

## 4.2. PORTAMENTO

The portamento is an element of historical singing all but ignored in modern performances of historical repertoire, despite protestations by those in the academic community. This is most likely due to its gradual decline in popularity during the twentieth century; the technique is now often regarded as old-fashioned, and something that is only to be heard used consistently in early recordings. Potter (2006) has suggested that opposition to this device helped fuel the idolisation of ‘pure’ singing voices in the early music movement, effectively shunning portamento as a device associated only with the decadence of grand opera.<sup>24</sup>

Nineteenth-century writers were careful to discuss portamento in their treatises; the device was clearly fundamental to the study (and practice) of stylish singing in this period, although difficulty in notating every aspect of the portamento makes its application more problematic than simply ‘sliding’ or ‘swooping’ between pitches.

### 4.2.1. DEFINITION AND NOTATION

The semantics of portamento has never been entirely stable, with the variety of terms used throughout this period including slurring, gliding, *portamento di/della voce* (and other translations), dragging, and anticipation. The current entry in *Grove Music Online* has defined portamento as ‘[T]he connection of two notes by passing audibly through the intervening pitches’, although this may not accurately describe every aspect of vocal portamento.<sup>25</sup> A common notation of portamenti throughout this period was the slur, but usage of this depiction does not appear to have been widespread or consistent.<sup>26</sup> The use of dotted rhythms to indicate portamento was also common in treatises and exercises, but this figure does not appear to have indicated portamenti more generally in musical publication,

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<sup>24</sup> John Potter, 'Beggar at the Door: The Rise and Fall of Portamento in Singing', *Music & Letters*, 87.4 (2006), 523-550 (p. 548).

<sup>25</sup> Harris, 'Portamento', in *Grove Music Online*.

<sup>26</sup> Brown, *Classical and Romantic Performing Practice*, p. 570.

although the incidence of a dotted rhythm in a work may present an opportune moment at which to use the device.

The use of portamento became increasingly common as the nineteenth century progressed, as is evident in its use in early vocal recordings of accomplished nineteenth-century singers performing at the turn of the twentieth century. Brown (1999) has confirmed that:

During the nineteenth century it became increasingly common to associate the term 'portamento' with a conspicuous slide, probably reflecting a growing tendency during the first two decades of the century for singers and string players to intensify the use of this technique as an expressive feature of their performance.<sup>27</sup>

Harris has written of the portamento as 'an important vocal technique for legato singing already established at the beginning of the 17<sup>th</sup> century', but one might suggest that this description fails to differentiate between legato and portamento as distinct effects (see section 4.2.6.).<sup>28</sup>

Wood (1930) acknowledged directly the difficulty inherent in describing and discussing this device: 'notation is unable to symbolize the very fine shades of a singer's portamento. The ear alone must be the judge.'<sup>29</sup> To discern more about the 'very fine shades' of successful portamento usage we must discuss its notation, range and speed, the varying types of vocal portamento, and the relationship between the portamento and legato singing.

#### 4.2.2. RANGE AND SPEED

In the treatises referenced here the portamento is depicted on a variety of intervals (moving in both directions) ranging from the second to the octave, and it appears that the device

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<sup>27</sup> Brown, *Classical and Romantic Performing Practice*, p. 559. See also pp. 560, 564.

<sup>28</sup> Harris, 'Portamento', in *Grove Music Online*.

<sup>29</sup> Wood, *The Gentle Art of Singing*, p. 35.

could be applied to most intervals, with the deciding factor on placement being appropriate expression of the sentiment being portrayed.

Considering the speed of movement in the portamento is very difficult, mainly because of the lack of objective discussion of this aspect of the device. The range and speed of the portamento appear to have been influenced by sentiment, as this excerpt from Garcia's *New Treatise* describes:

The time occupied by a slur should be taken from the last portion of the note quitted; and its rapidity will depend on the kind of expression required by any passage in which it occurs. [...] preserve an equable and progressive motion, whether in ascending or descending; for, if one part of the slur were executed slowly, and the other rapidly, or if the voice sunk to rise again directly afterwards, the effect produced would be perfectly detestable.<sup>30</sup>

Whether more or less rapid, Garcia was keen that the singer ensured a consistent speed of movement in execution. Lamperti (1890) agreed that '[t]here is no fixed rule; it depends upon the movement of the passage to which it belongs.'<sup>31</sup> Lablache (1840) observed that the portamento occurs 'in a rather slow movement', but warned that:

[i]t is necessary to avoid with care leaning strongly upon the carriage of the voice in descending. This would produce a kind of yawn, which would be very disagreeable.<sup>32</sup>

Bach (1883) added that '[t]he quicker the time, the less is the demand for portamento; the slower the movement, the more necessary it is, and it is therefore most necessary in the cantabile.'<sup>33</sup> Wood (1930) advised beginners in particular to err on the swifter side in their use of the portamento:

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<sup>30</sup> Garcia, *New Treatise*, p. 10. See also p. 52.

<sup>31</sup> Francesco Lamperti, *The Art of Singing* (New York: Schirmer, 1890), p. 12.

<sup>32</sup> Lablache, *A Complete Method of Singing*, p. 33.

<sup>33</sup> Albert B. Bach, *Musical Education and Vocal Culture: for vocalists and teachers of singing* (Edinburgh: W. Blackwood & Sons, 1883), p. 140.

Beginners should be most careful in their use of slurred tones, for they are very apt to make a slow slur, to connect the tones by scooping and dragging the voice *glissando* when they reach up to the higher notes, falling down to the lower ones. The slur must be taken with extreme quickness, the time being clipped from the value of the note from which the slur is marked[.]

[...]

It is a good rule that the larger the hall or theatre, the quicker the slur should be; otherwise you will have to reckon with echo.<sup>34</sup>

In this passage Wood appears to warn against any lateness of the destination pitch, but Bayly (1789) described inequality of motion as the feature that differentiated the portamento from the legato. Bayly discussed the effect of 'dragging' in terms reminiscent of those used to describe tempo rubato effects:

Dragging [portamento] is much the same motion as that of gliding [legato], only with inequality, hanging as it were upon some notes descending, and hastening the others so as to preserve the time in the whole bar.<sup>35</sup>

Lanza (1820), like others, suggested that the singer should arrive at the destination pitch promptly, taking the time for movement from the preceding pitch.<sup>36</sup> Bériot (1858) specifically warned against portamento that dragged too much:

This slide, executed too slowly (and this is the general fault), degenerates into a wretched caterwauling, which completely destroys the charm of the melody.<sup>37</sup>

The most prominent portamenti executed in the Recorded Portfolio include those in the Cimarosa aria from *Sacrifizio d'Abraham* as annotated by Garcia (CD 4: Track 9, 0:22). Here the repeated use of portamento in the opening melodic phrase might be said to give the feeling of uneasy or irregular tempo, even though these bars are not, in general, out of

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<sup>34</sup> Wood, *The Gentle Art of Singing*, p. 35.

<sup>35</sup> Bayly, *The Alliance of Musick Poetry & Oratory*, p. 44.

<sup>36</sup> Lanza, *Lanza's Abridgement of his Work on the Art of Singing*, p. 15.

<sup>37</sup> Charles de Bériot, *Méthode de Violin* (Mainz: [n.pub.], [1858]), p. 235. Translated in Clive Brown, 'Singing and String Playing in Comparison: Instructions for the Technical and Artistic Employment of Portamento and Vibrato in Charles de Bériot's *Méthode de violon*', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, ed. by Claudio Bacciagaluppi, Roman Brotbeck, and Anselm Gerhard (Schliengen: Argus, 2009), pp. 83-108 (p. 91).

time.<sup>38</sup> The application of other forms of tempo variation as expressions of the principle of *chiaroscuro* make tempo rubato a plausible component of the portamento when used in moderation and to expressive effect. This is another area that would benefit from further research and practical experimentation.

#### 4.2.3. LOCATION OF PORTAMENTI

A further issue for the historically-informed singer to consider is the appropriate location of portamenti. This again seems to have been governed by expression and sentiment, and, as with all expressive devices, the portamento was best used in moderation. As Garcia described in *New Treatise* (1894):

The circumstances under which the slur should be adopted, are very difficult to determine, and can scarcely be fixed by any general rules. Yet it may be observed, that a slur will always be well placed, whenever, in passionate places, the voice drags itself on under the influence of a strong or tender sentiment.

Some singers, either from negligence or want of taste, slur the voice endlessly, either before or after notes; thus the rhythm and the spirit of the song are destroyed, and the melody becomes nauseously languid.<sup>39</sup>

Garcia's criteria for the suitable location of portamento are helpful, but far from explicit. Milsom (2003) has noted that Bériot's notation of portamenti usually falls on a strong beat, and is 'most frequently' ascending, but this is not the case in the repertoire featured in Appendix A.<sup>40</sup> Common locations for portamenti can be heard in early recordings in the lead into the recapitulation of the opening/main theme (CD 2: Tracks 4-6),<sup>41</sup> over larger

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<sup>38</sup> Appendix A, Cimarosa: Aria from *Sacrifizio d'Abraham*, p. 271, second system.

<sup>39</sup> Garcia, *New Treatise*, p. 53.

<sup>40</sup> David Milsom, *Theory and Practice in Late Nineteenth-Century Violin Performance: an examination of style in performance, 1850-1900* (Aldershot; Burlington, VT: Ashgate, 2003), p. 82.

<sup>41</sup> CD 2: Track 4, Adelina Patti: Mozart *Voi, che sapete* (1905), 2:39; Appendix A, p. 201, b. 57. CD 2: Track 5, Nellie Melba: Mozart *Voi, che sapete* (1907), 2:26; Appendix A, p. 205, b. 55. CD 2: Track 6, Nellie Melba: Mozart *Voi, che sapete* (1910), 2:59; Appendix A, p. 209, b. 61.



intervals that express joy (CD 2: Tracks 11-13)<sup>42</sup> or characterise pleading (CD 2: Track 9),<sup>43</sup> and in ascending or descending chromatic movement, particularly in sentimental songs (CD 2: Tracks 2-3).<sup>44</sup>

Further detailed research of the location of portamento in early vocal recordings, annotated repertoire, and musical examples in treatises would be fruitful in the consideration of the acceptable interpretation of instructions like Garcia's.

#### 4.2.4. NATURE OF MOVEMENT

The discussion of the exact nature of the movement of portamento is particularly problematic; a swift portamento could be almost imperceptible, whilst a slower portamento at an opportune moment might clearly reference movement through intervening pitches to demonstrate the sentiment being expressed. In *New Treatise* and *Hints on Singing* Garcia advocated clear reference to the pitches between the original pitch and the destination pitch:

To slur is to conduct the voice from one note to another through all intermediate sounds.<sup>45</sup>

[...] [t]he *portamento*, or slur, which is the gliding of the voice through every possible sound between note and note. This colouring is designated by placing a curve [downwards slur, or upwards slur] over or under the notes.<sup>46</sup>

Garcia's demonstration of the difference between portamento and legato is reproduced in Figure 3 below .

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<sup>42</sup> CD 2: Track 11, Suzanne Adams: Gounod *Jewel Song* (1902/3), 0:16; Appendix A, p. 239, b. 16. CD 2: Track 12, Marcella Sembrich: Gounod *Jewel Song* (1906), 0:18; Appendix A, p. 244, b. 16. CD 2: Track 13, Nellie Melba: Gounod *Jewel Song* (1910), 0:16; Appendix A, p. 251, b. 16.

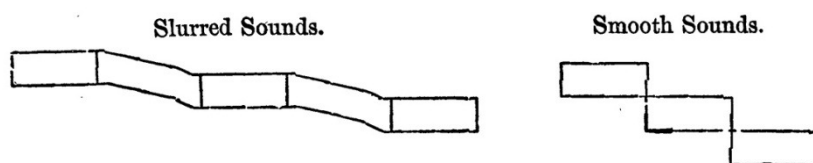
<sup>43</sup> CD 2: Track 9, Adelina Patti: Mozart *Batti, batti* (1904), 3:50; Appendix A, p. 230, b. 91.

<sup>44</sup> CD 2: Track 2, Nellie Melba: Bishop *Home, sweet home* (1905), 1:32; Appendix A, p. 193, b. 21-22. CD 2: Track 3, Amelita Galli-Curci: Bishop *Home, sweet home* (1917), 1:50; Appendix A, p. 196, b. 24-25.

<sup>45</sup> Garcia, *New Treatise*, p. 10.

<sup>46</sup> Garcia, *Hints on Singing*, p. 20.

Figure 3: Illustration of slurred and smooth sounds by Garcia (*New Treatise*)<sup>47</sup>



In Garcia's diagram slurred sounds are connected by 'continued pressure of air' and require gradual adjustment of the pitching muscles, whilst smooth sounds are also connected by continuous airflow but require instantaneous changes in pitch. It is unclear whether Garcia's references to 'every possible sound' or 'all intermediate sounds' were intended to suggest clear reference to intervening pitches, or imperceptible movement in microtones, but his illustration depicts no specific reference to pitch change in the movement of the slurred sounds. Elements of both approaches can be heard in early recordings, and in the emulations that accompany this thesis; of the portamenti emulated in the Recorded Portfolio few reference intervening pitches explicitly.<sup>48</sup> It is plausible that Garcia's acknowledgement of intervening pitches reflected his knowledge of the vocal apparatus, and the awareness that, if portamento was to be executed in one smooth movement of the muscles responsible for pitching, intervening pitches could not be completely avoided.

Some nineteenth-century writers were adamant that no reference to intervening pitches should be discerned by the listener. Vaccai (1832) warned that:

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<sup>47</sup> Garcia, *New Treatise*, p. 11.

<sup>48</sup> CD 2: Track 10, Marcella Sembrich: Mozart *Batti, batti* (1904), 2.24; Appendix A, p. 235, b. 61. CD 4: Track 2, Bellini *Ab! Non credea mirarti* from *La Sonnambula* (1831), 0:44. Sembrich references intervening pitches in her performance of Mozart's *Batti, batti* (1904); in the example from *Ab! Non credea mirarti* the portamento movement is discernible, but no particular intervening pitch referenced.

By Portamento must not be understood - as is too often wrongly the case – the gliding (or dragging) of the voice through all the intermediate grades between one tone and another. On the contrary it is the perfect connecting of two notes, each being confined strictly between its sound limits.<sup>49</sup>

Wood (1930) also seemed concerned that portamento was distinguished from mere sliding about between pitches: ‘To produce a true slur [portamento], listen intently that you make your voice pass from one to another quite cleanly, clearly, neatly and smoothly’.<sup>50</sup>

Lamperti (1890) defined portamento as ‘passing from one note to the other by slurring the voice, but in such a manner that the intervening notes are heard as little as possible.’<sup>51</sup> In the context of his definition of legato as ‘passing from one note to another quickly, so that the voice does not dwell upon the intervening notes, just as if it were executed upon a piano or any other keyed instrument’ this suggests some discernment of movement through the intervening pitches in portamento, but no particular emphasis.<sup>52</sup>

Bach (1883) derided any reference to intervening pitch in legato *and* portamento singing:

The singer must in *legato* singing, precisely as in *portamento di voce*, progress with his voice from note to note in close junction, without even the remotest tendency to touch on any intervening note not marked by the composer, and he must distinctly sound each note to be sung.<sup>53</sup>

Other sources distinguished between legato and portamento by means of the exclusion or inclusion of intervening pitches, making Bach’s comparison of the two techniques in this manner unusual. Novello (1859) described a sense of moderation, where the movement was clearly heard, but no specific pitch referenced:

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<sup>49</sup> Nicola Vaccai, *Metodo pratico* (Frankfurt; New York: C.F. Peters, 2002), p. 30. Reprint of Nicola Vaccai, *Metodo pratico de canto italiano per camera* (London: [n.pub.], 1832).

<sup>50</sup> Wood, *The Gentle Art of Singing*, p. 35.

<sup>51</sup> Lamperti, *The Art of Singing*, p. 12.

<sup>52</sup> Lamperti, *The Art of Singing*, p. 12.

<sup>53</sup> Bach, *Musical Education*, p. 141. See also pp. 135-6.

Portamento is much employed by Italian singers, and is very expressive when moderately introduced. It is the art of carrying the voice from one note to another, letting the intermediate notes be heard, but not distinguished: almost in the same manner as a scale may be sounded upon a pianoforte by pushing the thumb strongly along its keys for the distance of one or two octaves.<sup>54</sup>

This account seems to mediate both approaches to the description of portamento; the journey through the interval by definition involved the pitches inbetween, but they were not to be referenced individually. (The choice of piano by Lamperti makes for a poor analogy, as the voice can execute this effect much more smoothly than a keyboardist is able to.) The illustration from Novello (1859) below makes clear the journey through intervening pitches, and also demonstrates how difficulty in notating portamento might have encouraged misunderstanding or disagreement. Novello's choice of format (reproduced in Figure 4 below) suggests particular reference to intervening pitches in a way that the slur or dotted rhythm does not. The scope of the initial portamento is notable in this image as it exceeds the destination note by a semitone – this has not been encountered elsewhere in vocal sources, perhaps suggesting an error in typesetting.

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<sup>54</sup> Sabilla Novello, 'Voice and Vocal Art (Concluded)', *Musical Times*, 9.194 (1859), 21-24 (p. 23).

Figure 4: Illustration of portamento in Novello's *Voice and Vocal Art* (1859)<sup>55</sup>

*Without portamento :—*

DONIZETTI.

*With portamento would be sung thus :—*

Variation in the reception of portamento usage might well be accounted for in terms of speed, character of motion, and the overall effect produced, be it one of a general journey through the interval (the most desirable) or involving reference to particular intervening pitches (considered ill-advised by many).<sup>56</sup> Potter (2006) has concluded that '[w]e cannot be absolutely sure that the effect [of portamento] involved reference to intervening pitches'.<sup>57</sup>

In his *Select Collection* (c.1780s) Corri alluded to the anticipation of the portamento in the description of a '[g]race close after a note' where 'the time for its execution is to be deducted from the last part of that note', but he did not explicitly describe the nature of the movement between the two pitches.<sup>58</sup> He also depicted an ascending grace that 'is to be

<sup>55</sup> Novello, 'Voice and Vocal Art (Concluded)', (p. 23).

<sup>56</sup> Potter, 'Beggar at the Door', (p. 526).

<sup>57</sup> Potter, 'Beggar at the Door', (p. 526).

<sup>58</sup> Domenico Corri, *A Select Collection of the Most Admired Songs, Duets, &c* (London: John Corri, [n.d.]), vol. i, p. 8. Reproduced in *Domenico Corri's A Select Collection of the Most Admired Songs*,

taken softly, and to leap into the [melody] note rapidly.<sup>59</sup> This ‘leaping grace’ was later defined in the *Singer’s Preceptor* (1810) alongside the ‘anticipation grace’.<sup>60</sup> Corri’s definition of the *portamento di voce* occurs earlier in the *Singer’s Preceptor* and does not explicitly reference the anticipatory grace later described:

*Portamento di voce* [...] consists in the swell and dying of the voice, the sliding and blending [of] one note to another with delicacy and expression – and expression comprehends every charm which music can produce[.]<sup>61</sup>

Corri saw the leaping grace and portamento as separate devices; it is only through the context of other sources that we can recognise the anticipatory grace as a relative of portamento. Brown (1999) has suggested that these two devices share common ancestry, but it is unclear from Corri’s writing alone whether the anticipatory grace was expected to use intermediary movement in the style of the portamento.<sup>62</sup>

Graces that closely resemble Corri’s leaping grace are evident in early vocal recordings. Examples in the Recorded Portfolio include frequent use by Patti and Melba in Mozart’s *Voi, che sapete* (CD 2: Tracks 4-6)<sup>63</sup> and Bishop’s *Home, sweet home* (CD 2: Tracks 1-3).<sup>64</sup> In these recordings the effect appears in a form distinct from the portamento, and in some cases appears as if it is only the pitching of the consonant on the grace note before the melody note is sounded (without noticeable portamento between the two). Patti appears to have used the leaping grace much more than other singers emulated in the

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*Duetts, &c., Volumes 1-3*, ed. by C. R. F. Maunder, Domenico Corri’s Treatises on Singing, 4 vols (New York; London: Garland Publishing, 1993), vol. i.

<sup>59</sup> Corri, *A Select Collection vol. i*, p. 8.

<sup>60</sup> Corri, *The Singer’s Preceptor*, p. 32. See also Lablache, *A Complete Method of Singing*, p. 33.

<sup>61</sup> Corri, *The Singer’s Preceptor*, pp. 3-4. Corri did not specify exactly when the singer was to swell or die the voice; presumably the device mirrored the natural dynamics of the spoken voice when affected by an appropriate sentiment.

<sup>62</sup> Brown, *Classical and Romantic Performing Practice*, p. 569.

<sup>63</sup> CD 2: Track 4, Adelina Patti: *Voi, che sapete* (1905), 0:31; Appendix A, p. 199, b. 13. CD 2: Track 5, Nellie Melba: *Voi, che sapete* (1907), 1:19; Appendix A, p. 204, b. 31. CD 2: Track 6, Nellie Melba: *Voi, che sapete* (1910), 0:22; Appendix A, p. 207, b. 9.

<sup>64</sup> CD 2: Track 1, Adelina Patti: *Bishop Home, sweet home* (1905), 4:22; Appendix A, p. 191, b. 51. CD 2: Track 2, Nellie Melba: *Bishop Home, sweet home* (1905), 3:43; Appendix A, p. 194, b. 48. CD 2: Track 3, Amelita Galli-Curci: *Bishop Home, sweet home* (1917), 1:34; Appendix A, p. 196, b. 22.

Recorded Portfolio, perhaps suggesting a wane in popularity in the late nineteenth century; it was noted when emulating early recordings that it is very easy indeed to introduce a portamento element into the leaping grace without consciously intending to. Anticipatory graces *without* portamento are not heard in the recordings referenced in this thesis, perhaps suggesting that the anticipatory grace may have gradually been overtaken in popularity by the portamento.

#### 4.2.5. TYPES OF PORTAMENTO

Numerous sources have described two forms of portamento specific to vocal performance. This peculiarity is analogous to forms of portamenti specific to string playing, but without the added difficulty of the great variety of fingering options available to the instrumentalist.<sup>65</sup> Vaccai (1832) described how these two types of portamento differ in their treatment of the text:

Portamento, which means “carrying” the tones, can be executed in two different ways: 1) by Anticipation i.e. by continuing the vowel of one note into the commencement of the next note [...]. By discrete use of this method, a fine effect can be obtained in the interpretation of phrases requiring a graceful manner and depth of expression; its abuse, however, invariably results in a mannered, and monotonous style of singing, 2) by posticipation, i.e. by almost imperceptibly retarding one note, and drawing the syllable of the note following across [...]. This style is less usual than the first.<sup>66</sup>

Garcia’s *New Treatise* described ‘posticipation’ as an approach to be avoided:

A slur placed between two notes, each having its syllable, is executed by carrying up the voice with the syllable of the first note; and not, as is frequently done, with the syllable of the second. [...] This style is so unhappily easily, that pupils are constantly tempted to adopt it, and so avoid the difficulty of articulating words on high notes. They commence a syllable on a low note, and then slur up to the high one. By another, more correct method, they may assist themselves in taking a high note – we mean substituting a regular portamento for the incorrect slur.<sup>67</sup>

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<sup>65</sup> See Milsom, *Theory and Practice*.

<sup>66</sup> Vaccai, *Metodo pratico*, p. 30.

<sup>67</sup> Garcia, *New Treatise*, p. 53.

Bach (1883) omitted reference to the less desirable form entirely:

True *portamento di voce* is a mutual intimate, connection of two notes in tone, each of the notes having a syllable of its own assigned to it. It is brought about by anticipating the note of a second syllable while continuing the vowel of the first.<sup>68</sup>

Lamperti (1890) also adopted this approach.<sup>69</sup> These sources confirm that the dragging of the destination text was less desirable than movement on the preceding vowel (see Example 4 for clarification) and, as Vaccai and Bériot also suggested, less widespread in usage. Potter (2006) has hypothesised that this less desirable form of portamento might have been responsible for derision of the device, presumably because of the distortion of the text in this style, and the loss of textual clarity where weak word stresses are over-emphasised.<sup>70</sup> Vaccai's exercise with the less desirable 'other style' of portamento uses the device to onomatopoeic effect in the characterisation of wind and waves; it is easy to see how the frequent use of this form of the device could become ridiculous in a more serious setting (CD 1: Tracks 4, 9).<sup>71</sup> The following example (Example 4) from Garcia's *New Treatise* illustrates the two forms of portamento using a phrase from one of the annotated arias reproduced in Appendix A, Cimarosa: Aria from *Sacrifizio d'Abraham* (CD 4: Track 9). The image appears in *New Treatise* alongside the clarification that the portamento usage is 'correct as shown in A, and incorrect as shown in B'.<sup>72</sup>

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<sup>68</sup> Bach, *Musical Education*, p. 136.

<sup>69</sup> Lamperti, *The Art of Singing*, p. 12.

<sup>70</sup> Potter, 'Beggar at the Door', (pp. 532, 534).

<sup>71</sup> Vaccai, *Metodo pratico*, p. 33.

<sup>72</sup> Garcia, *New Treatise*, p. 53.



Example 4: Illustration of two forms of portamento by Garcia (*New Treatise*)<sup>73</sup>

CIMAROSA.  
*Sacrifizio d'Abraham.*

Deh par - la - te

(A) Deh par - la - te

(B) Deh par - la - te

The less desirable form (Garcia's example B) does indeed take place infrequently in early vocal recordings, although one notable instance occurs in renditions of Mozart's *Voi, che sapete* as sung by both Patti and Melba (CD 2: Tracks 4-6).<sup>74</sup> This particular example appears widespread, and could well be the exception to the rule, as it were; brief experimentation with both forms of portamento in this location will confirm that the less desirable form provides the most convincing word-stress pattern.

Bayly (1789) believed that the descending portamento was more easily executed.<sup>75</sup> This assertion is most likely to be the result of a neutral approach to larynx height (the most likely approach to voice production in late eighteenth-century singing): if the larynx is not artificially lowered then the singer encounters difficulty with ascending pitch because the larynx rises in the throat (as described in Chapter Two). Leopold Auer (1921) actively preferred the descending portamento, but this opinion does not appear to have been widespread, and is not reflected in the portamento usage documented in the repertoire that

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<sup>73</sup> Garcia, *New Treatise*, p. 53.

<sup>74</sup> CD 2: Track 4, Adelina Patti: Mozart *Voi, che sapete* (1905), 1:08; Appendix A, p. 200, b. 25. CD 2: Track 5, Nellie Melba: Mozart *Voi, che sapete* (1907), 0:58; Appendix A, p. 204, b. 23. CD 2: Track 6, Nellie Melba: Mozart *Voi, che sapete* (1910), 1:23; Appendix A, p. 208, b. 29.

<sup>75</sup> Bayly, *The Alliance of Musick Poetry & Oratory*, p. 44.

features in Appendix A.<sup>76</sup> Evans (1943) later commented that ‘[f]or some mysterious reason the downward portamento sounds less offensive – or is it that it has become so common that we notice it less?’<sup>77</sup> An undue prevalence of the ascending portamento might also have resulted in a preference for the less common variant. As can be seen in the repertoire he annotated (reproduced in Appendix A), Garcia specified both ascending and descending portamenti.<sup>78</sup>

Whilst Bayly’s recommendation that portamento should move ‘so slowly, equally and gently, as that not the least break or separation [sic] be perceived’ might suggest continuous movement from one pitch to another, the use of an anticipatory grace note or double dotted rhythm to denote portamento suggests a reiteration of the destination pitch (however imperceptible) after the portamento itself has been completed.<sup>79</sup> Garcia specified explicitly the reiteration of the destination pitch:

A slur placed between two notes, each having its syllable, is executed by carrying up the voice with the syllable of the first note [...] The second note ought to be heard twice – once on the first syllable, and again on its own.<sup>80</sup>

He added further in *Hints on Singing* (1894) that the singer could even make a swift emergency breath between the arrival of the portamento and the reiteration of the destination note where necessary.<sup>81</sup> The reason for the omission of discussion of reiteration in other sources may be due to its implicit necessity when a new consonant or word must be begun on the destination pitch, especially as the form that moves with the preceding vowel was the more desirable of the two portamento forms.

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<sup>76</sup> Leopold Auer, *Violin Playing As I Teach It* (New York: Dover Publications, 1980), p. 24. First published in 1921. Leopold Auer, *Violin Playing as I Teach It* (New York: Frederick A. Stokes Company, 1921).

<sup>77</sup> Edwin Evans, 'The Art of Singing in Decline', *Musical Times*, 84.1205 (July 1943), 201-202 (p. 202). Although a relatively late reference, Evans’ comments are relevant to this discussion because his lifetime spanned across the turn of the twentieth century (b. 1874, d. 1945).

<sup>78</sup> Appendix A, pp. 269-283.

<sup>79</sup> Bayly, *The Alliance of Musick Poetry & Oratory*, p. 43.

<sup>80</sup> Garcia, *New Treatise*, p. 53.

<sup>81</sup> Garcia, *Hints on Singing*, p. 58.

Milsom (2003) has noted two instances in early violin and voice recordings (respectively) in which the departure pitch is reiterated *before* the portamento, but this practice does not appear to have been widespread.<sup>82</sup>

#### 4.2.6. RELATIONSHIP TO LEGATO

It would seem counter-intuitive to presume that an articulated default style of singing would be associated with the portamento, and indeed nineteenth-century sources often warned against the aspiration or undue marking of individual notes, except where designed as a specific expressive effect. In this period portamento was always described in terms of smoothness of movement:

[B]lending them [notes] so smoothly, equally and gently, as that not the least break or separation [sic] be perceived between them.<sup>83</sup>

A gradual carrying of the sound or voice with extreme smoothness from one note to another... which can only really be executed by the voice or by a bowed instrument. It is of frequent occurrence as a musical direction in vocal music or in that for stringed instruments.<sup>84</sup>

Writers also described a smooth or flowing line when discussing the true legato, depicting a style that involved continuous air flow from the lungs and avoided all cessation of tone. The following passages from Lanza (1820), Bach (1883), Garcia (*New Treatise*), and Wood (1932) illustrate this:

In all passages marked Legato the notes must be sung smoothly, in a flowing style, the voice going from one note to the other, without any breaking of the sound, or any aspiration.<sup>85</sup>

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<sup>82</sup> Milsom, *Theory and Practice*, p. 100.

<sup>83</sup> Bayly, *The Alliance of Musick Poetry & Oratory*, p. 43.

<sup>84</sup> H. J. Fuller-Maitland, 'Portamento', in *A Dictionary of Music and Musicians*, ed. by G. Grove (London: [n.pub], 1883), vol. iii, p. 18. Cited in Milsom, *Theory and Practice*, p. 75.

<sup>85</sup> Lanza, *Lanza's Abridgement of his Work on the Art of Singing*, p. 51.

In now proceeding to the discussion of *legato*, we observe that it consists in fully sustaining each note up to the commencement of the succeeding one. Accordingly we sing *legato* only when the current of air proceeding from the chest is continuous.<sup>86</sup>

[T]he air must be subjected to a regular and continuous pressure, so as intimately to unite all the notes with each other.<sup>87</sup>

A clean, clear *legato* is the style which it is all important for the singing student to cultivate; his notes must be equal in musical value and timbre, united and bound together by the continuous vocal line; the continuity of vibration in his reed or cords must never be relaxed or broken.<sup>88</sup>

Potter (2006) has suggested that ‘portamento (and the various other terms that may mean something like it) is something more than just legato singing’, a view that is corroborated by the treatment of the legato and portamento as related but distinct techniques in nineteenth-century treatises.<sup>89</sup> Both Garcia and Melba described the portamento as a device for advanced singers only, further suggesting that the expressive portamento was considered something additional to the basic presentation of pitches and text.<sup>90</sup>

Garcia was particularly keen to identify a distinction between the two effects, and clarified that only the portamento involved intervening pitches:

To sing *legato* means to pass from one sound to another in a neat, sudden, and smooth manner, without interrupting the flow of the voice; yet not allowing it to drag or slur over any intermediate sound. In this case, as with slurred sounds, the air must be subjected to a regular and continuous pressure, so as intimately to unite all the notes with each other. As an example we may instance the organ and other wind instruments, which connect sounds together without either *portamento* or *break*; this result forms the leading characteristics of vocalization, every other being only a variety used to colour it.<sup>91</sup>

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<sup>86</sup> Bach, *Musical Education*, p. 140.

<sup>87</sup> Garcia, *New Treatise*, p. 12.

<sup>88</sup> Wood, *The Gentle Art of Singing*, p. 21.

<sup>89</sup> Potter, 'Beggar at the Door', (p. 525).

<sup>90</sup> Garcia, *New Treatise*, p. 10. Nellie Melba, *Melba Method* (London: Chappell, 1926), p. 23.

<sup>91</sup> Garcia, *New Treatise*, p. 10.

*Dragging of the voice:* - Lungs, *-equal* and continued pressure of air. Glottis, *-gradual* changes in the tension of the lips of the glottis.

*Smooth vocalisation:* - Lungs, *-equal* and continued pressure of air. Glottis, *-sudden* changes in the tension of the lips of the glottis.<sup>92</sup>

In the *Melba Method* (1926) Nellie Melba described both legato and portamento as being distinct from standard vocal execution, and advised that in the default mode of vocal execution ‘the voice must move from one note to the next *without slur, or portamento*.<sup>93</sup> The treatise later provides additional exercises for the slur and the portamento (respectively), further outlining Melba’s view that the legato was something other than the default execution, and that portamento was another distinct effect. Melba’s view is unique to this research project and could reflect a change in approach, perhaps moving towards a more detached singing style as the default mode of execution. Garcia’s *New Treatise* confirms that the legato style was the default style of performance for the nineteenth-century singer:

Legato vocalization being the most frequently used, needs no sign to indicate it; pupils should therefore be warned against singing *staccato, slurring, marking, or detaching* any notes in plain passages.<sup>94</sup>

There is in reality very little solid technical information regarding legato singing and the portamento in treatises or accounts dating from the long nineteenth century; the device could not be notated clearly on the written musical text, and the terminology used to describe it was often ambiguous. Conceptually, true legato may not be possible given the necessity for the cricothyroid muscles to manipulate the vocal apparatus when pitching from one note to the next. It is possible, however, for the experienced singer to give the illusion of true legato – trained singers can complete pre-phonatory tuning in just 50 milliseconds.<sup>95</sup> Conversely, it seems plausible that the voice could execute a true portamento, as accurate tuning is only really necessary in the pre-phonatory and destination

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<sup>92</sup> Garcia, *New Treatise*, p. 11.

<sup>93</sup> Melba, *Melba Method*, p. 23. Italicisation added for emphasis.

<sup>94</sup> Garcia, *New Treatise*, p. 13.

<sup>95</sup> Barry Wyke, 'Neurological Aspects of Phonatory Control Systems in Singing: A Review of Current Concepts', *Folia Phoniatrica*, 26 (1980), 295-306 (pp. 46-47).

phases, whilst the intermediate movement could conceivably be executed by one continuous muscle movement, the pace of which the singer can regulate for expressive effect. ‘Sirening’ exercises and warm-ups (where the singer slides the voice from one extreme to the other) are currently popular with choral directors and amateurs, and there is little reason why this agility could not be harnessed in controlled portamenti with practice.

Milsom (2003) has considered the relationship between legato and portamento in violin and vocal performance:

A singer may effect a portamento for two reasons: because the structure of the phrase compels it, or because a singer desires it on aesthetic grounds. In this way, singing technique provides a parallel situation to that of the string player, who, in a similar way, may slide either through necessity, or through choice. Given that the writers have been describing technique in stylistic terms so far in this discussion, one might reasonably assume that ‘stylistic’ rather than ‘necessary’ portamenti are alluded to in respect of singers. This statement remains inconclusive, since the aim to create a ‘natural’ vocal style in violin playing does not provide any sure indication of what terms of reference are being used.<sup>96</sup>

This passage highlights the role of expression in the application of portamenti – some locations *needed* the addition of the portamento, in a way that we may now feel a baroque cadence may be desperate for a trill or appoggiatura; the nineteenth-century singer would have expected portamenti in familiar expressive locations. That ‘stylistic’ rather than ‘necessary’ portamenti were alluded to in the sources he surveyed (and those surveyed here) suggests that ‘necessary’ portamenti may have gone unnoticed to the nineteenth-century ear. Brown (2009) has further emphasised this point:

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<sup>96</sup> Milsom, *Theory and Practice*, p. 83. See also Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 88.

To nineteenth-century musicians this was perhaps so integral to vocal technique that it went virtually unnoticed by performer or listener, in much the same way as that the continuous vibrato of the twentieth/twenty-first-century has become such an inseparable element of vocal sound that it no longer draws attention to itself unless it is grossly abused (as in the singing of some older sopranos).<sup>97</sup>

An analogy could be drawn with other performing conventions that went apparently unnoticed by the nineteenth-century listener or performer (the arpeggiation of piano chords, or tempo variation, for example).

#### 4.2.7. EMOTIONAL SIGNIFICANCE

It is clear that portamento was used to signify emotion in singing of this period, but it is difficult to analyse exactly how, or through which particular feature of the device the singer conveyed sentiment to the listener. Bach (1883) related the device directly to the expression of sentiment:

*Portamento* has its place chiefly in pieces in which tender sentiment is to be expressed; yet in the representation of violent passions, and in the delineation of gloom, not less than of the serene, and even in the recitativo, it may not always be dispensed with. The artist's taste has in most cases to decide where *portamento* may be employed. Expressiveness is both the object and the effect of the *portamento*, no matter whether love, grief, or joy be the emotions to be characterised. Still, as observed above, tender sentiment can least do without it.<sup>98</sup>

The old Italian school said that without *portamento* there was no singing, but only isolated notes void of all spiritual connection.<sup>99</sup>

Leech-Wilkinson (2006) has related portamento usage to the performance of lullabies by mothers with young children, believing that:

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<sup>97</sup> Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 88.

<sup>98</sup> Bach, *Musical Education*, p. 138.

<sup>99</sup> Bach, *Musical Education*, p. 136.

portamento draws on innate emotional responses to human sound, as well as on our earliest memories of secure, loving communication, in order to bring to performances a sense of comfort, sincerity, and deep emotion.<sup>100</sup>

Leech-Wilkinson has emphasised that portamenti can not only communicate the usual ‘sentimental, calming, loving, or sad’ sentiments, but can in fact communicate a variety of thoughts and meanings, such as confidence, joy, irony, or theatricality.<sup>101</sup> As noted in section 4.2.3., the varied signification of the portamento can be heard clearly in the Recorded Portfolio. Bériot (1858) valued portamento in the expression of more sombre sentiment:

Portamento is appropriate above all to the language of drama, but it destroys all the serious and majestic simplicity of sacred music. Employed in the ingenious, naïve, pastoral style it often takes on a ridiculous character. Lavishly used in the gracious style it makes its flavour insipid and destroys the naturalness in which its beauty resides. It is always better employed in the language of sorrow and mournfulness; but still it must be used with moderation. But in passion, in despair, the portamento may be more frequent, more plaintive, though always in agreement with the character of the prosody.<sup>102</sup>

Evans (1943) warned of overusing portamento in the mistaken belief that this would portray greater sentiment:

Another terrible disease is that of which the virulent form is crooning, but it has many stages before that is reached. It begins as an emotional slither, a passionate portamento, the mildest form of which, rising to the note, is sometimes called scooping. A famous prima donna was given to this failing. She happened to be also a great actress, and felt that it aided the expression of dramatic emotion. When she made her debut in New York the audience, startled at the unusual sight of a singer who could act, roared its approval. The next day one of the newspapers splashed the head-line: ‘She Scoops to Conquer.’<sup>103</sup>

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<sup>100</sup> Daniel Leech-Wilkinson, 'Portamento and Musical Meaning', *Journal of Musicological Research*, 25 (2006), 233-261. (Abstract).

<sup>101</sup> Leech-Wilkinson, 'Portamento and Musical Meaning', (p. 238).

<sup>102</sup> Bériot, *Méthode de Violin* p. 235. Translated in Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, p. 90.

<sup>103</sup> Evans, 'The Art of Singing in Decline', (p. 202).



It is difficult to assess in this passage whether the offence of ‘crooning’ was committed in the inappropriate scope, frequency, location, or emphasis of portamento usage.<sup>104</sup> (The discussion of a disease or affliction can often be seen in derision of overuse of vocal vibrato.)

It is possible to begin to develop a sense of where portamento might have been used expressively by experimenting with the device (guided in part by the example of the vocal performances preserved in early acoustic recordings). In practice it seems intuitive to adapt the spirit of the portamento to the sentiment being expressed as these writers encouraged; using swift and carefree movement in music of an energetic and joyful character, and slower movement for music of a plaintive character. Garcia confirmed the legitimacy of this approach, commenting that portamento should be ‘strong, full, and rapid’ when demonstrating ‘forcible sentiments’, but ‘slower and softer’ in the expression of ‘tender and graceful passages’.<sup>105</sup> In this way the emotional content of the portamento might appear to have been associated with the speed and dynamic of execution. It is possible that portamento extent might have been used to signify differing sentiment in nineteenth-century singing, but detailed analysis of annotated repertoire and early vocal recordings is needed to ascertain whether or not this was the case. Garcia considered portamento effective where the voice naturally dragged ‘under the influence of a strong or tender sentiment’.<sup>106</sup> This echoes advice offered on the subject of expressive devices more generally; singers were to take the effects of emotion upon the speaking voice as a model for expressive singing.

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<sup>104</sup> This is a mid twentieth-century reference, but Evans (b. 1874, d. 1945) would have witnessed change in portamento usage during the late eighteenth and early nineteenth centuries.

<sup>105</sup> Garcia, *New Treatise*, p. 52.

<sup>106</sup> Garcia, *New Treatise*, p. 53.

#### 4.2.8. NOTES ON USAGE

A variety of nineteenth-century sources advocated the clean onset of the voice at the beginning of a phrase, denouncing portamento and general deviation or insecurity at the opening of any melody. Novello (1859) wrote that:

*Anticipation*, or taking every note with a precursory interval, usually a third below, is a great blemish to singing, and is peculiarly irritating and distasteful to all good musicians, for the intervals thus sung are often entirely foreign to the chord employed by a composers, and therefore utterly destroy pure harmony or counterpoint. This defect often arises from uncertainty of intonation, and must be studiously avoided.<sup>107</sup>

Lamperti (1890) similarly warned the singer against singing ‘Strisciato’ (literally ‘crawling’ or ‘creeping’), and ‘slurring up to his notes in mistake for *Legato*’.<sup>108</sup> Garcia advised specifically against beginning a note with the portamento:

Above all, learners should avoid taking notes with a slur; this is a very common and prevailing fault in bad singers.<sup>109</sup>

Like Novello (1859), Bach (1883) and Melba (1926) also emphasised the importance of secure onset and intonation:

Every note must ring out all by itself independently and pure, without that too common disagreeable fetching about.<sup>110</sup>

The attack must be neat, and precisely on the note. To begin the note too low, and then slur up to the right note, is an unforgiveable [sic] fault. There can be no real singing without a good attack.<sup>111</sup>

The excerpts above suggest that the use of a poorly chosen interval for the ‘leaping grace’ or the inclusion of portamento prior to the opening note of a phrase was considered to be

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<sup>107</sup> Sabilla Novello, ‘Voice and Vocal Art (Continued)’, *Musical Times*, 9.193 (1859), 3-5 (p. 4). See Brown, *Classical and Romantic Performing Practice*, pp. 558, 566-567.

<sup>108</sup> Lamperti, *The Art of Singing*, p. 13.

<sup>109</sup> Garcia, *New Treatise*, p. 12.

<sup>110</sup> Bach, *Musical Education*, p. 31.

<sup>111</sup> Melba, *Melba Method*, p. 11.

in poor taste.<sup>112</sup> Discussion of this fault by writers of the period shows that the use of portamento at the opening of a phrase was not uncommon, if considered ill-advised or distasteful by some. Notably, Patti can be heard to use a downward portamento *after* the closing note of a phrase (emulated on CD 2: Track 4), but this is an isolated (and seemingly unusual) occurrence.<sup>113</sup>

Both Brown and Potter have noted an increased use of portamento (demonstrated in an increase in complaints about *overuse* of portamento) as the nineteenth century begins. Milsom (2003) has sensibly suggested that the decline in 'highly mannered use' of portamento as the twentieth century progressed:

might be another fashion swing, made all the more permanent by the enduring use of continuous vibrato, which - though completely different in essentials - seems to have supplanted portamento as the principal vehicle for tonal expression.<sup>114</sup>

Bériot (1858) connected the overuse of both devices:

Almost all the violinists who make too much use of portamento abuse the vibrato; the one fault inevitably leads to the other. The affectation shown in the use of these techniques renders the playing of the artist mannered, exaggerated, for it gives the piece more expression than is consonant with truth.<sup>115</sup>

The association of the misuse of both techniques was later noted by Auer in 1921.<sup>116</sup> It is highly likely that the gradual 'fashion swing' Milsom has described was influenced by the developments in voice production techniques described in Chapter Two; the growing popularity of low-larynx singing fuelled the developing taste for vibrato usage, and meant that portamento was eventually usurped by vibrato (and tremolo) as the principal indicator of expressive singing. A possible demonstration of this kind of developing trend can be noted in the singing styles of Adelina Patti (widely considered to represent the singing style

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<sup>112</sup> The *cercar della nota* also involves (non-portamento) graces of the kind these sources describe. See Brown, *Classical and Romantic Performing Practice*, pp. 558, 566-567.

<sup>113</sup> CD 2: Track 4, Adelina Patti: Mozart *Voi, che sapete* (1905), 0:48; Appendix A, p. 199, b. 18.

<sup>114</sup> Milsom, *Theory and Practice*, p. 107.

<sup>115</sup> Bériot, *Méthode de Violin* p. 242. Translated in Brown, 'Singing and String Playing in Comparison', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, pp. 100-101.

<sup>116</sup> Auer, *Violin Playing As I Teach It*, p. 22.

of the mid nineteenth century), and of Marcella Sembrich. Patti's relatively old-fashioned singing style utilises plenty of portamenti and leaping graces, and very sparing addition of vibrato, but, in contrast, Sembrich gives a largely clean rendering of musical texts in terms of additional portamenti but uses a relatively continuous small-scale intensity vibrato.

Brown (1999) has asserted that portamento in violin performance, 'even in solo playing, [...] was strongly resisted for some time during the early nineteenth century', but this does not seem to be the case in solo singing of the period.<sup>117</sup> Milsom has also suggested that '[v]iolin theorists advocated a more strict attitude to portamento than the vocalists put into practice'.<sup>118</sup> The frequency with which singers used portamento in this period is difficult to ascertain, especially as assessments of frequency are relative to expectations and trends at the time of writing. As Brown (1999) has described:

Even the authors of the most violent diatribes against its abuse were almost certainly quite happy to hear it tastefully and proportionately introduced, but here, as elsewhere, ideas of what was tasteful or proportionate will almost certainly have been very different from ours at all stages of the period.<sup>119</sup>

Potter (2006) has also suggested that portamento usage might have been more frequent than written sources suggest:

[S]ingers were far more uninhibited about such things than those who merely wrote about them, though by the twentieth century, when performers began to write their own manuals for the mass market, they too tended to pitch their remarks within this historical ideology of disciplined restraint.<sup>120</sup>

Garcia's annotated repertoire does not suggest very frequent portamento usage, but we cannot be sure that he notated every possible opportunity for portamento, and it is unlikely that such annotations depict the 'necessary' portamento Milsom has described. Milsom has noted that in Bériot's examples the portamento:

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<sup>117</sup> Brown, *Classical and Romantic Performing Practice*, p. 564.

<sup>118</sup> Milsom, *Theory and Practice*, p. 88.

<sup>119</sup> Brown, *Classical and Romantic Performing Practice*, p. 587.

<sup>120</sup> Potter, 'Beggars at the Door', (p. 528).

is placed on strong beats in all but one case, is most frequently employed ascending, and perhaps more importantly falls within words or on melismas when the singer could scarcely avoid executing a slide of some sort. [...] [T]he vocalist would have little choice but to slide in these places, although it must be noted that singing technique can make such sliding barely perceptible.<sup>121</sup>

This again supports the theory that a much more legato singing style was the default setting for nineteenth-century singers, and portamento an additional effect. The feeling that portamento is unavoidable is emphasised when performing with particular concentration on continual breath flow in phrasing. Frequent incidental portamento of this kind would undoubtedly be considered untidy or ‘sloppy’ in a modern vocal performance, but may well have gone unnoticed by nineteenth-century performers and listeners.

Changing approaches to larynx height do not appear to have had any tangible effect upon the execution of the portamento. What is obvious from research into portamento usage (or expectation) in the long nineteenth century is that the device was considered one of the primary tools for expression, whilst the modern expressive device of choice, the vibrato, was discussed merely in passing, and often only to warn against its inappropriate usage.<sup>122</sup>

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<sup>121</sup> Milsom, *Theory and Practice*, p. 82. Bériot, *Méthode de Violin* p. 240.

<sup>122</sup> Brown, *Classical and Romantic Performing Practice*, p. 565. Corri (1810) stated that ‘the *Portamento di voce* may justly be compared to the highest degree of refinement in elegant pronunciation in speaking.’ Corri, *The Singer's Preceptor*, pp. 3-4.



## *Chapter Five*

# SENSE AND SENSIBILITY: FURTHER REQUIREMENTS FOR AFFECTIVE NINETEENTH-CENTURY SINGING

The earlier chapters of this thesis have discussed the technical requirements of performing music in the style of the nineteenth century, and the impact of a changing approach to larynx height upon aspects of singing style commonly featured in nineteenth-century writing (*messa di voce*, portamento) and of particular interest to current discussion of historically-informed singing (vibrato usage). The use of an appropriate technique alongside attention to stylistic detail was not, however, the complete recipe for a truly expressive nineteenth-century performance: the purpose of this chapter is to acknowledge further attributes required by the stylish nineteenth-century singer. These include devices and approaches that, regrettably, could not be fully addressed within the limits of this research project, and would therefore benefit from future research.

### 5.1. EXPRESSION

Both modern and nineteenth-century musicians would agree that successful musical performance relies on something more than simply the accurate or appropriate reproduction of a musical text, but defining this extra-musical quality (or qualities) remains notoriously difficult. Allan (2011) has equated the ring of the low-larynx vocal technique directly to the concept of expression, believing that ‘the presence of balanced partials will transfer the emotional content of the music more easily to the listener’, but this view is

inextricably tied in with the experience of a modern (continuous) low-larynx technique and therefore incompatible with eighteenth- and nineteenth-century concepts of expression.<sup>1</sup>

A preoccupation with expression and sentiment can be seen in sources dating from the eighteenth-century onwards, particularly with regard to vocal music.<sup>2</sup> The role of the application of ornamentation and other musical devices in the discussion of expression in this period might suggest that sentiment was communicated through the adaptation or embellishment of the musical text. In the nineteenth century this might have been the use of tempo rubato, more general tempo changes, the addition of unwritten gasps, sigh or sobs, the improvisation of ornamentation, or the use of a particular timbre or tone colour – all governed by the over-arching principle of *chiaroscuro*. Defining moderation and good taste in terms of historical expectation remains problematic, but the general rule for expressive performance in the nineteenth century appears to have been that devices and variations were to be applied in moderation, and in keeping with the general climate of musical variety and *chiaroscuro* that characterised musical style in this period. As some degree of variation was expected of all competent performers, we might also interpret expression as the proper representation of sentiment through ornamentation, the application of expressive devices, and other appropriate forms of vocal variation. Bach (1883) reminded singers that expression was directly related to the great diversity of emotions observable in human nature:

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<sup>1</sup> Christopher Allan, 'Helping the Young Soprano Bring Emotional Truth to Seventeenth- and Eighteenth-Century Recitative Through the Use of Speech Mode', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/allan/>> [accessed 9 January 2012].

<sup>2</sup> Simon McVeigh, *Concert Life in London from Mozart to Haydn* (Cambridge; New York: Cambridge University Press, 1993), pp. 129, 132, 140.



Expression is the soul of music: without it music is reduced to a mere toy; by its means music becomes the most telling form of speech, irresistibly affecting the heart. Now it compels us to be tender, and again it inspires us with courage and steadfastness; now it excites our compassions, now our admiration.<sup>3</sup>

Nathan (1836) warned that '[f]alse expression (an error into which many fall) is infinitely worse than no expression at all: it renders the most beautiful and pathetic airs ludicrous.'<sup>4</sup>

Throughout this period the proper expression of sentiment remained a skill that related directly to human emotion, but was refined through the observation of performers experienced in the fashionable expressive devices of the day; for the modern musicologist-performer the evidence of documentary (and recorded) sources must suffice.

#### 5.1.1. ORNAMENTATION

Corri (c.1780s), in the discussion of graces, wrote that 'an air, or recitative, sung exactly as it is commonly noted, would be a very inexpressive, nay, a very uncouth performance'.<sup>5</sup> The countless possible variations of a musical text through ornamentation have not been detailed here, partly because of the scope of this project, and also because there is existing work by scholars in this area.<sup>6</sup>

A number of tracks from the Recorded Portfolio document experimentation with ornamentation. Rossini's *Una voce poco fa* from *Il barbiere di Siviglia* (CD 4: Track 1) demonstrates ornaments based on those transcribed by Laura Moeckli from a c.1835

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<sup>3</sup> Albert B. Bach, *Musical Education and Vocal Culture: for vocalists and teachers of singing* (Edinburgh: W. Blackwood & Sons, 1883), p. 139. See also p. 85.

<sup>4</sup> Isaac Nathan, *Musurgia Vocalis: an Essay on the History and Theory of Music, and on the Qualities, Capabilities, and Management of the Human Voice* (London: Fentum, 1836), p. 219.

<sup>5</sup> Domenico Corri, *A Select Collection of the Most Admired Songs, Duets, &c* (London: John Corri, [n.d.]), vol. i, p. 2. Reproduced in *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volumes 1-3*, ed. by C. R. F. Maunder, *Domenico Corri's Treatises on Singing*, 4 vols (New York; London: Garland Publishing, 1993), vol. i.

<sup>6</sup> See Crutchfield's work on vocal ornamentation. Will Crutchfield, 'The Prosodic Appoggiatura in the Music of Mozart and His Contemporaries', *Journal of the American Musicological Society*, 42.2 (1989), 229-274. Will Crutchfield, 'Vocal Ornamentation in Verdi: The Phonographic Evidence', *19th-Century Music*, 7.1 (1983), 3-54. See also Robert Toft, *Heart to Heart: Expressive Singing in England 1780-1830* (Oxford: Oxford University Press, 2000). Robert Toft, *Bel Canto: A Performer's Guide* (Oxford: Oxford University Press, 2013).

manuscript.<sup>7</sup> Perhaps surprisingly, some of these ornamental figures are still common in performances of this aria by modern operatic singers. *Cease your funning* (CD 4: Track 8) realises a transcription of ornaments in Special Collections at the Brotherton Library (University of Leeds) that reportedly documents a performance by Madame Catalani.<sup>8</sup> This transcription, as expected of Catalani, is exceptionally florid, including leaps of two octaves and heavily ornamented figures that exceed the length of the written bar. Whilst Catalani's performances might have been exceptional, the other ornamented sources in Appendix A also suggest a greater degree of ornamentation than is common in modern vocal performance (even that which appears to be historically-informed to some degree). Calvé's *My Life* (1922) includes an account of Patti performing *Una voce poco fa* before Rossini:

Patti sang all the rôles of the Italian repertoire exquisitely. Her vocalisation was remarkable, particularly in "The Barber of Seville." It is said that one day she sang the aria, "Una voce poco fa," for Rossini. The composer listened without comment. "How do you like it?" Patti asked finally. "It's very nice," answered the maestro. "But what is it?" "Don't you recognise your own 'Barber?'" Patti asked in astonishment. "Your 'Barber,' you mean!" he retorted. "It is not mine at all! It is easy to see that your master has Strakoschanised my poor opera!"<sup>9</sup>

It is clear that not everybody appreciated high levels of ornamentation, but ornamentation played an important part in expressive singing of the nineteenth century. Observation of the recitative to Cimarosa's aria from *Sacrifizio d'Abraham* (not featured in the Recorded Portfolio, but reproduced in Appendix A, pp. 269-270) demonstrates just how much variation could reasonably be added to the performance of a short and fairly simple recitative. This approach is very different from current perception of nineteenth-century performance practices. Historically-informed singers must, however, be aware that this is just one area in which the stylish singer could introduce variation for expressive effect.

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<sup>7</sup> Laura Moeckli, "Abbellimenti o fioriture' Further Evidence of Creative Embellishment in and beyond the Rossinian Repertoire', in *Beyond Notes: Improvisation in Western Music in the 18th and 19th centuries*, ed. by Rudolf Rasch (Turnhout: Brepols, 2011), pp. 277-294.

<sup>8</sup> Part of the collection titled 'English songs 1695-1830', published by N. Corri in Edinburgh, c.1803-4. Shelf Mark: Special Collections Large Music E-9 ENG.

<sup>9</sup> Emma Calvé, *My Life*. trans. by Rosamund Gilder (New York: D. Appleton, 1922), p. 163. Patti's teacher at this point was Maurice Strakosch; the origins of this anecdote are unknown.

### 5.1.2. TEMPO VARIATION

One only has to listen to early acoustic recordings of celebrated singers to glimpse the relaxed attitude that both singer and accompanist(s) had to strict ensemble (in the modern sense of simultaneous onset and regular tactus) at the turn of the twentieth century. Changes in tempo could be large scale, affecting whole movements, sections, or phrases, or much more localised, affecting only sections of a phrase, a single bar, or even one or two individual notes. Garcia (*New Treatise*) described tempo rubato as ‘the momentary increase of value, which is given to one or several sounds, to the detriment of the rest, while the total length of the bar remains unaltered’, carefully making the distinction that ‘*accelerando* and *rallentando* movements require the voice and accompaniment to proceed in concert; whereas, *tempo rubato* allows liberty to the voice only’.<sup>10</sup> A subsequent anecdote illustrates the scope of the device for those with great skill:

Two artists of a very different class – Garcia (the author’s father) and Paganini – excelled in the use of the *tempo rubato*. While the time was regularly maintained by an orchestra, they would abandon themselves to their inspiration, till the instant a chord changed, or else to the very end of the phrase. An excellent perception of rhythm, and great self-possession on the part of a musician, however, are requisite for the adoption of this method, which should be resorted to only in passages where the harmony is stable, or only slightly varied – in any other case, it would appear singularly difficult, and give immense trouble to the executant.<sup>11</sup>

Nathan (1836) also emphasised that tempo rubato was best left to ‘those whose knowledge dictates to them how to steal discreetly; for, if they be caught bungling in the fact, not even the restoration of the stolen property to its neighbour will compensate for the offence.’<sup>12</sup>

Like all expressive devices, tempo rubato was to be used very carefully, as Garcia

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<sup>10</sup> Manuel Garcia, *New Treatise on the Art of Singing. A Compendious Method of Instruction, with Examples and Exercises for the Cultivation of the Voice* (London: Hutchings & Romer, [n.d.]), pp. 50, 51.

<sup>11</sup> Garcia, *New Treatise*, p. 51. Garcia II illustrated this passage with a musical example showing the degree of rhythmic alteration used by Garcia I.

<sup>12</sup> Nathan, *Musurgia Vocalis*, p. 290.

emphasised: ‘The *tempo rubato*, if used affectedly, or without discretion, destroys all balance, and so tortures the melody.’<sup>13</sup>

Examples of tempo variation in the emulations of early recordings included in the Recorded Portfolio include the rushing of semiquavers in the joyful waltz Gounod’s *Jewel Song*,<sup>14</sup> and both pulling back and pushing forward in Chaminade’s *L’Été*.<sup>15</sup> Melba’s performance of Bishop’s sentimental *Home, sweet home* demonstrates an expressive slowing (alongside the accompaniment) at around half the existing speed at the words ‘Oh! Give me my lowly thatched cottage again’ (CD 2: Track 2, 2:19).<sup>16</sup> Small-scale trends appear in other examples of performances of repertoire by a number of singers; for example, in the rushing forward of the recitative-like B section of Mozart’s *Voi, che sapete* in performances by both Patti and Melba (CD 2: Tracks 4 – 6).<sup>17</sup> Some specific tempo adaptations appear to have entered the canon of performance convention by the turn of the twentieth century; for example, in the emulations of Albani and Marchesi singing Chaminade’s *L’Été* (CD 2: Tracks 7 and 8) there is a half bar in the refrain that is performed at half speed in each instance.<sup>18</sup> It was observed that ensemble in the recordings emulated on CD 2 of the Recorded Portfolio was, in general, less strict than currently expected.<sup>19</sup>

In Garcia’s annotated repertoire notes or phrases where the singer is at liberty to pull back the tempo are simply marked ‘Slow’, and usually occur at points where the voice

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<sup>13</sup> Garcia, *New Treatise*, p. 51.

<sup>14</sup> CD 2: Track 11, Suzanne Adams: Gounod *Jewel Song* (1902/3), 0:52; Appendix A, p. 241, b. 43.

<sup>15</sup> CD 2: Track 7, Blanche Marchesi: Chaminade *L’été* (1906), 1:02; Appendix A, p. 213, b. 35. CD 2: Track 8, Emma Albani: Chaminade *L’été* (1914), 1:18; Appendix A, p. 221, b. 41.

<sup>16</sup> CD 2: Track 2, Nellie Melba: Bishop *Home, sweet home* (1905), 2:19; Appendix A, p. 193, b. 32.

<sup>17</sup> CD 2: Track 4, Adelina Patti: Mozart *Voi, che sapete* (1905), 2:16; Appendix A, p. 201, b. 48. CD 2: Track 5, Nellie Melba: Mozart *Voi, che sapete* (1907), 2:05; Appendix A, p. 205, b. 46. CD 2: Track 6, Nellie Melba: Mozart *Voi, che sapete* (1910), 2:36; Appendix A, p. 209, b. 52.

<sup>18</sup> CD 2: Track 7, Blanche Marchesi: Chaminade *L’été* (1906), 1:18; Appendix A, p. 213, b.44. CD 2: Track 8, Emma Albani: Chaminade *L’été* (19014), 1:21; Appendix A, p. 221, b.43.

<sup>19</sup> The original recordings are detailed in Chapter Six (with web links where applicable).

is unaccompanied.<sup>20</sup> Annotated examples of tempo rubato (where the voice is accompanied, but moves independently) include only a prose direction, and the direction to allow time for the prolonged sounding of a consonant.<sup>21</sup> Such scant annotation of tempo rubato does not suggest infrequent usage of the device, but rather presumes understanding and experience of its use by accomplished singers (and accompanists).

Although it is expected that this aspect, like much of nineteenth-century vocal performance, was governed by expression of appropriate sentiment and an expectation of musical contrast, more specific research into the use of tempo variation in early vocal recordings would provide valuable insight into the location and application of these devices.<sup>22</sup>

### 5.1.3. DYNAMIC VARIATION

Dynamic variation was often listed as one of the elements governed by the principle of *chiaroscuro* in this period. Garcia specifically encouraged dynamic diversity in musical performance:

[T]he *forte-piano*, *crescendo*, and *diminuendo*, are employed chiefly to enhance sentiment, and not in compliance with the forms of music. [...] In coloring by details, all the delicacies of the melody should be attended to. Each melodic figure, - each *intention*, should have its effect. This method suits the liveliness of rapid and short ideas, and is adapted to a graceful and buffo style; it is also adopted with equal success in chamber and dramatic music.

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<sup>20</sup> Appendix A, Morlacchi: Aria from *Teobaldo ed Isolina*, p. 281, second system, b.3. Appendix A, Cimarosa: Aria from *Sacrifizio d'Abraham*, p. 269, second system, b.4; third system, b. 3; p. 270, first system, b. 1; third system, b. 4; fourth system, b. 2.

<sup>21</sup> Appendix A, Cimarosa: Aria from *Sacrifizio d'Abraham*, p. 271, second system, b. 3. Appendix A, Morlacchi: Aria from *Teobaldo ed Isolina*, p. 281, first system, b. 6.

<sup>22</sup> For discussion of tempo variation in early string recordings, see David Milsom, *Theory and Practice in Late Nineteenth-Century Violin Performance: an examination of style in performance, 1850-1900* (Aldershot; Burlington, VT: Ashgate, 2003).

If the shadings of the forte-piano are to be impressive, the diction must be natural and even; it being an error to give the same degree of strength to all parts of a passage. When all is energetic, energy, in fact, exists nowhere. Generally speaking, a source of the most strongly-marked effects consists in *contrast*. An effect prepared by contrast is rendered far more brilliant – as a piano opposed to a forte; passages composed of rapid sounds following a succession of *sostenuto* notes; &c, &c.<sup>23</sup>

Nathan's *Musurgia Vocalis* (1836) provides singers with illustrations of numerous possible variants of the swelling and diminishing of the voice, demonstrating the expectation of regular dynamic change through the detailed annotation of Handel's *Holy Lord God Almighty*.<sup>24</sup> This example frequently shows the voice tapering off at the end of phrases, as described elsewhere by Corri (1810): 'On the last note of a passage, always die the Voice'.<sup>25</sup> Bériot's *Méthode de Violin* (1858) offers more detailed phrasing advice to instrumentalists, but discussion of phrasing was not commonly found in vocal treatises of the period; singers were obviously expected to follow the lead of experienced performers, and to uphold rhetorical principles also applied to oration. Toft has discussed early nineteenth-century phrasing convention in far greater detail in *The Expressive Pause: Punctuation, Rests, and Breathing in England, 1770-1850*.<sup>26</sup>

Thorough enquiry of written evidence from throughout this period, alongside dedicated analysis of early recordings, could help to elucidate the specific application of dynamic variation and phrasing convention throughout the long nineteenth century. It is expected that this aspect of expression was also closely related to the communication of sentiment within the culture of *chiaroscuro*.

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<sup>23</sup> Garcia, *New Treatise*, p. 55.

<sup>24</sup> Nathan, *Musurgia Vocalis*, pp. 153, 214-216. Partially reproduced in Toft, *Heart to Heart*, pp. 72-73.

<sup>25</sup> Domenico Corri, *The Singer's Preceptor* (London: Longman, Hurst, Rees and Orme, 1810), p. 52. Reproduced in *Domenico Corri's A Select Collection of the Most Admired Songs, Duets, &c., Volume 4, and The Singer's Preceptor, Volumes 1-2*, ed. by C. R. F. Maunder, Domenico Corri's Treatises on Singing, 4 vols (New York; London: Garland Publishing, 1995), vol. iii.

<sup>26</sup> Robert Toft, 'The Expressive Pause: Punctuation, Rests, and Breathing in England, 1770-1850', *Performance Practice Review*, 7.1 (1994), 1-32. See also Toft, *Heart to Heart*. Toft, *Bel Canto*.

#### 5.1.4. GESTURE IN VOCAL PERFORMANCE

We must not assume that proper expression in successful performance involved only the singing voice; the presumption of appropriate gesture as a component of vocal performance is alluded to in a number of sources that were encountered over the course of this research project. Baroque gesture has received some interest in recent years, but the possible role of movement in expressive vocal performances of the late eighteenth and nineteenth centuries has yet to be explored at length. King (2008) has described the function of gesture in the Baroque period as being ‘to create for the spectator a concrete image of the ideas or affects expressed by the words and music.’<sup>27</sup> Rutherford (2007) has made a similar assessment of nineteenth-century gesture: ‘Gesture was perceived as possessing a vital role in clarifying the spectator’s grasp of musical essence.’<sup>28</sup> On a more aesthetic note, Nathan (1836) advised that ‘[h]owever charmed we may be by a good voice, the eye as well as the ear requires to be pleased’.<sup>29</sup>

Austin’s *Chironomia* (1806) provides a comprehensive guide to gesture in the delivery of the ‘principle species’ of the ancient art of public speaking at senate, at the bar, in the pulpit, and on the stage.<sup>30</sup> This text is seminal in its comprehensive nature: Barber’s *Practical Treatise on Gesture* (1831) was ‘chiefly abstracted from Austin’s *Chironomia*’, and Russell’s *Rudiments of Gesture* (1830) was also ‘drawn from that rich and copious volume, Austin’s *Chironomia*’.<sup>31</sup> Austin defined ‘gesture’ as follows:

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<sup>27</sup> Richard G. King, ‘How to be an emperor?: acting Alexander the Great in opera seria’, *Early Music*, 36.2 (2008), 181-201 (p. 181).

<sup>28</sup> Susan Rutherford, ‘La cantante delle passioni!: Giuditta Pasta and the Idea of Operatic Performance’, *Cambridge Opera Journal*, 19.2 (2007), 107-138 (p. 133).

<sup>29</sup> Nathan, *Musurgia Vocalis*, p. 246.

<sup>30</sup> Gilbert Austin, *Chironomia; or A Treatise on Rhetorical Delivery* (London: W. Bulmer & Co., 1806), p. vi. Austin frequently referred to ancient writers that included Quintilian and Cicero.

<sup>31</sup> Jonathan Barber, *A Practical Treatise on Gesture* (Cambridge: Hilliard and Brown, 1831). See title page. William Russell, *Rudiments of Gesture* (Boston: Carter and Hendee, 1830), p. viii.

Under gesture is comprehended the action and position of all the parts of the body; of the head, the shoulders, the body or trunk; of the arms, hands, and fingers; of the lower limbs, and of the feet.<sup>32</sup>

His treatise confirms that, like all other expressive devices, appropriate physical expression and countenance were to be guided by the nature of the sentiment and ‘character of feeling’.<sup>33</sup> Russell (1830) also made a connection between expression and emotion, affirming that ‘[g]esture derives its existence from the necessary sympathy of mind and body. It is by no means a mere product of art.’<sup>34</sup> Henry Siddons (eldest son of renowned English actress Mrs Sarah Siddons) further defined gesture in his *Practical Illustrations of Rhetorical Gesture and Action* (1822) as ‘the exterior and visible signs of our bodies, by which the interior modifications of the soul are manifested and made known’.<sup>35</sup>

We know from accounts that date from throughout the nineteenth century that performers on the musical stage were judged as singing-actors, and expected to possess equally impressive singing and acting skill. Gesture quite clearly formed an integral part of a compelling performance by the singing-actor. As prints in the Victoria and Albert Museum’s Online Collections demonstrate, it was not uncommon for performers to be shown mid-gesture in portraits when depicted in a particular role.<sup>36</sup> Discussion of the exact nature of the gestures used by actors on stage is far too detailed to be considered here: Austin’s treatise (1806) details more than one hundred and twenty illustrations of gesture (some of which also appear in both Barber and Russell), alongside numerous figures

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<sup>32</sup> Austin, *Chironomia*, p. 133.

<sup>33</sup> Austin, *Chironomia*, pp. 92, 378.

<sup>34</sup> Russell, *Rudiments of Gesture*, p. iii.

<sup>35</sup> Henry Siddons, *Practical Illustrations of Rhetorical Gesture and Action* (London: Sherwood, Neely, and Jones, 1822), p. 27.

<sup>36</sup> *Theatre and Performance Collection* (V&A Museum, 2014) <<http://collections.vam.ac.uk/collection/tp/10/>> [accessed 24 March 2014]. See, for example, Alfred Edward Chalon, ‘Giulia Grisi as Anna Bolena in Donizetti’s opera (1836)’, in *Harry Beard Collection* (V&A Museum, 2014) <<http://collections.vam.ac.uk/item/O181946/h-beard-print-collection-print-chalon-alfred-edward/>> [accessed 24 March 2014]. Austin cited Giuseppina Grassini as an example of a singer that was also an exceptional actress (p. 247). See Harry Beard Collection for illustrations of Grassini using gesture. King has noted the mutual influence of depictions of gesture in artwork and the use of gesture on the stage. King, “How to be an emperor”, (pp. 195-196).



focusing upon the specific movement of each hand, arm, and foot in detail, all of which are accompanied by descriptions of execution and signification. Siddons' *Practical Illustrations* (1822) also includes a selection of engravings that demonstrate the posture and gesture of various states and emotions. Discussion of the signification and appropriate use of specific gestures in nineteenth-century vocal performances could easily form the content of another thesis, and therefore has not been touched upon here.<sup>37</sup> As Austin commented, '[t]he variety of gestures, of which the human figure is capable, in all the motions, positions, and combinations of the head, the body, and the limbs, may almost be accounted infinite.'<sup>38</sup>

Further specialised research in this area is vital if we are to understand the full experience of nineteenth-century vocal performances (particularly those on the stage), and the changing expectations of both performer and audience member.

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<sup>37</sup> For an introduction to the use of gesture in nineteenth-century vocal performance see Robert Toft, 'An Expressive Countenance: The Actor of the Passions', in *Heart to Heart: Expressive Singing in England 1780-1830* (Oxford: Oxford University Press, 2000).

<sup>38</sup> Austin, *Chironomia*, p. 293.



## *Chapter Six*

# PERFORMING THE ART OF SINGING:

## RECORDED PORTFOLIO CRITICAL COMMENTARY

The function of this chapter is to provide commentary upon the development of both stylistic and technical skill throughout the course of the research project, as demonstrated by the contents of the Recorded Portfolio. Within this chapter the aims and objectives of each CD of recordings are outlined, and research conclusions explored. The recordings are not critiqued note-for-note, but their general success is discussed and individual elements of interest highlighted where appropriate. The Recorded Portfolio not only documents the development of the research project, but also disseminates the research of nineteenth-century singing styles and techniques through the act of singing itself.

### 6.1. LARYNX HEIGHT EXPERIMENTATION: **CD 1**

#### 6.1.1. AIMS AND OBJECTIVES

The aim of the first recording session was to experiment with neutral, transitional, and (consistently) low larynx height in an effort to better assess accounts of these techniques, and demonstrate the contrast between each of these modes of voice production. Vaccai's *Metodo pratico* (1832) was chosen to demonstrate these techniques as it dates from a period when neutral and transitional approaches to larynx height are likely to have been used concurrently. The didactic nature of the publication also presented an opportunity to experiment with stylistic devices alongside differing approaches to larynx height.

The transitional style used in these recordings is that described by Lehmann (and

others), where a singer prepares for pitch ascension by raising the soft palate, and not the timbral approach advocated by Garcia and Bach (amongst others). This decision reflects the early stage of the research project at the time that these tracks were recorded.

The degree of experimentation with tempo in the Mozart *Ach ich fühl's* examples was influenced by a comment made by Gottfried Weber in 1815.<sup>1</sup> Weber commented that the aria was performed under Mozart's command at ♪ = c.138-152, but had since slowed. Renditions of this aria in modern opera regularly last between four and five minutes, and yet a performance observing Weber's metronome marking would occupy less than two minutes. Even with an expectation of tempo variation a performance in Weber's speed range is significantly swifter than modern operatic renditions.<sup>2</sup> It is possible that changing approaches to larynx height could have influenced a tendency towards slower tempi, as the lowered larynx offers additional resonance that can excite a sustained note with a type of aural interest unavailable to the neutral-larynx singer.

An Erard piano dating from c.1855 was used to accompany exercises with a neutral-larynx approach, and a Steinway Model D concert grand piano used to accompany those with a transitional approach to larynx height. A specific instrument is listed in the track title of each Mozart rendition as conscious deviation from this principle was made in the name of experimentation (see discussion below).

### 6.1.2. RESEARCH CONCLUSIONS

Experimentation with neutral and transitional approaches to voice production proved to be very informative. Perhaps most shocking was the way in which the use of the voice was dramatically and audibly different, and yet the voice itself was still immediately recognisable as my own. The progression of the research project by this time had created an expectation that the output of the neutral-larynx approach might be shocking, or perhaps even

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<sup>1</sup> Gottfried Weber, *Allgemeine musikalische Zeitung* (1815), 247-249. Cited in Clive Brown, *Classical and Romantic Performing Practice 1750-1900* (Oxford: Oxford University Press, 1999), p. 297.

<sup>2</sup> There do not appear to be extant examples of this aria by early recording artists.

unpleasant to the modern ear, but instead the effect of the technique had a charm and vulnerability reminiscent of teenage performances. A positive reaction was expressed by both the recording engineer and the accompanist present in the recording sessions, and later by listeners at a postgraduate research event.

These recordings demonstrate the expected timbral qualities of the neutral- and low-larynx styles, and confirm that early singing was indeed expressive and emotive, as writers of the time suggested, although not in quite the way that modern singers (and listeners) might expect. As predicted, breath efficiency was reduced when using the neutral larynx technique, and the effect can be heard in the breathier tone caused by comparatively loose phonation; breathiness in the voice was not deliberately exaggerated, but accepted as a by-product of this technique. It was noted that intonation was more difficult to control when using the neutral approach to larynx height. This technique requires less airflow than the low-larynx approach, and as a result the vocal folds are not stiffened in resistance to the pressure of the breath, making precise tuning and quick pitch changes more technically demanding.<sup>3</sup> Intonation might have been said to improve very slightly as the recording session continued and the voice settled into this unusual technique, but tuning certainly continued to be more of an issue than usual in scalic passages. In general, tuning is not as 'bright' in the neutral-larynx style, reflecting the absence of the 'singer's formant' produced by the lowering of the larynx. This can sometimes give a feeling of approaching notes from below, and is particularly noticeable in the highest part of the range. Although this technique still audibly reverberated in the highly resonant acoustics of the recording venue (the Clothworkers' Centenary Concert Hall within the School of Music), contrast between the neutral-larynx and low-larynx approaches is stark.

The transitional approach still gives a gentle and intimate feeling to the performances, but the additional resonance in the highest part of the voice is noticeable.

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<sup>3</sup> John Potter, *Vocal Authority: Singing Style and Ideology* (Cambridge: Cambridge University Press, 1998), p. 53. See also Steven E. Plank, *Choral Performance: A Guide to Historical Practice* (Maryland; Toronto; Oxford: The Scarecrow Press, 2004), p. 23.

The additional breadth of the high register gives an impression of greater continuity throughout the range.

The performances on CD 1 would have benefitted from more freedom of movement, and greater familiarity with neutral-larynx techniques and stylistic devices such as the portamento. These were noted as areas for future improvement.

Initial experimentation with the neutral-larynx approach produced a sensation of actively lowering the soft palate (due to my existing low-larynx training), but the muscle memory of the soft palate was soon retrained through gentle practice in short but regular bursts. This process (even when performing high in the range) gave absolutely no discomfort or cause for concern, and has not inhibited by my ability to utilise the low-larynx technique either in transitional or modern forms. The experience of completing this practical research project has reinforced my belief that singers are perfectly able to perform in a variety of styles and techniques without detrimental effect to performance efficiency or vocal health. Accusations that the neutral-larynx technique might be harmful or dangerous are unfounded (as the neutral larynx position is that of healthy speech or untrained singing), but it must be acknowledged that this technique cannot replace the low-larynx technique like-for-like unless expectations of vocal output are realigned accordingly; attempting to emulate the volume and power of the modern operatic voice with a neutral approach to larynx height would undoubtedly result in the forcing and straining of the vocal apparatus.

The neutral and transitional larynx approaches were combined with each accompaniment instrument in the performance of Mozart *Ach ich fühl's* to test (informally) the audibility of each technique; results were as expected. Both the transitional and neutral approaches were felt to be convincingly matched with the Erard piano (CD 1: Tracks 11 and 12), and it is entirely plausible that singers of the period would have performed both these approaches with a similar instrument. During the mixing process it was necessary to decrease the audio level of the Steinway piano when used in conjunction with the neutral

larynx approach (CD 1: Track 14), and conversely to increase the Steinway audio level when combined with the modern vocal operatic standard (CD 1: Track 15). This confirmed the suspicion that a neutral approach to larynx height could not replace the modern operatic vocal standard in performance unless the volumes of accompaniments (and expectations of audibility) were modified accordingly.

Unsurprisingly, without the resonance interest of the lowered larynx (or vibrato) to excite sustained notes, the performance of *Ach ich fühl's* combining the neutral approach to larynx height with the slower modern speed feels to be lacking in direction. The performance in the modern operatic vocal standard, on the other hand, seems to just about sustain the dramatic effect at the slower speed. The use of the modern operatic vocal standard is not entirely convincing because my own modern vocal training has not been specifically operatic, but it does demonstrate the use of an 'open throat' and lowered larynx. I found it particularly difficult to sustain a continuous vibrato, and almost impossible to produce a noticeable pitch vibrato, but the contrast with the other examples demonstrates the reality that singers can adjust or adapt their approach to larynx height and vocal style. This kind of singing expends far more energy than the transitional or neutral approaches to larynx height because control of a large volume of air is necessary to uphold a consistent tracheal pull throughout long sustained phrases.

The overall experience of recording CD 1 was very useful in considering the difficulties the modern singer may face when approaching historical vocal practices. Having been trained in the modern low-larynx (albeit not primarily operatic) tradition, the natural reaction when faced with a concert hall (even when empty) is to attempt to fill it with sound, and to project the voice throughout the room. The challenge with performing in the neutral-larynx style was to keep a sense of intimacy in the singing style, and to avoid any sense of needing to 'project' the voice; this is something that a singer could overcome in time once familiarity with the technique had been developed.

## 6.2. EMULATIONS OF EARLY RECORDINGS: **CD 2**

### 6.2.1. AIMS AND OBJECTIVES

The emulation of early recordings offered the opportunity to learn from successful singers who had trained in the nineteenth century, with particular reference to their application of stylistic devices (portamento, vibrato, *messa di voce*, ornamentation, tempo rubato, register use, and so on). The use of recordings by performers of varying age also offered the chance to consider changing approaches to elements of vocal style. Recordings of a piece of repertoire as performed by more than one performer (or one performer on different occasions, as was the case with Melba's *Voi, che sapete* recordings) allowed comparison of differing approaches to musical style, and the chance to relate recorded practice to written sources of the period. The preparation required for this recording session involved extensive listening and emulation, and it was hoped that the process would lead to a more freely expressive approach to the stylistic devices of the nineteenth century.

Track 4, Adelina Patti: Mozart *Voi, che sapete* (1905), was re-recorded in April 2014 to better reflect the intended tempo. It was accompanied by the c.1855 Erard instrument used for the entirety of that recording session, as practical constraints meant that the Steinway could not be brought in for one single track. All others performances on this CD feature the Steinway piano.

### 6.2.2. PERFORMANCES EMULATED

The performances that the tracks on CD 2 emulate can be found on the following albums:

Nimbus Records, *The Era of Adelina Patti* (1902-1928), UK 1993 (2 disc)

EMI, *The Record of Singing: The Very Best of Volumes 1-4*, UK 2009 (10 disc)

Symposium, *The Howard Wayne Collection: Vol. 25, The Marchesi School* (1902-1937), UK 2011 (1 disc)



Other tracks form part of the *Victor Encyclopedic Discography of Recordings* available online.<sup>4</sup> Details of each individual recording are provided under each track listed below, and web links are included in the footnotes where applicable. Dates in brackets denote the year of the original recorded performance.

- 1 Adelina Patti: Bishop *Home, sweet home* (1905)  
*The Era of Adelina Patti* (Disc 2; Track 17)
- 2 Nellie Melba: Bishop *Home, sweet home* (1905)  
*Victor Encyclopedic Discography of Recordings*: 5 September 1905, Victor 95026.<sup>5</sup>
- 3 Amelita Galli-Curci: Bishop *Home, sweet home* (1917)  
*Victor Encyclopedic Discography of Recordings*: 13 January 1917, Victor 6123.<sup>6</sup>
- 4 Adelina Patti: Mozart *Voi, che sapete* (1905)  
*The Era of Adelina Patti* (Disc 2; Track 1)
- 5 Nellie Melba: Mozart *Voi, che sapete* (1907)  
*Victor Encyclopedic Discography of Recordings*: 29 March 1907, Victor 88067.<sup>7</sup>
- 6 Nellie Melba: Mozart *Voi, che sapete* (1910)  
*Victor Encyclopedic Discography of Recordings*: 23 August 1910, Victor 6219.<sup>8</sup>
- 7 Blanche Marchesi: Chaminade *L'été* (1906)  
*The Howard Wayne Collection* (Track 1)
- 8 Emma Albani: Chaminade *L'été* (1914)  
*The Record of Singing* (CD 1; Track 3)
- 9 Adelina Patti: Mozart *Batti, batti* (1904)  
*The Era of Adelina Patti* (CD 1; Track 19)
- 10 Marcella Sembrich: Mozart *Batti, batti* (1904)  
*Victor Encyclopedic Discography of Recordings*: 19 November 1904, Victor 85038.<sup>9</sup>

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<sup>4</sup> *Encyclopedic Discography of Victor Recordings*, Library of Congress National Jukebox <<http://victor.library.ucsb.edu/>> [accessed 4 May 2014].

<sup>5</sup> Nellie Melba, 'Matrix 523c. Home, sweet home', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/1000003607/523c-Home\\_sweet\\_home](http://victor.library.ucsb.edu/index.php/matrix/detail/1000003607/523c-Home_sweet_home)> [accessed 4 May 2013].

<sup>6</sup> Amelita Galli-Curci, 'Matrix C-19149. Home, sweet home', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/700004213/C-19149-Home\\_sweet\\_home](http://victor.library.ucsb.edu/index.php/matrix/detail/700004213/C-19149-Home_sweet_home)> [accessed 4 May 2014].

<sup>7</sup> Nellie Melba, 'Matrix C-4353. Voi che sapete', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200006070/C-4353-Voi\\_che\\_sapete](http://victor.library.ucsb.edu/index.php/matrix/detail/200006070/C-4353-Voi_che_sapete)> [accessed 4 May 2014].

<sup>8</sup> Melba, 'Matrix C-4353. Voi che sapete', *Victor Encyclopedic Discography of Recordings*.

- 11 Suzanne Adams: Gounod *Jewel Song* (1902/3)  
*The Howard Wayne Collection* (CD 1: Track 6)
- 12 Marcella Sembrich: Gounod *Jewel Song* (1906)  
*Victor Encyclopedic Discography of Recordings*: 4 May 1906, Victor 6289.<sup>10</sup>
- 13 Nellie Melba: Gounod *Jewel Song* (1910)  
*Victor Encyclopedic Discography of Recordings*: 22 August 1910, Victor 6215.<sup>11</sup>

### 6.2.3. RESEARCH CONCLUSIONS

The early recordings selected proved to be of great interest to the research project as a whole, as they highlighted not only the idiosyncrasies of individual performers, but changing approaches to vocal performance. These emulatory recordings are referenced throughout the thesis where they illustrate styles, techniques, or trends discussed in the text. Three areas that provoked particular thought were the use of register (and the characteristic use of the chest voice in Mozart's *Voi, che sapete*, for example), the use of portamento (and its relationship to legato), and the tempo variation evident in these recorded performances.

There were instances in emulation when the use of portamento felt almost instinctive and additional unintentional, but convincingly stylistic portamenti were added in performance (in renditions of Bishop's *Home, sweet home*, for example) without prior planning. This demonstrated that the emulation process had been successful in allowing the habituation of codes of musical expression familiar to the nineteenth-century singer. The transcription method used did not specifically notate vibrato rate/extent, or portamento

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<sup>9</sup> Marcella Sembrich, 'Matrix C-1954. Batti, batti', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200003331/C-1954-Batti\\_batti](http://victor.library.ucsb.edu/index.php/matrix/detail/200003331/C-1954-Batti_batti)> [accessed 4 May 2014].

<sup>10</sup> Marcella Sembrich, 'Matrix C-3360. Air des bijoux', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200004940/C-3360-Air\\_des\\_bijoux](http://victor.library.ucsb.edu/index.php/matrix/detail/200004940/C-3360-Air_des_bijoux)> [accessed 4 May 2014].

<sup>11</sup> Nellie Melba, 'Matrix C-4338. Air des bijoux', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200006053/C-4338-Air\\_des\\_bijoux](http://victor.library.ucsb.edu/index.php/matrix/detail/200006053/C-4338-Air_des_bijoux)> [accessed 4 May 2014].

speed/movement (as discussed in Appendix A), but encouraged growing familiarity with the devices used by the singers featured.

The idiosyncrasies of individual performers proved of particular interest, especially the vibrato-resistant approach of Patti (and sometimes Albani), and the peculiar vibrato of Melba (as discussed in Chapter Three). In attempting to emulate Melba's distinctive vibrato it became clear that breath-induced intensity vibrato did not resemble the effect she utilised in these performances; the best emulation of Melba's vibrato came from the throat. This glottal vibrato is not as harsh as the impulse of the trillo, but the movement is felt in the throat (as opposed to the chest) much like the execution of the trill or fast divisions.

The emulation of these early vocal recordings was largely successful: the representation of vocal and stylistic traits is generally accurate, and the emulation of devices like the portamento, and various forms of tempo variation, has allowed a more instinctive understanding of these practices to develop.

### 6.3. FREQUENCY EXPERIMENTS: **CD 3**

Frequency experiments were completed using the audio on CD 2; the content of both CDs has been kept separate so as to avoid confusion.

#### 6.3.1. AIMS AND OBJECTIVES

There is much disagreement as to the frequency range that early recording apparatus could effectively capture, especially as technicians consistently refined acoustic recording technology throughout the opening decades of the twentieth century. In *A Century of Recorded Music* Timothy Day stated that 'the acoustic recording process was limited to a range between 168 and 2,000 cycles [Hz]', a range also cited in a keynote address to the Society for Music Information Retrieval in 2010.<sup>12</sup> Other published estimates range from

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<sup>12</sup> Timothy Day, *A Century of Recorded Music: Listening to Musical History* (New Haven: Yale University Press, 2000), p. 9. Tim Crawford, Matthias Mauch, and Christophe Rhodes,

between 150 and 2000Hz (Daniel Leech Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performances*), to between 100 and 2500Hz (Library of Congress National Jukebox), and even 100 to 4000Hz (Neal Peres da Costa, *Off the Record: Performing Practices in Romantic Piano Playing*).<sup>13</sup> Da Costa has admitted that there is varied opinion on this topic, but his estimate appears somewhat cautious. Acknowledging the inability of early acoustic techniques to capture all the frequencies of vocal performance is particularly important when analysing and commenting upon early vocal recordings, as a loss of high or low frequencies can dramatically alter the listener's perception of a voice.

An exercise experimenting with frequency was devised in an attempt to better understand what effect selective capture of sound frequency might have had on vocal recordings that date from the turn of the twentieth century. The emulations of early recordings already recorded (CD 2) were filtered to give an indication of the effect of a limited window of frequency capture. Acoustically, the act of *removing* certain frequencies from a recording is drastically different from never having captured those frequencies in the first place; in layman's terms, initially recording the high frequencies leaves a lasting impression upon the rest of the audio, even if those high frequencies are later erased.<sup>14</sup> It is therefore important to understand that this exercise only approximates the effect of recording within a small specified range of frequency.

Another important factor to consider when listening to the results of this exercise is the means of removing the higher and lower frequencies no longer desired. 'Brick wall' filters that stop sound absolutely at a given frequency are not possible in modern

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'Recognizing Classical Works in Acoustic Recordings', *Keynote Address: 11th International Society for Music Information Retrieval Conference* (2010) <<http://ismir2010.ismir.net/proceedings/ismir2010-84.pdf>> [accessed 12th May 2014] (497).

<sup>13</sup> Daniel Leech-Wilkinson, *The Changing Sound of Music: Approaches to Studying Recorded Musical Performance* ([n.p.]: Centre for the History and Analysis of Recorded Music, 2009)<<http://www.charm.rhul.ac.uk/studies/chapters/chap1.html>> [accessed 27 March 2012]. Chapter 3, Section 3.1, paragraph 25. 'Acoustical Recording' Library of Congress National Jukebox <<http://www.loc.gov/jukebox/about/acoustical-recording>> [accessed 21st January 2014]. Neal Peres da Costa, *Off the Record: Performing Practices in Romantic Piano Playing* (New York: Oxford University Press, 2012), p. 19.

<sup>14</sup> Martin Russ, *Sound, Synthesis and Sampling*, 3rd Edition (Oxford: Focal Press, 2012), p. 62.

engineering, and instead low-pass and high-pass filters were used that cut off frequency gradually within a localised region.<sup>15</sup> A low-pass filter allows low frequency to pass through and attenuates higher frequencies; a high-pass filter allows high frequency to pass through and attenuates low frequencies. In this instance both a low-pass and a high-pass filter were used to reject certain frequencies, creating a band-pass filter that permitted only frequencies *between* the two values selected to remain.<sup>16</sup>

In order to hear the possible effects of each estimate of frequency capture, a small excerpt from the emulation of Emma Albani singing Chaminade's *L'Été* was filtered to replicate each of the frequency estimates listed above. Track numbers 2 – 4 of CD 3 approximate the effects of frequency limitation in the following frequency ranges: 100-4000Hz, 150-2000Hz, and 100-2500Hz.<sup>17</sup> An excerpt from the original (unfiltered) recording has also been included in this section of the Recorded Portfolio for ease of comparison (CD 3: Track 1).

This experiment could not be scientific due to the limitations of frequency filtration, and so the smallest estimate of frequency capture was applied to a selection of other emulations from CD 2 in the hope that the results might provoke further consideration of the effects of limited frequency capture upon a greater selection of repertoire and vocal approaches. It is suspected that the vast range of the estimates cited here reflect the changing technology of the first twenty years of the twentieth century. Acoustic recording remained the default mode of audio capture until the development of

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<sup>15</sup> Russ, *Sound, Synthesis and Sampling*, p. 62. Russ has written that “Brick wall’ filters with flat pass-bands and high stop-band rejection are difficult to design and fabricate[.]’ See also David Miles Huber and Robert E. Runstein, *Modern Recording Techniques* (New York; London: Focal Press, 2001), p. 371. The filtered examples on CD 3 of the Recorded Portfolio demonstrate the most extreme frequency cut-off that was possible.

<sup>16</sup> Russ, *Sound, Synthesis and Sampling*, pp. 114-116. Huber and Runstein, *Modern Recording Techniques*, p. 371.

<sup>17</sup> Day’s estimate was not included as the upper value is identical Leech-Wilkinson’s, and the small change in lower frequencies was considered less relevant to experimentation with the soprano voice.

broadcasting-grade microphones in the 1920s,<sup>18</sup> and, as all the recordings emulated here pre-date 1917, it was felt that approximation of the possible limitations of the earliest acoustic techniques would be acceptable.

### 6.3.2. RESEARCH CONCLUSIONS

The results of this experiment do not represent a precise reproduction of the frequency capture of early recordings, but they do encourage serious thought as to the sound information communicated by early recording techniques.

As expected, the limitation of 100-4000Hz (CD 3: Track 2) presents little obvious change to the casual listener. The filtration has reduced the brightness of the highest vocal tones to some degree, but the reduction of the bass of the piano gives the impression of a slightly top-heavy audio mix (as if the piano is further away than the singer). This has not been my general impression of early recordings, and accounts of the recording process suggest that singers are most likely to have been placed closest to (in some cases almost inside) the recording horn. The limitation of 100-2500Hz (CD 3: Track 3), as expected, presents a much more noticeable change in higher tones. When compared to the previous example Track 3 appears rather more bass-heavy because of the significant reduction in high frequency content. Unsurprisingly, the example limited at 150-2000Hz (CD 3: Track 4) presents the most marked change from the unfiltered version, with obvious change in the highest vocal tones, and more noticeable omission in the bass of the piano accompaniment. In these examples the resonant reaction of the recording venue is still very prominent, but the restoration of the Clothworkers' Centenary Concert Hall as a dedicated music performance venue means that it contains a good deal more reflective surfaces than the average early twentieth-century recording venue.

The limitation of high frequency in Tracks 5 – 13 has had a noticeably detrimental effect upon the clarity of diction, as pitched consonants are also affected by the filtering of

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<sup>18</sup> Costa, *Off the Record*, p. 8.

higher frequencies. It is difficult to say whether this might account for examples of what sounds like exaggeration of the text in early recordings; incidence of an exaggerated rolled ‘r’, or perhaps deliberate mispronunciation of words might well reflect a lost performance convention or some form of idiosyncrasy (see transcriptions of early recording emulations in Appendix A). The results of this experiment do not suggest that high-frequency filtration has any effect upon the representation of vibrato effects.

The most significant effect of limited frequency capture is the perceived change in vocal tone colour. The filtration of higher frequencies presents a very different impression of the voice than the modern stereo recording now allows us to record, effectively enhancing the round or full tone characteristics of the voice by omitting any overtones usually discernible in the ‘sparkle’ or ‘spin’ of a low-larynx technique. This is significant when discussing the singing of early recording artists: whilst we can assert from documentary enquiry that singers were not producing and utilising their voices in the same way as their modern counterparts, the limitations of acoustic recording techniques mean that early recordings do not give the listener a true impression of all vocal characteristics.

A noticeable limitation in frequency capture could have been a factor in reports that some performers disliked hearing their voice played back on record for the first time. The magnification of all forms of ‘accompanying extraneous noise’ might also have been a factor in some of the earliest recording artists suffering what Wood (1930) called the ‘agony of disappointment’ when first experiencing their voice on disc.<sup>19</sup> Wood asserted that sopranos and tenors recorded better than other voice parts, presumably because a greater portion of their tessitura lay within the frequency range able to be captured by the acoustic techniques available. Accounts of singers moving (or being moved) away from the recording horn to sing high notes are likely to be linked to the fact that high frequencies are

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<sup>19</sup> Henry Joseph Wood, *The Gentle Art of Singing: Abridged Edition in One Volume* (London: Oxford University Press, 1930), pp. 95-96.

often performed at higher dynamic volume than lower pitches.<sup>20</sup> In Suzanne Adam's rendition of Gounod's *Jewel Song* (CD 2: Track 11; 2:10)<sup>21</sup> the climactic top B flat is noticeably 'covered', presumably so as to avoid distorting the recorded audio. In Sembrich's performance of Mozart's *Batti, batti* (CD 2: Track 10)<sup>22</sup> the F' is often distorted; it appears as if these notes were accented above others in the phrase, but this could be a misrepresentation caused by the limitations of the acoustic recording process at the time of recording (1904).

It is highly significant that the majority of the frequency range estimates cited here fail to extend to the region in which the 'singer's formant' would be discernible (around 3kHz): it is not possible to analyse early recordings for the presence of this, or similar, resonance strategies. Despite this, a trained ear can make an informed judgement based upon the information that is presented by early recordings, supported by performance experience and documentary evidence. It is possible to discern the difference in approach in the modern operatic vocal standard performance of Mozart *Ach ich fühl'*; the voice still sounds fuller in timbre than in the filtered early recording emulations, although the overall effect is that of the singer appearing more distant than in a live (or modern recorded) performance. It is startling how easily the ear adjusts to listening to performances in a filtered format.

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<sup>20</sup> See Day, *A Century of Recorded Music*, p. 10. See also Johan Sundberg, *The Science of the Singing Voice* (Illinois: Northern Illinois University Press, 1987), p. 40.

<sup>21</sup> Appendix A, Suzanne Adams: Gounod *Jewel Song* (1902/3), p. 243, b. 92.

<sup>22</sup> Appendix A, Marcella Sembrich: Mozart *Batti, batti* (1904), p. 232-234, b. 13, b. 15, b. 41, b. 43, b. 49. Distortion can be heard in the original recording at the following points: 0:09, 0:27, 0:31, 1:26, 1:31, 1:44. Marcella Sembrich, 'Matrix C-1954. Batti, batti', Victor Encyclopedic Discography of Recordings <[http://victor.library.ucsb.edu/index.php/matrix/detail/200003331/C-1954-Batti\\_batti](http://victor.library.ucsb.edu/index.php/matrix/detail/200003331/C-1954-Batti_batti)> [accessed 4 May 2014].



## 6.4. MISREPRESENTED REPERTOIRE: **CD 4**

### 6.4.1. AIMS AND OBJECTIVES

The purpose of this set of performances (CD 4: Tracks 1-7) was to explore popular repertoire that dates from the nineteenth century but has repeatedly been (mis)interpreted in the context of the modern operatic vocal standard and the constant low-larynx technique that it implies. This repertoire presented further opportunity in which to practice the conclusions of the research project and continue the development of a physical familiarity with the stylistic and technical approaches used by nineteenth-century singers. The repertoire selected includes arias from operas by ‘bel canto’ composers Donizetti, Bellini, and Rossini, and popular opera arias by other late nineteenth-century opera composers, Verdi, Puccini and Bizet.

As these performances used keyboard reductions of works composed for full orchestra the influence of early recordings was used to guide appropriate cuts in introductions, interludes, and endings. It is plausible that nineteenth-century performers accompanied by keyboard in smaller venues and domestic settings might also have edited keyboard reductions accordingly.

The tracks in this section are ordered chronologically in order of the year of the first known performance (given in brackets after each track title). It was expected that this recording session would produce performances that contrasted considerably with renditions of the same repertoire by current opera stars representing the modern operatic vocal standard.

### 6.4.2. RESEARCH CONCLUSIONS

It was felt to be particularly important that this research project considered the performance of ‘bel canto’ opera and ‘heavier’ works like Verdi, and the performance of Bellini’s *Ab! Non credea mirarti* (CD 4: Track 2), Donizetti’s *Regnava nel silenzio* (CD 4: Track 3), and Verdi’s *Ave Maria* (CD 4: Track 6) took influence from extant recordings of

Tetrazzini, Patti, and Melba respectively. (The obvious change to the chest register at the end of *Ave Maria* was directly influenced by Melba's performance, and is an effect also used by Patti.)<sup>23</sup> Listening to performances of this repertoire by the likes of Cecilia Bartoli, Angela Gheorghiu, Natalie Dessay, or Renée Fleming (all accomplished, successful, and very impressive singers in their own right) alongside the renditions here immediately demonstrates the contrast in depth of vocal tone, vibrato usage, phrasing, and overall approach between nineteenth-century styles and techniques and the modern operatic vocal standard.

Growing familiarity with the vocal expression of this period meant that performances sometimes included previously unplanned portamenti, graces, and other expressive devices, as in previous recording sessions. It was contemplated that the unplanned portamenti in Puccini's *Vissi d'Arte*, for example, were fairly frequent, but any possible overuse of portamento would be accurate to increasing complaints of portamento indulgence around the turn of the twentieth century (even though overuse does not reflect the ideal outlined in didactic material).

These recordings were successful in continuing to develop already growing familiarity with nineteenth-century singing styles and techniques, and in demonstrating the contrast between the nineteenth-century approach to this repertoire, and the approach commonly adopted by modern operatic singers. It was noted that experimentation with individual devices and techniques, followed by the emulation of other reputable performers, and the culmination of the project in the realisation of all these aspects in appropriate repertoire in some ways reflected the training of nineteenth-century singers; the practical research element of this project required (and resulted in) learning to sing (again).

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<sup>23</sup> CD 4: Track 6, Verdi *Ave Maria* from *Otello* (1887), 3:46. Nellie Melba, 'Matrix C-6705. Ave Maria', *Victor Encyclopedic Discography of Recordings* <[http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave\\_Maria](http://victor.library.ucsb.edu/index.php/matrix/detail/200007659/C-6705-Ave_Maria)> [accessed 18 May 2014].

## 6.5. ANNOTATED REPERTOIRE: **CD 4**

### 6.5.1. AIMS AND OBJECTIVES

It was hoped that the realisation of annotated repertoire (CD 4: Tracks 8-11) would encourage further familiarity with individual techniques, and stimulate consideration of the specific location and application of expressive devices. In the case of the Garcia repertoire (CD 4: Tracks 9-11), this was coupled with an opportunity to observe and experience his timbral approach to selective larynx-lowering. The Catalani realisation (CD 4: Track 8) offered the opportunity to attempt the variation for which she was famed in the appropriate context of a neutral approach to larynx height.

The act of realising the repertoire annotated by Garcia in *Traité complet de l'Art du Chant* (1847) demonstrated this work as an important record of early-mid nineteenth-century vocal style *and* technique. Copies of the repertoire discussed in this section can be found in Appendix A, pp. 267-283.

### 6.5.2. RESEARCH CONCLUSIONS

The performance of *Cease your funning*, which emulates Madame Catalani (CD 4: Track 8), can appear amusing to the modern ear and eye because of its vast leaps and somewhat stilted tactus. It is likely that Catalani's performances were exceptional (as was her reputation for variation), and also that her own performances might have displayed greater familiarity with the extremely florid style demonstrated in Track 8. It is questionable whether a more regular tactus could be established in this arrangement, as the floridity transcribed by Natale Corri (brother of Domenico) often exceeds the length of the written bar (providing further evidence for an expectation of tempo rubato and other forms of tempo variation). This track was performed with the c.1855 Erard, as that instrument was already in situ to accompany the rest of CD 4; it is likely that performing pitch c.1800

would have been slightly lower, reducing the chance of a screeching tone whilst performing the highest written pitches with a neutral approach to larynx height.<sup>24</sup>

The vocal audio level had to be boosted in both Track 9 (Cimarosa) and Track 11 (Morlacchi). It is possible that this might partially be due to the concentration required in the realisation of Garcia's copious annotations; further familiarity with the diverse style (and varied use of larynx height) might allow a more extrovert performance in future. The three pieces annotated by Garcia provided opportunity to tackle early nineteenth-century stylistic devices like sighing, sobbing, and inflections, and to observe and experience Garcia's placement of portamenti, tremolo, and other variations. The preparation and performance of this repertoire was challenging, and illustrated the need for future research and experimentation with early and mid nineteenth-century repertoire and performance practices. The discussion of these styles alone does not fully illuminate the great diversity Garcia expected of the stylish performer because the interpretation of moderation by the twenty-first-century singer is unlikely to suggest the frequently varied approach Garcia clearly advocated.

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<sup>24</sup> Madame Catalani b. 1780, d. 1849; Natale Corri b. 1765, d. 1822.

## 6.6. ADDITIONAL TRACKS: **CD 4**

These short audio examples (CD 4: Tracks 12-13) were recorded to provide unaccompanied examples of neutral- and low-larynx approaches to voice production, and to act as source material for the analysis of frequency content using Sonic Visualiser software (as mentioned in Chapter Two). CD 4: Track 14 demonstrates the 'spin' of the low-larynx approach (as discussed in the context of intensity vibrato in Chapter Three).

- 12 Vocal Technique Example: Low Larynx Height
- 13 Vocal Technique Example: Neutral Larynx Height
- 14 Vocal Technique Example: 'Spin'



## *Conclusion*

# A NEW BEL CANTO: TOWARDS HISTORICALLY-INFORMED VOCAL PERFORMANCES

Contemporary society has a tendency to view modernity as an improvement upon history by default, but retrospective study of historical vocal practices has the potential to encourage new approaches to vocal interpretation. With current vocal performance reflecting a largely operatic style in which the power of the projected voice is prized – and noticeable vibrato usage often misunderstood as a necessary component of that power – the performer is forced to consider what possible modifications remain for the ‘development’ of vocal performance. We cannot modify the instrument or change the basic fundamentals of its operation, and if volume and constant vibrato are to remain the primary components of desirable singing then singers *will* reach a plateau at which point these components can be maximised no further. Vocal performance practice research has not only a very real and practical application to the field of historically-informed performance, but also offers the chance to reinvigorate vocal performance more generally by introducing singers to the regular use of a greater variety of approaches to vocal style and technique. As vocal group Red Byrd commented at the time of their founding: ‘the point of singing the music of the past is to illuminate the present’.<sup>1</sup> The time is right to introduce a more sensitive approach to vocal performance of historical repertoire, an approach that reintroduces nuance to the interpretation of song and affirms the singer as a valued and active participant in ‘period’ performances. The fact that singers do not currently participate actively in historically-informed performances has not gone unnoticed:

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<sup>1</sup> Richard Wistreich and John Potter, 'Singing early music: a conversation', *Early Music*, 41.1 (2013), 22-26 (p. 22). John Potter, *Red Byrd: John Potter Richard Wistreich* (John Potter, 2014) <<http://www.john-potter.co.uk/red-byrd.php>> [accessed 3 April 2014].

Singers [...] have almost without exception shied away from changing their approach to vibrato and tone production, and the absurd effects to which this gives rise can easily be heard in numerous performances where singers have been combined with period instruments.<sup>2</sup>

Voices were noted for their sweetness, brilliance, vigo[u]r and virtuosity, and performers were noted for their intelligence and taste, but there was seldom mention of great volume and quantity. It is safe to say that the shouting and bellowing so frequently heard now would have received short thrift at the hands of the eighteenth[-]century opera audience.<sup>3</sup>

Recent doctoral research by Helena Daffern (2008) has confirmed that modern singers that specialise in 'early music' employ the same vocal techniques as those who specialise in grand opera, with very little reference to the information we have regarding larynx height, articulation, or the changing use of expressive devices.<sup>4</sup> This is mainly due to what Daffern has called a 'distinct absence of specific vocal pedagogy for modern early music singers'.<sup>5</sup> The singers analysed by Daffern made some conscious stylistic concessions regarding vibrato extent and overall usage, but it is clear that current approaches to vocal performance practices go little further than adapting selected elements of style (ornamentation, for example), and are largely based upon the pre-existing values and expectations of conservatoire or chapel choir training.<sup>6</sup> The failure of many 'early music' singers to make the distinction between modern and historical approaches to style and technique has resulted in the quasi-operatic sound that many professional chamber choirs and soloists routinely produce. It is indeed possible to taper the volume of the voice, and the weight of the tone, without breaking the efficient breath flow used in the modern operatic vocal standard. This, combined with an acceptance of the difference between a

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<sup>2</sup> Clive Brown, 'Singing and String Playing in Comparison: Instructions for the Technical and Artistic Employment of Portamento and Vibrato in Charles de Bériot's *Méthode de violon*', in *Zwischen schöpferischer Individualität und künstlerischer Selbstverleugnung*, ed. by Claudio Bacciagaluppi, Roman Brotbeck, and Anselm Gerhard (Schliengen: Argus, 2009), pp. 83-108 (p. 85).

<sup>3</sup> Philip A. Duey, *Bel Canto in its Golden Age. A Study of its Teaching Concepts*. (New York: Da Capo Press, 1980), p. 156.

<sup>4</sup> Helena Daffern, 'Distinguishing Characteristics of Vocal Techniques in the Specialist Performance of Early Music', (University of York, 2008), pp. 151, 330.

<sup>5</sup> Daffern, 'Distinguishing Characteristics', p. 193.

<sup>6</sup> Daffern, 'Distinguishing Characteristics', pp. 89-94, 170-171, 297, 317.



‘white’ sound (without resonance interest, direction, or vibrato) and shapely expressive singing *without* (excessive) stylistic vibrato will ensure that historically-informed singing advances in the way that instrumental playing has begun to in recent decades. If we are to fully understand the vocal performers of the long nineteenth century we must begin to integrate narratives of change into histories of singing, and celebrate variation in the application of vocal styles and techniques.

In seeking to explore the art of nineteenth-century singing through both theory and practice, this project has confronted a number of difficult (and sometimes controversial) research questions, as outlined in Chapter One. Whilst this thesis has probed documentary evidence of a change in approach to larynx height (and confirmed a strong case for neutral *and* transitional approaches to larynx height), the Recorded Portfolio has demonstrated that it is indeed possible for singers to execute a variety of approaches to style and technique. As with any form of construction, the re-building of the nineteenth-century art of singing needed to rest upon solid technical foundations; the movements of the vocal apparatus and its related systems are complicated and wide-ranging, and the subject of much expert enquiry, but even this relatively simple discussion of the principles of voice production provides valuable context to nineteenth-century discussion of singing. Professional singers across all ages have advocated, and presumably practiced, varying techniques in an effort to execute their individual goals and interpretations, just as modern singers utilise a variety of approaches to breath control or larynx height, but this research clearly identifies growing discussion (and practice) of selective larynx-lowering as the nineteenth century progresses. This research is not the first to relate the modern operatic vocal standard to the developments of the nineteenth century, but it is unique in its specific enquiry into approaches to larynx height, and its discussion of transitional approaches to selective larynx-lowering.

The modern ideal of continuous lowering of the larynx demonstrates a tendency towards continuity and homogeneity in vocal sound that is at odds with the principles of

nuance and variety upheld throughout the long nineteenth century.<sup>7</sup> The acknowledgement of a neutral approach to voice production presents an early instrument of much more delicate capabilities than currently imagined, and certainly a voice better suited to the compositional styles and demands of eighteenth- and early nineteenth-century vocal music: a voice that possessed greatest power in the lower register and performed in a range that reflected this (unless exceptional), but that was capable of great agility and dexterity. *This* is the voice that can be gentle, sweet, clear, rich, and emotive, is closely related to the speaking voice, and portrays sentiment through the use of the *messa di voce*, ornamentation, and portamento effects.

Technical foundation aside, the *style* of nineteenth-century singing also presents an immediately obvious contrast to that of the modern operatic vocal standard; enhancing the relative delicacy of nineteenth-century methods of voice production were a variety of expressive effects that were prized above power or vibrato as attributes of stylish singing – the portamento, the *messa di voce*, divisions and other melodic alterations, tempo variation, sighing and sobbing devices, and the selective application of vibrato effects all formed part of the nineteenth-century singer’s artistic palette. These devices were also subject to changing application and popularity across the period, but remained part of a code of expression that emulated the effects of emotion upon the human speaking voice, and is now all but lost in modern performances of nineteenth-century repertoire. Listeners sought and found delight in the skillful use of musical devices in the absence of the low-larynx resonance we have come to expect from modern ‘classical’ vocal performance.

As suspected, vibrato usage in this period was approached selectively, just like any other element of this varied and nuanced singing style: modern performers have yet to accept this. Practical experimentation over the course of this research project encouraged the formulation of the theory that technical change may have influenced the growing use

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<sup>7</sup> Steven E. Plank, *Choral Performance: A Guide to Historical Practice* (Maryland; Toronto; Oxford: The Scarecrow Press, 2004), p. 23.

and acceptance of vibrato effects, and allowed the clarification of existing inquiry through the identification of two main forms of vibrato effect. It became clear that *chiaroscuro* (in its original context of stylistic contrast) was extremely important to the discussion of expressive devices of every kind in this period, although the specific location of portamento and (selective) vibrato effects is an area for further research. Practical engagement with the subject matter has also been invaluable in grappling with the detail of portamento usage, and in allowing familiarity with the execution of a wide variety of expressive devices to develop over the course of the project.

It is anticipated that singers, musicians, and concert-goers might voice concern for the audibility of the neutral-larynx approach in a modern (commercial) performance environment.<sup>8</sup> This should not stop dissemination of (and engagement with) this research, as a sensitive combination of practices *influenced* by historical practice is indeed possible where an historically-accurate performance might not be considered practical. The experience of completing this practical research project has reinforced my belief that singers are perfectly able to perform using a variety of styles and techniques without detrimental effect to performance efficiency or vocal health. Accusations that a neutral-larynx technique might be harmful or dangerous are unfounded (as the neutral larynx position is that of healthy speech or untrained singing), but it must be acknowledged that this technique cannot safely replace the low-larynx technique like-for-like unless expectations of vocal output are realigned accordingly. The modern trained singer may well have difficulty fighting the urge to project their voice (lower the larynx) when performing repertoire that would have been produced with a neutral approach to larynx height in this period, particularly in the highest part of the range, and especially when performing in a

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<sup>8</sup> Martha Elliot, 'Vibrato and Rossini: managing vibrato and articulation to differentiate ornaments', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival* (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/elliott/>> [accessed 9 January 2012]. Elliot has also raised concerns for audibility, but concluded that 'compromise is possible.'

large, resonant concert venue. The singer may find Stanislavsky's 'Circles of Attention' exercise useful in resisting the temptation to revert to their usual performance style and technique, and combatting any inclination towards low-larynx projection of the voice.<sup>9</sup>

Whilst this research project has been successful in tackling the research questions outlined in Chapter One, and presenting original research into the styles and techniques used and discussed by nineteenth-century singers, the relative neglect of this research area (in comparison to instrumental enquiry) necessitated a fairly general approach to the research of performance practices. This has highlighted the need for more detailed enquiry, particularly in the dedicated study of early vocal recordings, the specific application of transitional approaches to larynx height by particular performers and/or theorists, and the expectation of the use of gesture in (early) nineteenth-century vocal performance.

The theme of change has been central to this research project; knowledge of changing approaches to larynx height, vibrato application, and styles of expression is fundamental to the historically-informed performance of nineteenth-century vocal repertoire. Acknowledging a theory of change within our understanding of vocal performance practices calls us to reconsider issues we have long been interpreting through the expectation of (more-or-less continuous) larynx-lowering, such as the term *chiaroscuro*, and concepts like 'bel canto' and the celebrity singer or 'diva'. Teaching and practice in our field must experience reform and reflect the need for a widespread reconsideration of historical singers and singing in scholarship if we are to expect more (appropriate) engagement from singers of future generations. As Rooley (2009) has commented, reform relies upon the dissemination of academic research, and appropriate vocal teaching:

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<sup>9</sup> Constantin Stanislavski, *An Actor Prepares*. trans. by Elizabeth Reynolds Hapgood (London: Bloomsbury, 2013), pp. 71-74.

The pace-making work of Robert Toft, and a very small band of others, has raised awareness but slowly – partly because of the innate conservative nature of voice-teaching, and the safety in the familiarity of immediately received attitudes and habits (and suspicion of anything ‘new’ – even though the ‘new’ in this case may actually be ‘old’, ‘original’ and ‘authentic’).<sup>10</sup>

Much of historically-informed performance is currently organised and directed by instrumentalists, partly because of a lack of enquiry into vocal styles and techniques, but also because of a lack of engagement with existing academic research into vocal performance practices. Wistreich (2013) has observed that discussion and research of (vocal) performance practices has tended to focus upon:

the far safer ground of questions of organology, musical sources, historical documents, even hand gestures – indeed anything rather than deal with the elephant that has been hanging around in the early music movement’s room, probably ever since Mendelssohn brought in soloists from the opera house to sing in his revival of the St Matthew Passion in 1829.<sup>11</sup>

If we are to counter discontent with vocal style and technique in historically-informed performances of earlier repertoires then the wealth of information available *must* be disseminated to teachers and performers at all levels. The field of performance practice has often been accused of being retrospective, but the dissemination and application of historical approaches in our conservatoires and academic institutes could breathe new life into repertoire deserving fresh interpretation, and encourage a new generation of historically-informed singers.

Perhaps the greatest challenge faced by the historically-informed singer is acknowledging and deconstructing the preconceptions about vocal style and technique that have undoubtedly been formed whilst learning the twenty-first-century art of singing; it is hoped that this research project will encourage others to consider alternative approaches to

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<sup>10</sup> Anthony Rooley, 'A case for the pickled larynx', in *Singing music from 1500 to 1900: style, technique, knowledge, assertion, experiment: Proceedings of the National Early Music Association International Conference, in association with the University of York Music Department and the York Early Music Festival*, ed. by John Potter and Jonathan Wainwright (York: University of York, 2011) <<http://www.york.ac.uk/music/conferences/nema/rooley/>> [accessed 9 January 2012].

<sup>11</sup> Wistreich and Potter, 'Singing early music: a conversation'.

vocal style and technique. Where the modern singer prizes the more-or-less continuous lowering of the larynx and associated vibrato, the nineteenth-century singer approached both devices as stylistic elements of singing to be used selectively alongside portamento, the *mesa di voce*, tempo variation, ornamentation, dynamic nuance, and physical gesture; the defining feature of nineteenth-century singing was the governance of all expressive devices (including larynx height) by the principle of *chiaroscuro*. Acknowledgement of this approach to expression requires historically-informed singers to relinquish the broad white-wash effects of continuous vibrato and larynx-lowering in favour of a delicate and varied palette of vocal timbre, and expressive nuance.

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## *Appendix A*

# MUSICAL TEXTS: EDITIONS AND TRANSCRIPTIONS

This appendix lists the musical editions used in the creation of the Recorded Portfolio component of this submission, and presents transcriptions of the early vocal recordings emulated on CD 2 of the Recorded Portfolio. Also included are reproductions of the annotated repertoire from Garcia's *Traité complet de l'Art du Chant*, Catalani's ornamented version of *Cease your funning*, and the performing edition of Rossini's *Una voce poco fa*. This repertoire has been reproduced as it is not readily available (and/or is significantly annotated), and is relevant both to the appraisal of the recordings in the Recorded Portfolio and to the discussion of various styles and techniques within this thesis.

### 1. EDITIONS

#### **CD 1**

TRACKS 1 – 10:

Nicola Vaccai, *Metodo pratico* (Frankfurt; New York: C.F. Peters, 2002).

Reprint of Nicola Vaccai, *Metodo pratico de canto italiano per camera* (London: [n.pub.], 1832).

Also consulted: Nicola Vaccai, *Practical Method of Italian Singing*, trans. Henry Badger (Boston: G. D. Russell & Co., 1878).

TRACK 11 – 15:

Act 2, No. 17: Aria *Ach ich fühls*, in W. A. Mozart, *Die Zauberflöte* (Bonn: N. Simrock, [c.1793]), pp. 90-91.

#### **CD 2**

Transcriptions were based upon the musical text of the following editions:

TRACKS 1 – 3:

Henry R. Bishop, *Home! sweet home! Sung by Miss M. Tree in Clari The Maid of Milan at the Theatre Royal Covent Garden* (London: Goulding, D'Almain & Co., [c. 1825]).

TRACKS 4 – 6:

Act 2, No. 11: Aria *Voi, che sapete*, in W. A. Mozart, *Le nozze di Figaro* (Bonn: N. Simrock, [n.d.]), pp. 58-60.

TRACKS 7 – 8:

Cécile Chaminade. *L'été* (London: Joseph Williams, [c.1900]) .

TRACKS 9 – 10:

Act 1, No. 12: Aria *Batti, batti, o bel Masetto*, in W. A. Mozart, *Don Giovanni* (New York: G. Schirmer, 1900), pp. 106-110.

TRACKS 11 – 13:

Act 3, No. 9: Aria *Jewel Song/Air des bijoux*, in Charles Gounod, *Faust* (Paris: Choudens, 1859), pp. 111-117.

## CD 4

TRACK 1:

Act 1, Scene 5: Cavatina *Una voce poco fa*, in Gioacchino Rossini, *Il barbiere di Siviglia* (Milan, F. Lucca, [n.d.]), pp. 82-88.

Embellishments based upon Manuscript Foà-Giordano 631, fol. 11v [c. 1835], as reproduced in work by Laura Moeckli.<sup>1</sup>

TRACK 2:

Act 2, Scene 2: Aria *Ab! Non credea mirarti*, in Bellini, *La Sonnambula* (Milan: G. Ricordi, 1869), pp. 190-192.

TRACK 3:

Act 1, Scene 2: Aria *Regnava nel silenzio*, in Gaetano Donizetto, *Lucia di Lammermoor* (New York: G. Schirmer, 1898), pp. 32-35.

TRACK 4:

Charles Gounod, *Je veux vivre* from Act 1 of *Roméo et Juliette* in *Fifteen Arias for Coloratura Soprano* (New York: G. Schirmer, 1944), pp. 121-129.

The first page of the aria itself is marked copyright 1937.

TRACK 5:

Act 3, No. 22: Aria *Je dis que rien ne m'épouvante*, in Georges Bizet, *Carmen* (New York: G. Schirmer, 1895), pp. 300-305.

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<sup>1</sup> Laura Moeckli, 'Abbellimenti o fioriture' Further Evidence of Creative Embellishment in and beyond the Rossinian Repertoire', in *Beyond Notes: Improvisation in Western Music in the 18th and 19th centuries*, ed. by Rudolf Rasch (Turnhout: Brepols, 2011), pp. 277-294.

TRACK 6:

Act 4, Scene 2: *Ave Maria*, in Giuseppe Verdi, *Otello* (Milan: Ricordi, 1886), pp. 338-341.

TRACK 7:

Giacomo Puccini, *Vissi d'arte* from Act II of *Tosca* (Milan: Ricordi, 1910).

TRACK 8:

*The Original Song of Cease your Funning from the Beggar's Opera To which is added the Set with all the Ornaments and Graces as Sung with the greatest applause by Madame Catalani arranged by Natale Corri* (Edinburgh: N. Corri, [n.d.]).

Special Collections, Brotherton Library, University of Leeds, Part of the collection titled 'English songs 1695-1830', published by N. Corri in Edinburgh, c.1803-4.<sup>2</sup>

TRACKS 9 – 11:

All three works from Manuel Garcia, *Complete Treatise on the Art of Singing*, trans. by Donald Paschke (New York: Da Capo Press, 1972), ii.

Cimarosa Aria from *Sacrifizio d'Abraham*: pp. 217-223.

Crescentini Aria inserted into *Romeo e Giulietta* by Zingarelli: pp. 232-236.

Morlacchi Aria from *Teobaldo ed Isolina*: pp. 238-240.

These works can be found in section 3 of this Appendix (pp. 269-283). The recitative section of the Cimarosa does not feature in the Recorded Portfolio but has been included here for reference.

## 2. EARLY RECORDING TRANSCRIPTIONS

This section details and reproduces the transcriptions used in the emulation of early vocal recordings (CD 2: Tracks 1-13). These transcriptions were initially based upon the editions referenced above, and then edited in accordance with the recorded performances of each singer. The transcriptions follow the editorial method in the order that the emulations feature in the Recorded Portfolio.

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<sup>2</sup> Shelf Mark: Special Collections Large Music E-9 ENG.

## 2.1. EDITORIAL METHOD

Transcriptions of early recorded vocal performances were created by noting additional information onto the basic musical text during a period of extensive listening. A system of symbols was devised to represent certain elements of vocal performance practice, as detailed in Table 2 below.

Table 2: Symbolic representation of vocal performance practices

SYMBOL(S)	PERFORMANCE PRACTICE	ADDITIONAL NOTES
<i>appoggiaturas</i>	Grace notes or additional flourishes	Symbol selected indicates approximate note length
<i>arrows</i>	Mild to moderate changes in speed	Relative to general tempo. Affects accompaniment also unless noted.
<i>dotted arrows</i>	Moderate to extreme changes in speed	Relative to general tempo. Affects accompaniment also unless noted.
<i>straight lines</i>	Portamento effects	Line denotes departure and destination pitch (grace note used if not destination pitch)
<i>wavy line</i>	Vibrato effects	Shows location in /on given note
<i>rhythms above stave</i>	Text division	Denotes division of vowels in elision
v	Breath	Denotes breaths by performer (sighing/sobs noted separately)

Symbolic notation was not considered specific enough to notate all the elements of the performance practices that these singers were utilising. Short prose notes were added to describe general voice characteristics, such as tone, timbre, and vibrato rate, in an effort to aid swift changes from one performer's style to another in the recording sessions; these notes are not exhaustive but aid memory in the context of existing familiarisation with the early recordings being emulated. Metronome markings give a general idea of the tempi employed by the singers (and their accompanists), although the performance style of most of these performances incorporates a good deal of tempo rubato and general tempo variation (as noted in Chapter Five). Dotted bar lines denote where musical text has been



cut to match the recorded performance being emulated. The use of the chest voice as an expressive device that provides contrast to the mid-voice is noted on each applicable transcription. Text has been edited to reflect idiosyncratic pronunciation.

It is acknowledged that the approach used here does not fully notate every aspect of performance style and technique, and could be refined further to become much more specific. Vibrato extent and rate might be reflected in the specific undulation of the line used to represent vibrato, the type of vibrato effect used might be specified, and the speed and movement of portamento might be communicated through notation with future refinement. The work of Charles de Bériot in *Méthode de violon* (1858) is of great significance to the notation of performance practices, and provided particular inspiration for future refinement of techniques to communicate greater detail about vibrato and portamento usage.<sup>3</sup> An approach that notated the location of vibrato usage was trialled in both transcriptions of Chaminade's *L'Été*, but was not considered useful in transcribing the practices of performers that used very frequent vibrato effects.

Greater specificity in notation brings with it the difficulty of communicating musical information succinctly, and in an easily usable format; it is for this reason that transcriptions of this form could not be advocated for routine use in performance. These transcriptions were extremely useful in assessing the use of portamento and tempo rubato by these particular performers, but do not offer a viable option for the communication of vocal performance practices to modern performers. This realisation led to the decision not to refine transcription techniques for greater specificity at this juncture. It was felt that the aim of achieving greater familiarity with the vocal style of successful recording artists around the turn of the twentieth century had been met through the act of transcription, the associated focussed listening, and the act of emulation, but that absolute recreation of the

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<sup>3</sup> Bériot also used a wavy line to communicate vibrato. Charles de Bériot, *Méthode de violon* (Mainz, 1858). Nicholson (1821) amalgamated this approach with variation in the frequency of the undulation to communicate the rate and extent of the vibrato effect. Charles Nicholson, *Preceptive Lessons for the Flute* (London: [n.pub.], 1821). Spohr (1832) also utilised a similar approach to Nicholson. Louis Spohr, *Violinschule* (Vienna: [n.pub.], [1832]).

minutiae of any specific vocal performance would not be helpful in the general study of vocal performance practices of this period. Despite this largely broad approach a number of noticeable traits and idiosyncrasies were noted, and have been discussed within the main body of the thesis.

Accompaniments were edited in an effort to reflect the character of the accompaniment in the original recording. This included replacing moving figures with static chords where necessary, transcribing small interludes, and cutting (or editing) introductions and endings as required. Accompanying forces in the original recordings vary from brass ensemble or piano, to strings and woodwind; the accompaniments in these transcriptions are not direct realisations of the original recorded accompaniments.

## 2.2. TRANSCRIPTIONS

Individually titled transcriptions commence on the following page. For ease of reference the contents of this section, along with CD track details and individual page numbers, is listed below.

CD 2: Track 1	Adelina Patti: Bishop <i>Home, sweet home</i> (1905)	189
CD 2: Track 2	Nellie Melba: Bishop <i>Home, sweet home</i> (1905)	192
CD 2: Track 3	Amelita Galli-Curci: Bishop <i>Home, sweet home</i> (1917)	195
CD 2: Track 4	Adelina Patti: Mozart <i>Voi, che sapete</i> (1905)	199
CD 2: Track 5	Nellie Melba: Mozart <i>Voi, che sapete</i> (1907)	203
CD 2: Track 6	Nellie Melba: Mozart <i>Voi, che sapete</i> (1910)	207
CD 2: Track 7	Blanche Marchesi: Chaminade <i>L'Été</i> (1906)	211
CD 2: Track 8	Emma Albani: Chaminade <i>L'Été</i> (1914)	219
CD 2: Track 9	Adelina Patti: Mozart <i>Batti, batti</i> (1904)	224
CD 2: Track 10	Marcella Sembrich: Mozart <i>Batti, batti</i> (1904)	232
CD 2: Track 11	Suzanne Adams: Gounod <i>Jewel Song</i> (1902/3)	239
CD 2: Track 12	Marcella Sembrich: Gounod <i>Jewel Song</i> (1906)	244
CD 2: Track 13	Nellie Melba: Gounod <i>Jewel Song</i> (1910)	251

# Patti: Bishop *Home, sweet home* (1905)

(CD 2: Track 1)

3"41 sings around ♩ = 66 + rubato

VOICE QUALITIES:  
deeper than Melba  
vibrato VERY sparing

Mid pleasures and

4

Pa-laces though we may roam, Be it

7

ev-err so hum-ble there's no place like home! A

11

almost late

charm From the skies seems to hal-low us there Which

15

seek through the world, is ne'er met with elsewhere Home!

*pp*

20

Home— sweet sweet Home! There's no— place like Home!— There's

*pp*

25

no— place like Home! An

*colla voce pp*

29

ex - ile from Home, Splen - dour daz - zles in vain!— Oh!

*pp*

33

give— me my low - ly thatch'd Cot - tage a - gain!— The

*tr*

37

Birds sing - ing gai - ly that came at my call, Give me

*tr* *tr* *tr* *tr*

41

them with the peace of mind dear - er than all

45

Home! Home sweetsweet Home! There's no place like



50


Home! There's no place like Home!

*colla voce* *pp*

# Nellie Melba: Bishop *Home, sweet home* (1905)

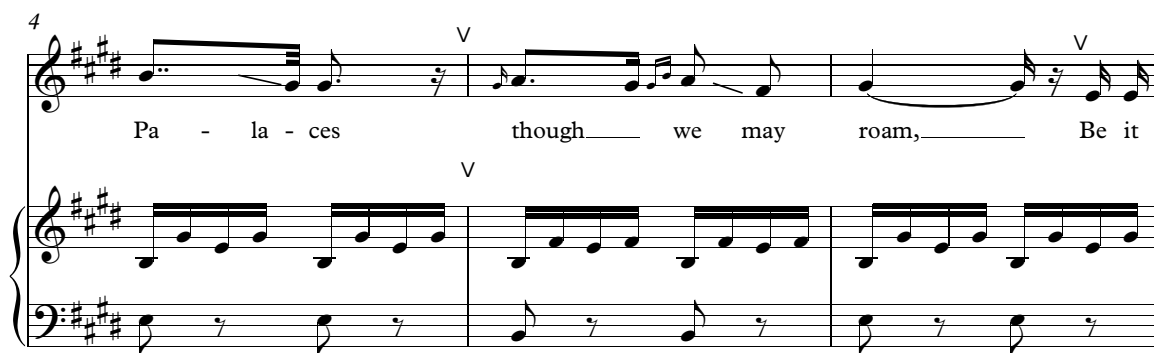
(CD 2: Track 2)

VOICE QUALITIES:  
light, flickering vibrato  
swift but small-scale  
no noticeable in less than   
vibrato rate: 

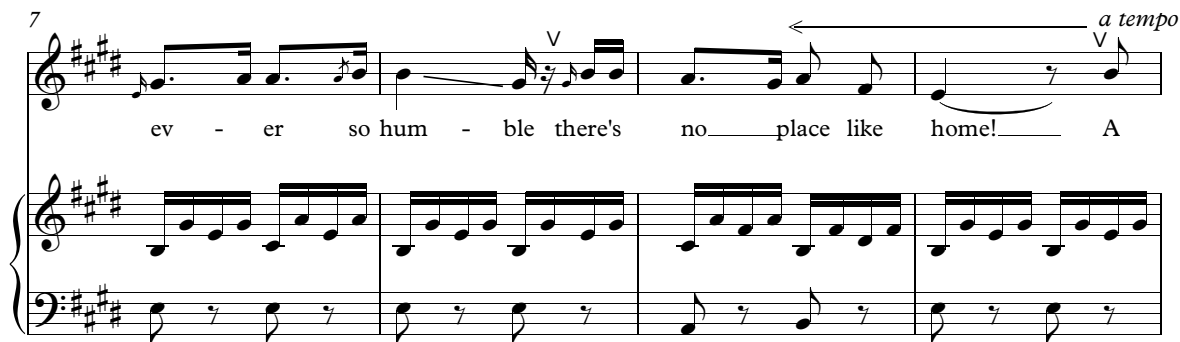
around  = 68?



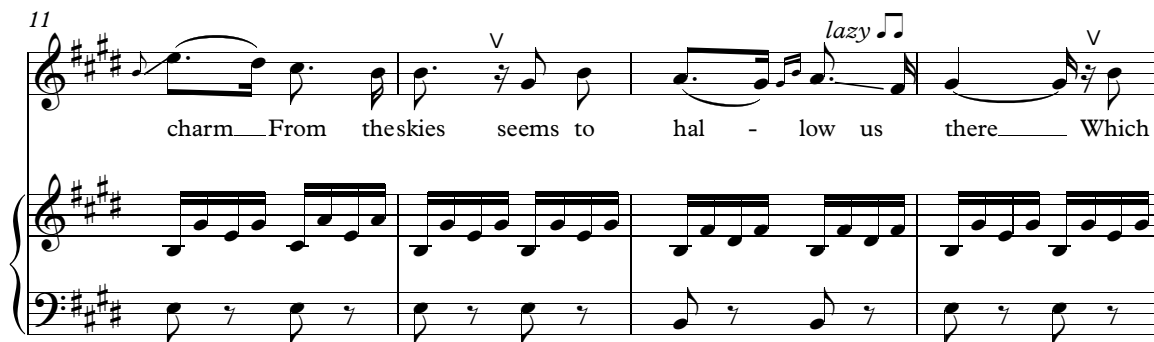
Mid pleasures and



4 Pa-laces though we may roam, Be it



7 ev-er so humble there's no place like home! A



11 charm From the skies seems to hal-low us there Which

15

seek through the world, is ne'er met with else where Home!

*pp*

20

Home sweet sweet Home! There's no place like Home! There's

25

no place like Home! An

*colla voce* *pp*

28

ex - ile from Home, Splen - dour daz - zles in vain! Oh!

32

give me my low - ly thatch'd Cot tage a - gain! The

*suddenly half speed* *tr*

36

*not quite up to tempo*

*a tempo*

Birds sing - ing gai - ly that came at my call, Give me

40

them with that peace of mind dear - er than all

44

*slow again*

Home! Home sweet sweet Home! There's no place like


49

Home! There's no place like Home!

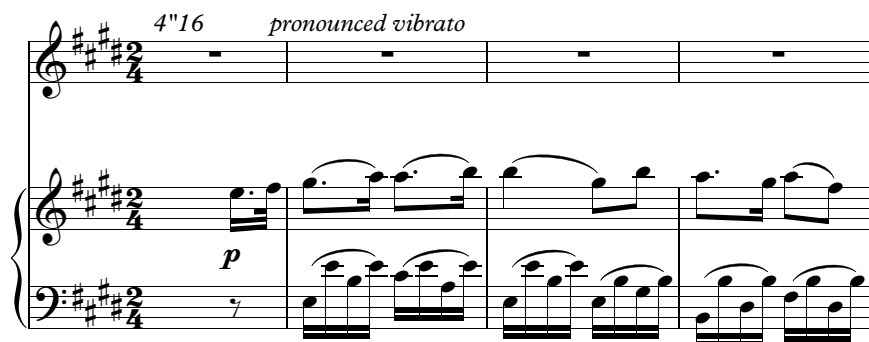


# Amelita Galli-Curci: Bishop *Home, sweet home* (1917)

(CD 2: Track 3)

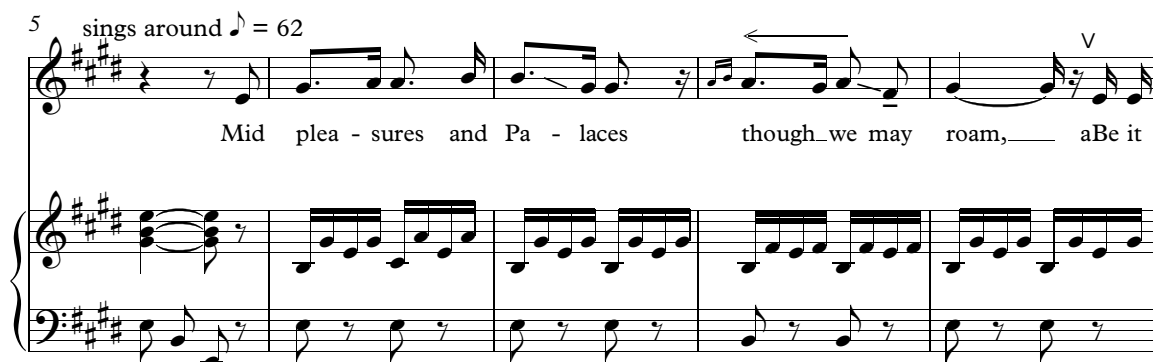
VOICE QUALITIES:  
 more pronounced vib.  
 vibrato rate:   
 not as light as Melba  
 not as deep as Patti

4"16 *pronounced vibrato*



5 *sings around* ♩ = 62

Mid plea - sures and Pa - laces though we may roam, — aBe it



10

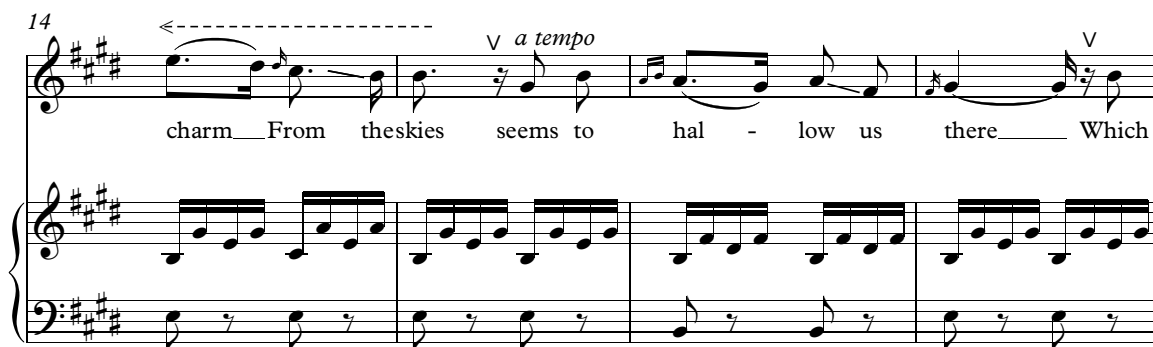
ev - er so hum - bel there's no — place like home! — A



14

charm From theskies seems to hal - low us there — Which

*a tempo*



18

seek through the world, is ne'er met with \_\_\_\_\_ else where Home!

*pp*

23

Home— sweet sweet Home! There's no— place like Home!— There's

*pp*

28

no— place like Home! An

*colla voce pp*

*tempo up a notch*

32

ex - ile from Home, Splen - dour daz - zels in vain!— Oh!

36

give me my low - ly thatch'd Cot- tage a - gain! Thee

*late*

*tr*

40

Birds sing - ing gai - leh that came at my call, Give me

*tr*

*tr*

*tr*

*tr*

44

them with thee peace of mind dear er than all

*tr*

*tr*

*tr*

*tr*

48

Home! Home sweet sweet Home! There is no place like

*pp*

53

(held in/frequencies lost)


Home! There's no place like Home!

*colla voca*

*pp*

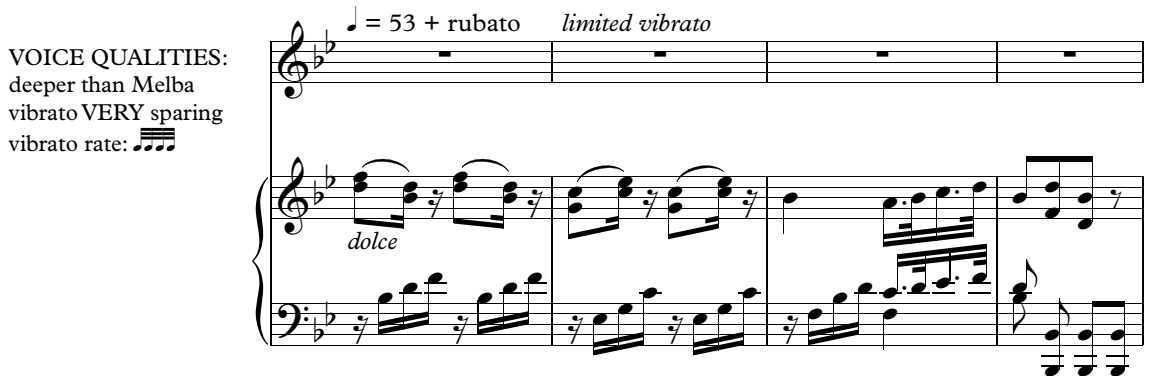
# Adelina Patti: Mozart *Voi, che sapete* (1905)

(CD 2: Track 4)

VOICE QUALITIES:  
deeper than Melba  
vibrato VERY sparing  
vibrato rate: 

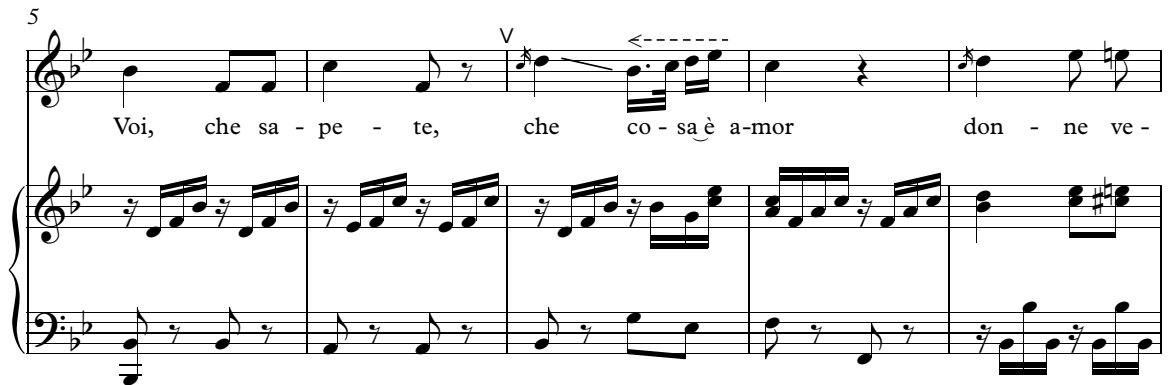
$\text{♩} = 53 + \text{rubato}$  *limited vibrato*

*dolce*



5

Voi, che sa - pe - te, che co - sa è a - mor don - ne ve -



10

de - te, s'io l'hò-nel cor? don - ne ve - de - te, —



15

s'io — l'hò nel — cor? quel - lo, ch'io pro - vo, vir - di -



20

-rò, è per me nuo - vo, ca - pir nol sò,

25

sen - t un af - fet - to pien di de - sir ch'o - ra e di -

30

- let - to, ch'o - ra e mar - ti - rr. ge - lo e poi sen - to

35

l'al - ma via vam - par è in un mo - men - to tor - no gel -

40

lar. ri - cer co un be - ne fu(o) - ri di me,

45 *entries frantic!  
not metrical*

non sò ch'il tie - ne non sò cos' - è sos-pi-ro, e ge-mo sen-za vo-

50

ler pal pi-to tre-mo sen-za sa - per, non tro-vo pa - ce not - te, ne

54

di; mà pur mi pja - ce lan - guir co - si, voi, che sa -

59 *faster than previous verse*

pe - te. che co-sa è a - mar, don - ne ve - de - te,

64 *chest*

s'io l'hò-nel cor? don - ne ve - de - te. s'io l'hò - nel

69

cor? don - ne ve - de - te, s'io l'hò - nel

73

cor?

*(a tempo)*

*tr.*

*tr.*



# Nellie Melba: Mozart *Voi, che sapete* (1907)

(CD 2: Track 5)

VOICE QUALITIES:  
 light, flickering vibrato  
 swift but small-scale  
 not noticeable in less than  $\frac{1}{4}$   
 vibrato rate:  $\frac{1}{16}$

$\text{♩} = 53 + \text{rubato (orch) selective vibrato}$

Voi, che sa - pe - te,

5 (moves on a notch and settles)

che co - sa è a - mor don - ne ve - de - te, s'io l'hò - nel

10

cor? don - ne ve - de - te, s'io l'hò - nel cor?

15

quel - lo, ch'io pro - vo, vi - ri - di - rò, è per me

20

*drags a*

nuo - vo, ca - pir nol sò, sen - to un af - fet - to

25

pien di de - sir ch'o - ra e di - let - to, ch'o - ra e mar -

30

*still fraction slower, but steady* *chest*

tir; ge - lo e poi sen - to l'al - ma av - vam - par

35

*a tempo*

è in un mo - men - to tor - no gel - lar. ri - cer co un

40

be - ne fuo - ri di me,

43

non sò ch'il tie - ne non sò cos' -

46

è sos-pi-ro, e ge - mo sen-za vo - ler pal - pi-to tre - mo sen-za sa

50

per, non tro-vo pa - ce not - te, ne di; mà pur mi pia - ce

54

*not quite a tempo*

lan - guir co - si, voi, che sa - pe - te. che co-sa è a -

59

mar, don - ne ve - de - te, s'io l'hò-nel cor?

64

don - ne ve - de - te, s'io l'hò - nel cor? don - ne ve -

69

de - te, s'io l'hò nel cor?

# Nellie Melba: Mozart *Voi, che sapete* (1910)

(CD 2: Track 6)

VOICE QUALITIES:  
 light, flickering vibrato  
 swift but small-scale  
 LESS SO THAN 1907  
 not noticeable in less than  $\text{♪}$   
 vibrato rate:  $\text{♩♩♩}$

intro at  $\text{♪} = 50$  (orch) *slightly more regular vibrato*

5 sings at  $\text{♪} = 48 + \text{rubato}$

V

Voi, che sa - pe - te,

*dolce*

11

che co - sa è a-mar don - ne ve - de - te, s'io l'hò-nel

16

cor? don - ne ve - de - te, s'io l'hò nel cor?

21

quel - lo, ch'io pro - vo, vi - ri - di - rò, è per me

26

nuo - vo, ca - pir nol sò, sen - to un af - fet - to

*drags a*

31

pien di de - sir ch'o - ra e di - let - to, ch'o - ra e mar -

*(a tempo)*

36

tir; ge - lo e poi sen - to l'al - ma av - vam - par

*(fraction less than tempo)*

*chest*

41

è in un mo - men - to tor - no gel - lar.

*(a tempo)*

45

ri - cer co un be - ne fuo - ri di me, non sò ch'il

50

tie - ne non sò cos' - è sos-pi-ro, e ge-mo sen-za vo - ler pal-pi-to

55

tre - mo sen-za sa - per, non tro-vo pa - ce not - te, ne di; mà pur mi

59

*not quite a tempo*

pia - ce lan - guir co - si, voi, che sa - pe - te.

64

che co-sa è a - mar, don - ne ve - de - te, s'io l'hò-nel

69 *(a tempo)*

cor? don - ne ve - de - te. s'io l'hò - nel cor?

*chest*

74

don - ne ve - de - te, s'io l'hò - nel

77 -


cor? *(moves on a little)*

*tr.*



# Blanche Marchesi: Chaminade *L'Été* (1906)

(CD 2: Track 7)

VOICE QUALITIES:  
selective vibrato where marked  
vibrato rate: 

*begins*  $\text{♩} = 92$

3 *mf*  
La la la la la la la chan-tez chan-tez Fol-le fau vet-te, Gaie a-lou-et-te,

7  
Jo-yeux pin-son, Jo yeaux pin-son, chan-tez, ai-mez! Par-fum des ro-ses,

11 *p*  
Frai ches é-clo-ses, Ren-dez nos bois nos bois plus em-bau-més

16

La la la la la la, — La la la la la la, — La la la la la la, — La la la la la la,

*pp*

20

Ah ——— chan - tez ——— ai - mez.

*f*

23

So - leil qui do - - -

*cresc.* *3* *8va-1* *ff* *ff* *p* *legato.*

27

-re Les sy - co - mo - res Rem - plis des - sains — tout bruis sants,

*mf* *p* *f*

32

*f* Ver-se la joi - - e; Que tout se noi -

*dim.*

37

- e Dans tes ray - ons res-plen - dis sants.

41

(running out of breath) *mf* Ah Ah Ah Ah Ah, chan

*double time*

*ff p cresc. f*

45

tez, ai-mez chan - tez ai - mez, Jo - yeux pin-son

*rhythms rushed but inaccurate*

*cresc.*

213

49

chan tez, Ah Ah Ah Ah Ah, chan - tez, ai - mez,

*ff* *ff p* *cresc.* *f* *double time*

54

Fol-le fau - vet - te, Gaie a - lou - et - te, chan tez

*p* *cresc.* *f*

59

chan-tez Ah Ah

*tr.* *tr.* *f* *mf*

64

Chan - tez!

*v fast trill* *f* *tr.* *tr.* *tr.* *ff* *p*

68

La la la la la la, — chan-tez chan-tez, Souf-fle qui pas-ses Dans les es-pa-ces

72

Se-mant l'es-poir Se-mant l'es-poir d'un jour — d'é-te. Que ton ha-lei-ne

76

Don-ne à la plai-ne plus d'é clat — Plus d'é-clat et plus de beau-té —

81

La la la la la la, — La la la la la la, — La la la la la la, — La la la la la la, —

85

*f* Ah ——— chan - tez ——— chan - tez.

88

*mf* Dans la prai - ri - -

92

- e Calme et fleu - ri - e, En - ten - dezvous ces mots si doux?

97

*f* L'à - me char - mè - - e, L'é - pou - se ai - mé -

102 *f*

- e Bé-nit le ciel près de l'é poux!

106 *mf* *cresc.* *double time* *ff*

Ah Ah Ah Ah chan - tez chan

110 *[rhythms lazy]*

tez ai-mes Chan - tez ai - mez Joy-eaux pin-son chan tez

115 *double time* *mf*

Ah Ah Ah Ah Ah, chan - tez, ai-mez, Fol-le fau

120

vet - te Gaie a - lou - et - te, Chan tez chan tez

*cresc.*

*f*

125

Ah Chan

*tr*

*v. fast*

*f* *mf* *f*

131

tez!

*ff*

*runs out of breath*

134

*fff*

218



# Emma Albani: Chaminade *L'Été* (1914)

(CD 2: Track 8)

VOICE QUALITIES:  
little vibrato: only where marked  
vibrato rate:   
quite reedy?

begins  $\text{♩} = 72$



3 *mf*  
La la la la la la la chan-tez chan-tez Fol-le fau vet-te, Gaie a-lou-et-te,

7  
Jo-yeux pin-son, Jo yeaux pin-son, chan-tez, ai-mez! Par-fum des ro-ses,

11 *p* *f* *acc.*  
Frai ches é-clo-ses, Ren-dez nos bois nos bois plus em-bau-més

*cresc.* *f* *p*

16 *accel cresc.*

Ah Ah Ah Ah

*pp*

20 *Albani comes in early HERE*

Ah chan-tez ai-mez.

*f ff 3 sff p*

24 *slow*

So-leil qui do-re Les sy-co-mo-res Rem-plis des

*f mf*

*legato.*

29

sains tout bruis sants, Ver-se la joi

*p f*

220

34 *early* *early*

- e; Que tout se noi - e Dans tes ray - ons res-plen - dis sants.

*dim.* *f*

39 *mf accel*

Ah Ah

*sf* *p* *cresc.*

42 *double time* *f*

Ah Ah chan - tez chan - tez, ai - mez chan - tez ai - mez,

*f*

47 *cresc.* *p* *cresc.* *cresc.* *double time* *f*

Joyeux pin-son chan tez, Ah Ah Ah Ah chan - tez chan

*cresc.* *ff* *sf p* *cresc.* *f*

52

tez, ai-mez, Fol-le fau-vet - te, Gaie a - lou - et - te,

57

chan - tez chan - tez Ah

60

tr. tr. Ah

[piano pushes on]

63

tr. tr. tr. Ah

222

66

Musical score for measures 66-68. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). Measure 66 features a treble staff with a wavy line above it and a bass staff with a simple accompaniment. Measure 67 continues the accompaniment in the bass staff and adds a complex melodic line in the treble staff with many slurs. Measure 68 concludes with a final chord in the treble staff and a bass staff marked *fff*.

# Adelina Patti: Mozart *Batti, batti* (1904)

(CD 2: Track 9)

VOCIE QUALITIES:  
vibrato use VERY sparing  
voice colour quite deep

$\text{♩} = 50$  *limited vibrato*

Bat - ti, bat - ti o bel Ma - zet - to, la tua

*p sempre legato*

The first system of the score is in 2/4 time with a key signature of one flat. It features a vocal line with a tempo marking of quarter note = 50 and the instruction 'limited vibrato'. The lyrics are 'Bat - ti, bat - ti o bel Ma - zet - to, la tua'. The piano accompaniment is marked 'p sempre legato' and consists of a steady eighth-note bass line and a more melodic treble line.

4

po - ve - ra Zer - li - na: sta - rò qui co - me a - gnel - li - na le tue

The second system continues the piece from measure 4. The vocal line includes vibrato markings (v) over the notes 'Zer - li - na' and 'le tue'. The piano accompaniment maintains the same rhythmic and melodic patterns.

8

bot - te ad a - spet - tar. Bat - ti, bat - ti

*p*

The third system starts at measure 8. The vocal line has a rest for the first two measures before the lyrics 'Bat - ti, bat - ti'. The piano accompaniment features a dynamic marking of 'p' (piano) in the second measure.

12

la tua Zer - li - na; sta - rò qui, sta - rò qui le tue

The fourth system begins at measure 12. The vocal line has vibrato markings (v) over the notes 'Zer - li - na' and 'le tue'. The piano accompaniment continues with its characteristic accompaniment.

16 chest

bot te ad a spet - tar.

20

La - scie - rò ca - var - mi il cri - ne,

24

La - scie - rò ca - var - mi gli oc - chi, e le ca - re tué ma - ni - ne lie - ta

28

poi sa prò ba - ciar, sa - prò ba - ciar, ba

*f p* *fp*

32

ciar, sa - prò, sa - prò ba - ciar.

*fp*

36

Bat - ti, bat - ti, o bel Ma - set - to, la tua

*v*

40

po - ve - ra Zer - li - na! sta - rò qui - co - me a - gnel - li - na le tue

*v a*

44

bot - te ad a - spet - tar. O bel Ma - set - to!

*drags m*

*piano reacts*



48

Bat - ti, bat - ti! sta - rò qui, sta - rò qui le tue

52

chest  
bot- te ad a - spet- tar. Ah, lo

55

ve - do, non hai co - re,

58

ah non hai co - re, ah, lo ve - do, non hai

61 *(in two, not as rushed as Sembrich)*

co - re. Pa - ce, pa - ce, o vi - ta mi - a! pa - ce,

*Allegro*

*f* *p*

65

pa - ce o vi - ta mi - a! in con - ten - to e al - le -

68

gri - a not - te e di vo - gliam pas - sar,

71

not - te e di vo - gliam pas -

*piano tentative here*

228

74

sar, not - te e di vo - gliam pas -

77

sar, not - te e di vo - gliam pas -

80

sar. Pa - ce, pa - ce, o vi - ta mi - a! Pa - ce,

83

pa - ce, o vi - ta mi - a! in con - ten - to ed al - le -

86

*omitted*

- gri - a not - te e di\_\_\_ vo - gliam pas - sar, si, si, si, si, si,

89

si, not - te e di\_\_\_ vo - gliam pas - sar, si, si, si, si, si,

92

si, not - te e di\_\_\_ vo - gliam pas - sar, \_\_\_\_\_ vo gli -

95

am,\_\_\_ vo gli - am,\_\_\_ pas - sar, \_\_\_\_\_ vo gli - am,\_\_\_ vo gli - am,\_\_\_ pas -

98 - chest


sar.

*pp*

The image shows a musical score for measures 98-101. The score is in 3/4 time with a key signature of one flat. The vocal line (top) has a box around the word 'chest' in the first measure. The piano accompaniment (bottom) features a melodic line in the right hand and a dense, rhythmic accompaniment in the left hand. The piano part includes a 'pp' dynamic marking in the third measure.

# Marcella Sembrich: Mozart *Batti, batti* (1904)

(CD 2: Track 10)

VOICE QUALITIES:  
not as plummy as Patti  
selective vibrato - natural  
vibrato rate: 

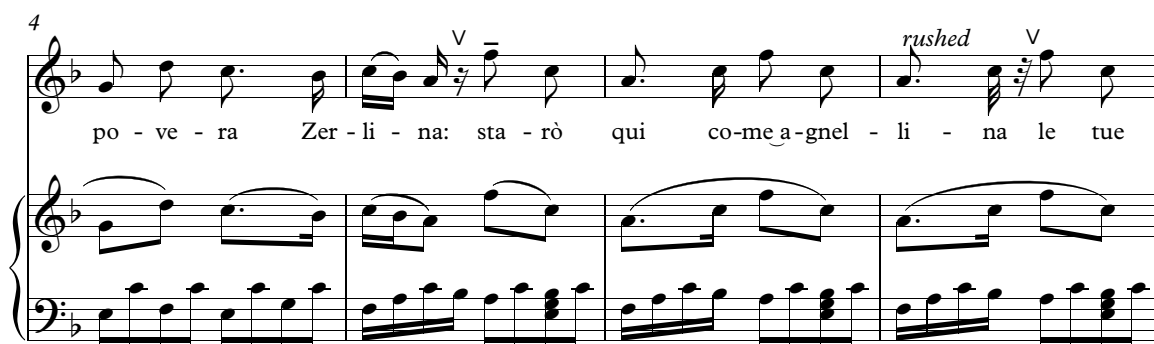
$\text{♩} = 58$  *comparatively more vibrato*



Bat - ti, bat - ti o bel Ma - set - to, la tua

*p sempre legato*

4



po - ve - ra Zer - li - na: sta - rò qui co - me a - gnel - li - na le tue

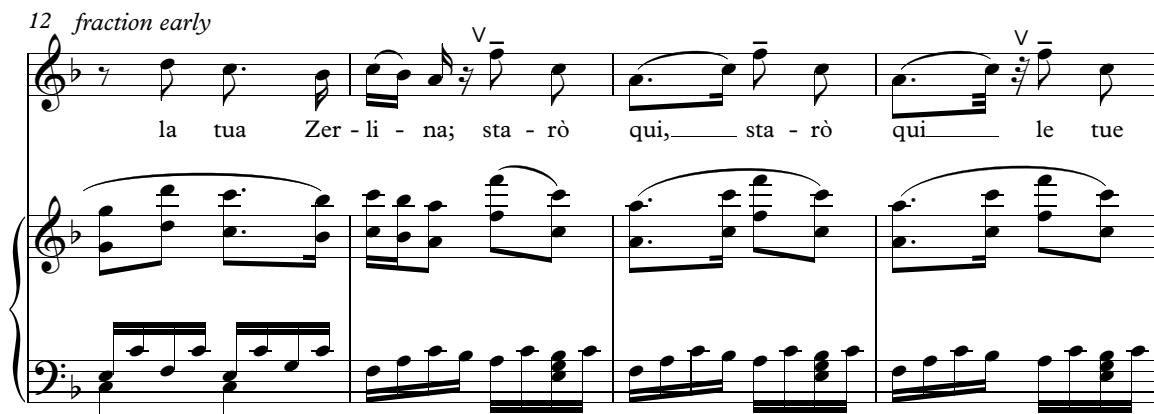
8



bot - te ad a - spet - tar. Bat - ti, bat - ti

*p*

12 *fraction early*



la tua Zer - li - na; sta - rò qui, sta - rò qui le tue

16 chest

bot te ad a spet - tar.

20 -----> <-----

La-scie-rò ca-var-mi il cri - ne,

24 -----> v

La-scie-rò ca-var-mi gli oc - chi, e le ca - re tué ma - ni - ne lie - ta

28 <----- v v v v

poi sa prò ba - ciar, sa - prò ba - ciar, ba ciar, sa -

*fp* *fp* *fp*

33

prò, sa - prò ba - ciar.

37

*up to tempo*  
Bat - ti, bat - ti, o - bel Ma - set - to, la tua po - ve - ra Zer

41

*rushed*  
li - na! sta - rò qui - co - me a - gnel - li - na le tue bot te ad a - spet - tar.

46

O bel Ma - set - to! Bat - ti, bat - ti! sta - rò qui, sta - rò



51 *v* chest

qui le tue bot te ad a - spet - tar. Ah, lo

55

ve - do, non hai co - re,

58

ah non hai co - re, ah, lo ve - do, non hai

61 *quickly*

co - re. Pa - ce, pa - ce, o vi - ta mi - a! pa - ce,

*Allegro*

*f* *p*

65

pa - ce o vi - ta mi - a! in con - ten - to e al - le -

68

gri - a not - te e di vo - gliam pas - sar,

71

not - te e di vo - gliam pas -

74

sar, not - te e di vo - gliam pas -

77

sar, not - te e di - vo - gliam pas -

80

Pa - ce, pa - ce, o vi - ta mi - a! Pa - ce,

83

pa - ce, o vi - ta mi - a! in con - ten - to ed al - le -

86

- gri - a not - te e di - vo - gliam pas - sar, si, si, si, si, si,

89

si, not - te e di vo - gli am pas - sar, si, si, si, si, si,

92

si, not - te e di vo - gli am pas - sar, i vo - gli

95

am vo - gli am pas - sar, i vo - gli - am vo - gli am pas -

98

sar.

# Suzanne Adams: Gounod *Jewel Song* (1902/3)

(CD 2: Track 11)

intro at  $\text{♩} = 72$

VOICE QUALITIES:  
selective vibrato: long, high notes  
as natural to me

Allegretto. (*piano rushes through intro*)  
leggiere

4 sings around  $\text{♩} = 56 + \text{rubato}$

cre - - - - - scen - do

9 late focus on lower note

Ah! Je ris de me voir Si

(*in tempo*)  
*f* *dim.* *pp*

15

belle en ce mir - oir, Ah! je ris de me voir Si belle en ce mir

leggiere

20

oir Est - ce toi, Mar - gue - ri - te,

*cresc.*

*cresc.*

25

Est - ce toi? Ré - ponds moi, ré - ponds moi, Ré - ponds, ré - ponds, ré - ponds

*p*

*dim.*

*steady*

29

vi - tel Non! non! ce n'est plus toi!

*p*

*dolce.*

*notch faster*

34

non non, Ce n'est plus ton vi - sage. - C'est la

*cresc.*

*dim.*

*p*

39

fil - - le d'un roi, C'est la fil -

44

- le d'un roi! Ce n'est plus toi, Ce n'est plus

49

toi, C'est la fil - le d'un roi, Qu'on sa - lue au pas - sa -

55

ge! Ah! s'il é - tait i - ci! S'il me vo - yait ain - si!

60 *late* ----->

Comme u - ne de moi - sel - le Il me trou - ver - ait bel - le.

*a Tempo.*

*pp*

64 ----->

Ah! Comme u - ne de moi - selle Il me tou - ve - rait

*cresc.* *f* *dim.*

69 ----->

bel - le, Comme u - ne de moi - selle Il me trou - ve - rait bel - le!

*rit* *a Tempo*

*p* *p*

74 ----->

Mar - gue - ri - te, C'est ne plus toi, Ce n'est plus ton vi -



80

sa - ge Non! c'est la fil - le d'un roi,

86

Qu'on sa - lue au pas - sa - - -


91

(covered)

ge.

# Marcella Sembrich: Gounod *Jewel Song* (1906)

(CD 2: Track 12)

VOICE QUALITIES:  
selective vibrato as natural to me  
BUT very fast:   
Trills very odd: almost like  
repeats on one note

intro almost up to  $\text{♩} = 80$

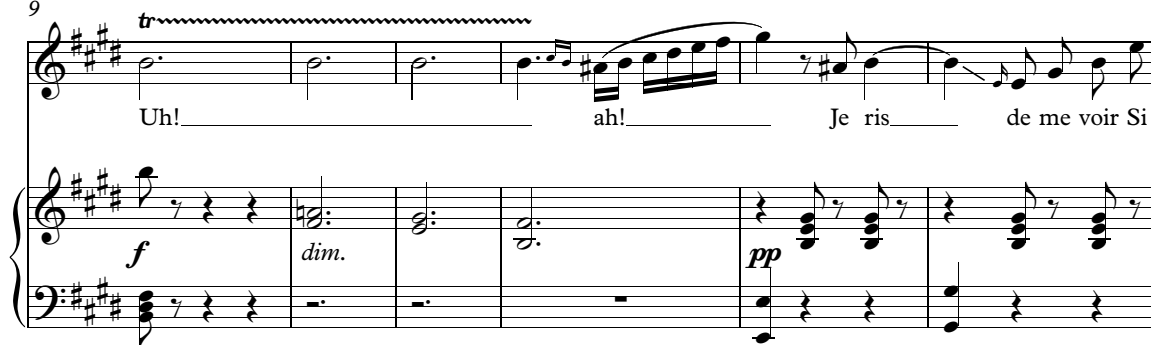


4

sings around  $\text{♩} = 63 + \text{rubato}$



9



15



20

oir Est-ce toi, Mar-gue - ri - te,

*cresc.*

*cresc.*

25

Est-ce toi? Ré-ponds moi, ré-ponds moi, Ré-ponds, ré-ponds, ré-ponds

*p*

*dim.*

29

vi - te! Non! non! ce n'est plus toi!

*dolce.*

*p*

34

non non, Ce n'est plus ton vi - sa - ge; C'est la

*cresc.*

*dim.*

*p*

39

fil - - le d'un roi, C'est la fil -

44

- le d'un roi! Ce n'est plus toi, Ce n'est plus toi, \_\_\_\_\_

50

— C'est la fil - le d'un roi, Qu'on sa - lue au pas - sa -

55

ge! Ah! s'il é - tait i - ci! S'il me vo - yait ain - si!

60 *a Tempo*

Comme u - ne de moi - sel - le Il me trou-ver-ait bel - le.

*a Tempo.*  
*pp*

64

Ah! Comme u - ne de moi

*cresc.* *f*

68

selle Il me tou-ve-raït bel - le, Comme u - ne de moi-selle Il me trou-ve-raït

*dim.* *p*

72

bel - le! ah! je ris

*a Tempo*  
*tr* *dim.* *pp*

*focus on lower note*

79

de me voir Si belle en ce mir - oir Ah! je ris

*leggiero*

83

de me voir Si belle en ce mir - oir! Est - ce toi,

*cresc.*

88

Mar - gue - ri - te, Ect-ce toi? Ré-ponds moi,

*cresc.* *p*

92

ré-ponds moi, ré ponds, ré-ponds, ré-ponds vi - te! Ah! s'il é -

*dim.* *p*

96

tait i - cil S'il me vo - yait ain - si. Comme u - ne de moi -

Tempo.

*rit.* *pp*

100

sel - le Il me trou-ve-raït bel - le, Ah!

104

Comme u - ne de moi - selle Il me trou ve-raït

*cresc.* *f* *dim.*

108

bel - le Comme u - ne de moi - selle, Il me trou-ver-ait bel -

*p* *pp*

112

-le! Mar - gue - ri - te, C'est ne plus toi, Ce n'est

*a tempo.*

*p*

118

plus ton vi - sa - ge Non! c'est la fil - le d'un roi, \_\_\_\_\_

*f a tempo*

*f*

*p*

125

Qu'on sa - lue au pas - sa - - -

*tr*

130

- ge aupassa - ge

*(tr)*



# Nellie Melba: Gounod *Jewel Song* (1906)

(CD 2: Track 13)

VOICE QUALITIES:  
selective vibrato as natural to me.  
NOT as obvious as other repertoire

around ♩ = 72 plus rubato/tempo relaxes after opening

Allegretto.  
*leggiere*  
(orch rush slightly)

4

cre - - - scen - do

9

focus on upper note

Ah! Je ris de me voir Si

*f* *dim.* *pp*

15

belle en ce mir - oir, Ah! je ris de me voir Si belle en ce mir

*leggiere*

20

oir Est - ce toi, Mar - gue - ri - te,

*cresc.*

*cresc.*

25

Est - ce toi? Ré - ponds moi, ré - ponds moi, Ré - ponds, ré - ponds, ré - ponds

*p*

*dim.*

29

*a notch faster*

vi - te! Non! non! ce n'est plus toi!

*dolce.*

*p*

34

non non, Ce n'est plus ton vi - sa - ge; C'est la

*cresc.*

*dim.*

*p*

39

fil - le d'un roi, C'est la fil -

44

- le d'un roi! Ce n'est plus toi, Ce n'est plus

*cresc.*

49

toi, C'est la fil - le d'un roi, Qu'on sa - lue au pas -

*f*

*dim.*

54

sa - ge! Ah! s'il é - tait i - ci! S'il me vo -

*p*

59

yait ain-si! Comme u - ne de moi - sel - le Il me trou-ver-ait

*rit.* *pp* *a Tempo.*

63

bel - le. Ah! Comme u-ne de moi

*cresc.* *f*

68

selle Il me tou-ve-raït bel - le, Comme u - ne de moi - selle Il me trou-ve-raït

*dim.* *p*

72

bel - le! ah! je ris

*focus on upper note*  
*a Tempo*  
*dim.* *pp*

78

de me voir Si belle en ce mir - oir Ah! je ris de me voir Si

83

belle en ce mir - oir! Est - ce toi, Mar - gue -

88

ri - te, Ect-ce toi? Ré-ponds moi, ré-ponds moi,

92

ré ponds, ré-ponds, ré-ponds vi - te! Ah! s'il é - tait i - ci!

96

S'il me vo - yait ain - si. Comme u - ne de moi - sel - le

Tempo.

*rit.* *pp*

100

Il me trou-ve-raît bel - le, Ah!

*cresc.*

105

Comme u - ne de moi - selle Il me you ve-raît bel - le Comme u - ne de moi -

*f* *dim.* *p*

109

selle, Il me trou-ver-ait bel - le! Mar - gue - ri - te, C'est ne plus

a tempo.

*pp* *p*

256

115

toi, Ce n'est plus ton vi - sa - ge Non!

121

c'est la fil - le d'un roi, Qu'on sa - lue au pas -

127

*focus on lower note*

sa - - - - - ge.





### 3. OTHER REPERTOIRE

This section includes the *Una voce poco fa* performing edition, an image of the manuscript of Catalani's rendition of *Cease your funning* from *Beggar's Opera*, and the Garcia annotated repertoire. The intermittent quality of the Garcia repertoire is representative of the images reproduced in the Paschke translation. For ease of reference the contents of this section, along with CD track details and individual page numbers, is listed below.

CD 4: Track 1	Rossini <i>Una voce poco fa</i> from <i>Il barbiere di Siviglia</i> (1816)	260
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Rossini *Una voce poco fa*  
from *Il barbiere di Siviglia* (1816)

ornamentation c.1835

*Allegro Moderato*

Piano introduction in A major, 3/4 time. The score consists of five measures. The first measure is a whole rest. The second measure has a forte (*f*) dynamic. The third measure has a pianissimo (*pp*) dynamic. The fourth measure has a forte (*f*) dynamic. The fifth measure has a piano (*p*) dynamic. The piano part features a rhythmic pattern of eighth and sixteenth notes.

5 [Andante] *f*

Una voce poco fa qui nel cor mi ri-suo-nò il mio

Vocal line and piano accompaniment for measures 5-9. The tempo is marked [Andante]. The vocal line includes a triplet of eighth notes under 'qui' and a fermata over 'nò'. The piano accompaniment is in a simple harmonic style.

10 *p* *p* con espr:

cor fe-ri-to è già e Lin-do-ro fu che il pia-gò sì Lin

Vocal line and piano accompaniment for measures 10-13. The vocal line includes a triplet of eighth notes under 'e' and a fermata over 'gò'. The piano accompaniment continues with a steady rhythm.

14 *f* *p*

do-ro mio sa-rà lo giu-ra-i la vin-ce-rò sì Lin

Vocal line and piano accompaniment for measures 14-17. The vocal line includes a sixteenth-note run under 'ra-i' and a triplet of eighth notes under 'ce-rò'. The piano accompaniment features a forte (*f*) dynamic in the first measure and a piano (*p*) dynamic in the second.

18

do ro mio sa rà lo gui

*f*

*p*

20

ra i la vin ce rò.

22

*p* (con malizia)

Il tu-tor ri-cu-se - rà io l'in-ge - gno a guz-ze-

*p*

24

rò al - la fin s'ac-che te - rà e con ten - ta re-ste

*f*

26

rò si Lin-do ro mio sa - rà lo giu

*f* *pp*

29 *note lengths edited*

ra-i la vin - ce - rò si, Lin - do - ro - mi-o sa -

32 *f*

-rà, lo - gui - ra - i la vin - ce - rò.

*pp*

35

*Moderato*

*p* *p* *f*

39

Io son - no do - ci-le son - ri - spet - to - sa,

*p*

43

so - no ob - be - dien - te dol - ce - a - mo -

*3* *3*

46

- ro - - sa mi las-cio reg - ge-re mi las-cio reg - ge-re mi fo gui-

49

dar mi fo gui-dar me se mi toc - co-no dov'è il mio de - bo-le sa-rò u-na

53 [This alteration from Schirmer ed.]

vi - pe - re sa - rò e cen-to trap - po-le pri-ma di

56

ce - de-re fa-rò giuo - car far - rò giuo - car e cen-to

59

trap - po-le pri-ma di ce - de-re fa-rò giuo - car fa - rò giuo -

62

car e cen-to trap-po-le pri-ma di-ce-de-re e cen-to

65

trap-po-le fa-rò gio-car

68

io so-no do-ci-le

70

so-no ob-be-dien-te mi las-cio

72

reg-ge-re mi fo-gui-dar ma se mi

75

toc - ca - no dov'è il mio de - bo le sa-rò u-na vi - pe - ra sa -

78

rò e cen-to trap - - - po - le fa -

81

[f in article]

-rò gio - car e cen-to trap - po-le pri - ma di

84

ce - de re fa-rò gio - car fa-rò fa-rò fa-rò gio - car e cen - to

87

trap - po-le pri - ma di - ce - de re e cen-to trap po - le fa -

90 *f*

-rò fa - rò gio - car e cen-to trap-po-le fa-rò gio

93

car e cen - to trap-po-le fa-rò gio-car fa - rò gio -

car fa - rò gio -

car fa - rò gio-car fa - rò gio-car.

99

101



Madame Catalani: *Cease your funning* from *Beggar's Opera* (CD 4: Track 8)

FOLLY  
Original Set

Andantino

Cease, your Funning, Force or Cunning, Never shall my Heart tra-pan, All these Sallies  
are but Malice, To seduce my constant Man: 'Tis most certain, By their flirting, Women oft have  
En-vy shewn; Pleas'd to ru-in, Others wooing, Never happy in their own.

As Sung by MAD<sup>M</sup> CATALANI.

Andantino

Sy

Cease your Fun - - - ning Force or Cun - - - ning, neve - - - r shall my  
Heart tra - pan, All these Sal - - - lies are but Ma - - - lice,

to be - - - - - duce my con - stant Man, 'Tis mo - - - - - st certain,

By - - - - - their flir - ting Women oft have

En - vy she - - - - - wn Pleas'd to ru - in

O the - - - - - rs wooing, Ne - - - - - ver happy i - - - - - n their own.

Cimarosa: *Sacrifizio d'Abraham*, Scene and Aria for soprano. Poetry by Metastasio.

Largo espressivo.

SARA. Recit.  
mezzo forte.

Long preparation of the consonant [m].  
Leave the e2 as soon as attacked, but without a jerk.  
Long prep. of the [m].  
Leave the note lightly.  
Avoid the shake which can result from the doubling of the consonant.  
piano.

Slow. The appoggiatura longer than the d2.  
Slow and equal notes.  
soft and portamento.

Diphthong: a contraction of two vowels under the same note.

Chi per pie - ta mi di - ce il mio fi - glio che fa? ser - vie pas - to - ri in - vi - o - dia.

TENRE.

Chi per pie - ta mi di - ce, il mio fi - glio che fa? ser - vie pas - to - ri in - vi - o - dia.

piano.

Sigh. Slow. piano. Long breath. Tone sustained with inflections. forte.

- tor - no e al - cun non rie - de ah! for - se pie - to - so o - gnun me - vi - ta

- tor - no calun - nie - de! ah! for - se pie - to - so o - gnun me - vi - ta

Very accentuated portamentos. In this passage one cannot show too much power of voice and articulation.

Slow. *Sigh.* *Strong voice.* *forte.* *ff.* *piano.* *Sigh of extreme anguish.* *m.forte.* *forte.*

ah! in no-cen-te già spi-ro for-ne l'al-ma in man del pu-dro ah forse oh! di-o che dolor

ah! in no-cen-te già spi-ro for-ne l'al-ma in man del-padro ah forse oh! di-o che do-lor

Tears and desolation. *p.* Extremely legato. *breath.* Mordant which begins the note. *>>* Slight rall. *Anxiety.*

chi mi con-su-li non si tru-va per me almen di tan-ti al-meno tor-nar ve

chi mi con-su-li non si tru-va per me almen di tan-ti al-meno tor-nar ve

Precise and short words. *All. f.* A kind of faint. *Slow.* *forte. sostenuto.* *piano.* *Anxiety.*

des-si! ec-co-me un si cer-chi chie-da-si non ho cor-pas-to-ri ah!

des-si! ec-co-me un si cer-chi chie-da-si non ho cor-pas-to-ri ah!

*Soft mordent, slow.* *Slow.* *Voice full and commanding.*

tre-mo-dascol-tar la vispos-ta ah! per-che ma-i si con-fu-si tor-na-te dov'è A'

tre-mo-dascol-tar la vis-pos-ta ah! per-che ma-i si con-fu-si tor-na-te dov'è A'

*Prolonged note.* *Prolonged.* *piano.* *Light.*

bram? che ve-des-te? oh! Di-o par-la-te.

bram? che ve-des-te? oh! Di-o par-la-te.

Release of air to end this note which should be very long.

Release of air.

ARIA.

Ah! parla - te!  
 Ah! par - la - te.

Ah! par - la - te!  
 Ah! par - la - te.

Full voice, very energetic portamentos.

Example of tempo *allegro*.

Slight variant of measure 8.

deh! par - la - te che for - se ta - cen - do men pie - to - si

deh! par - la - te che for - se ta - cen - do men pie - to - si

The reply to measures 15 and 16, more accented and slightly varied.

piano.

più bar - ba - ri sie - te deh! par - la - te che for - se ta - cen - do men pie - to - si più bar - ba - ri

più bar - ba - ri sie - te deh! par - la - te che for - se ta - cen - do men pie - to - si più bar - ba - ri

Strong voice.

The stress of the note  $g^2$  should arise principally from the preparation of the consonant [b].

sie - te men pie - to - si più bar - ba - ri sie - te

sie - te men pie - to - si più bar - ba - ri sie - te

piano

$p < cresc.$

This little note taken without portamento.

fort. Br. Sombro timbre, but sparkling.

Soft, pleading piano voice.

ah! vin - ten - do ta - ce - te non mi di - te che il fi - glio mo - ri non mi

ah! vin - ten - do ta - ce - te non mi di - te che il fi - glio mo - ri non mi

This phrase member more accented than at measures 29 and 30.

*mf* *piano.* *release of air before and after the note.*

di - te che il fi - glio mo - ri ah! deh! par - la - te che for - se ta - cen - do

di - te che il fi - glio mo - ri ah! deh! par - la - te che for - se ta - cen - do

*Extend the note g<sup>b2</sup>.* *Lively.* *Extend the voice.* *Extend the voice.*

men pie - to - si piu bar - ba - ri sie - te men pie - to - si piu bar - ba - ri sie - te oh

men pie - to - si piu bar - ba - ri sie - te men pie - to - si piu bar - ba - ri sie - te oh

*These two 32nd notes e<sup>2</sup> and f<sup>2</sup>, slow and equal.* *Messa di voce as much as possible.* *The note e<sup>1</sup> very full.* *Declaimed. piano.*

Di - o par - la - te par - la - te ah vin - ten do ta - ce - te ta - ce - te non mi di - te che il fi - glio mo -

Di - o par - la - te par - la - te ah vin - ten do ta - ce - te ta - ce - te non mi di - te che il fi - glio mo -

*Full voice.* *One may accentuate the first, second, or fourth note of each beat.*

*Sombre. timbre.* *Soft, marked.* *Variant of measures 49 and 50.*

ri deh par - la - te che for - se ta - cen - do men pie - to - si piu bar - ba - ri

ri deh par - la - te che for - se ta - cen - do men pie - to - si piu bar - ba - ri

*piano* *Aspirate the attack of the f<sup>2</sup>.* *Increase the accent.* *Variant.* *Variant: Increase of accent.* *Variant: slight rall.* *Sustained tone.* *Voice covered and agitated.* *Still piano* *Jerky tones.*

sie - te oh Di - o par - la - te oh Di - o ta - ce - te ah vin - ten do ta - ce - te ta -

sie - te oh Di - o par - la - te oh Di - o ta - ce - te ah vin - ten do ta - ce - te ta -

Prolong the voice.

*sub. sub. forte*

- ce - te non mi di - te che il fi - glio mo - ri non mi di - te che il fi - glio mo - ri no non mi di - te che il fi - glio mo -

- ce - te non mi di - te che il fi - glio mo - ri non mi di - te che il fi - glio mo - ri no non mi di - te che il fi - glio mo -

The whole phrase at full voice.

*f p > p fp fp f*

- ri che il fi - glio mo - ri che il fi - glio mo - ri

- ri che il fi - glio mo - ri che il fi - glio mo - ri

*fp fp fp*

These notes in chest voice and well held, *rinforz.*

*piano* Half breath after portamento. Clear timbre. *col canto.*

Slow preparation, smooth and gradually accelerated.

so che spi - ra quell' os - tia si ca - ra, si ca - ra,

so che spi - ra quell' os - tia si ca - ra, si ca - ra,

With tenderness. *a tempo, piano.*

*piano. cres* Increasing anxiety.

so che spi - ra quell' os - tia si ca - ra veg - go il san - gue che tin - ge quell'

so che spi - ra quell' os - tia si ca - ra veg - go il san - gue che tin - ge quell'

In order to express this outburst of grief in all its energy, the mind should be struck with all the nuances of fear and horror which are connected to the idea being expressed by the words.

*piano cresc.* *piano cresc.* *forte.* *ff* Beside herself.

- a - - ra sen - - to il fer - ru che il sen le fe - ri deh par -  
 - a - - ra sen - - to il fer - vo che il sen le fe - ri deh par -

*dim.* *dim.* *f* *dim.* *dim.* *f* *cresc.* Heart-rending grief.

- la - te che for - se ta - ceo - do men pie - to si piu bar - ba - ri sie - te ah! ta - ce - te v'in - ten - do v'in - ten - do veggo, il  
 - la - te che for - se ta - ceo - do men pie - to si piu bar - ba - ri sie - te ah! ta - ce - te v'in - ten - do v'in - ten - do veggo, il

Exhausted, fainting away. *ff*

fi - glio veggo il san - gue, veggo il fer - ro che il sen le fe - ri gia spi - ra oh  
 fi - glio veggo il san - gue, veggo il fer - ro che il sen le fe - ri gia spi - ra oh

Exclamation of poignant grief.

Pronounce [y] as in French, but however without closing the lips. *rall.* *dimin.* *p* Pleading voice. With fright.

Du - - - - - ! deh par - - - - - ta - - - - - te ta - ce - te v'in - ten - do  
 Di - - - - - ! deh par - - - - - ta - - - - - te ta - ce - te v'in - ten - do

non mi di - - - - - te che il fi - gliuo - ri non mi di - - - - - te che il fi - gliuo -  
 non mi di - - - - - te che il fi - gliuo - ri non mi di - - - - - te che il fi - gliuo -



- ri ah! par - - la - te che for - se ta - cen - do men pie -  
 - ri ah! par - - la - te che for - se ta - cen - do men pie -

- to - si piu bar - ba - ri sie - te oh Di - o par - - la - te oh Di - o  
 - tu - ri piu bar - ba - ri sie - te oh Di - o par - - la - te oh Di - o

- ce - te, ha! v'in - ten - do ta - ce - te ta - ce - te non mi di - te che il fi - glio mo - ri no no no non mi  
 - ce - te, ha! v'in - ten - do ta - ce - te ta - ce - te non mi di - te che il fi - glio mo - ri no no no non mi

Concentrated voice, marked tones. a Tempo. Prolonged voice.

di - te che il fi - glio mo - ri no no no non mi di - te che il fi - glio mo - ri non mi  
 di - te che il fi - glio mo - ri no no no non mi di - te che il fi - glio mo - ri non mi

Perform the final cadences brilliantly and vigorously.

di - te che il fi - glio mo - ri non mi di - te che il fi - glio mo - ri che il fi - glio mo - ri.  
 di - te che il fi - glio mo - ri non mi di - te che il fi - glio mo - ri non mi di - te che il fi - glio mo - ri.

Crescentini: Aria for mezzo-soprano inserted into *Romeo e Giulietta*

by Zingarelli.

And<sup>te</sup> sostenuto.

ROMEO. *Sigh before the syllable del.*

I - do - lo hidel mio cor deh

TEXTE.

I - do - lo del mio cor deh

cresc. *R. p.* *Long* *cresc.* *f*

ve - - di il pian - to mi - o, h'i ge - mi - ti il do - lor hidel tu - o fe - del h'i - do - lo

ve - - di il pian - to mi - o, i ge - mi - ti il do - lor del tu - o fe - del i - do - lo

*p* *cresc.* *f* *forte* *tremolo.* *Delayed syllable.* *soft mordent.* *Trembling and soft portamento.*

hidel mio cor deh ve - - di il pian - to mi - o, i ge - mi - ti do - lor del

del mio cor deh ve - - di il pian - to mi - o, i ge - mi - ti il do - lor

tu - o fe - del

tu - o fe - del *All<sup>o</sup> moderato.*

*p* *cresc.* *amor.* *del.*

Recitativo. *forte.* Prolonged tones. Tone sustained with inflections.

Ma che va le il mi - o duol! mi bel la spe me io ti sen to mi chia mi a seguir ti fra  
 Ma che va - le il mio duol! mi bel la spe me io ti sen to mi chia mi a seguir ti fra

Resolutely.

l'um bre eb ben, m'aspet ta, ti se gui ro  
 l'ombre eb ben, m'aspet ta, ti se gui ro

*rinf.*

se a te compagno in vi ta non mi vol - - - le la sor te te co munis - ca al  
 se a te cum pagno in vi ta non mi vol - - - le la sor te te co munis - ca al

*dim.* *P* And.<sup>te</sup> sostenuto.

- men pie to - sa mor te.  
 - men pie to - sa mor te

With animation.

Tranquil - lo io son, fra po co te co sa ro mia vi ta  
 Tranquillo io son, fra po co te co sa ro mia vi ta

Slow.

ac-cogli in-tan-to mia spe-me, a - - - ni-ma mi-a, accogli in-tan-to questo ch'io per

ac-cogli in-tan-to mia spe-me, a - - - ni-ma mi-a, ac-cogli in-tan-to que-sto ch'io per te

Slow. RONDO: And<sup>te</sup> mosso.

ver-so ul-ti-mo pian-to.

ver-so ul-ti-mo pian-to.

Largo assai.

*p* *f* *p*

With verve (exaltation).

Ombra a-do-ra-ta as-pel-ta, te-co sa-ro in-di-vi-so, nel for-tu-na-to e-

Omb-ra a-do-ra-ta as-pel-ta, te-co sa-ro in-di-vi-so, nel for-tu-na-to e-

*p* *mf*

With power and warmth. Voice sustained (stendue).

- li - so a - vra con - ten - to il cor. ombra a-do-ra-ta as -

- li - so a - vra con - ten - to il cor. ombra a-do-ra-ta as -

*f* *p*

Soft. cresc. cresc.

- pel-ta te-co sa-ro in-di vi-so, nel for-tu-na-to e - li - so a - vra con-

pel-ta te-co sa-ro in-di vi-so, nel for-tu-na-to e - li - so a - vra con-

*f* *p* *f*

*p* *cresc.*

- ten - to a - - vra con - ten - to il cor a - vra con - ten - to il cor

- ten - to a - - vra con - ten - to il cor a - vra con - ten - to il cor

Half voice. Lightly. Full voice.

La, tra i fe - de - li a - ma - ti ci ap - pres - ta a - mor di - let - ti, go -

La, tra i fe - de - li a - ma - ti ci ap - pres - ta a - mor di - let - ti, go -

The entire organ point should be performed on one breath, taken before the syllable man; but this liberty should remain unnoticed by the audience.

*p* *breath.*

- dre - moi dol - ci is - tan - ti, la, tra i fe - de - li a - man - - - ti ru - - -

- dre - moi dol - ci is - tan - ti, la, tra i fe - de - li a - man - ti so - - -

*rinforz.* Full

- dre - moi dol - ci is - tan - ti di piu no - ceu - ti af - fet - ti e

- dre - moi dol - ci is - tan - ti, de piu in no - ceu - ti af - fet - ti

and sonorous voice. *p*

le - co a noi d'in - tor - no ri - suo - - ne - ra da - mor, ri - suo - -

le - co a noi d'in - tor - no ri - suo - - ne - ra da - mor, ri - suo - -

*rinf.* *dim.* *Graciously.*

de - ra ri - suo, ne ra d' a - mor.

ombra a do - ra - ta as - pet - ta te - co sa ro in - di - vi - so nel for - tu - na - to e -

ombra a do - ra - ta as - pet - ta te - co sa ro in - di - vi - so nel for - tu - na - to e -

*p* *cresc.* *forte.* *Soft.*

li - so a - vra con - ten - to a - - vra con - ten - to il cor, a - vra con - ten - to il

li - so a - vra con - ten - to a - - vra con - ten - to il cor, a - - vra con - ten - to il

*cresc.*

cor, a - vra con - ten - to il cor, a - - vra con - ten - to il cor, a - -

cor, a - - vra con - ten - to il cor, a - - vra con - ten - to il cor.

vra con - - teu - - to il cor.

vra con - ten - to il cor

Morlacchi: Teobaldo ed Isolina, Aria.

Surprised. Letter pronounced slowly.

Desperate. *forte.* Covered timbre. *Piano.* ce n to

Ma-ri-ri-ri-ri-ri qual-con-cento

FLAUTO.

ARPA.

diminuet ritard.

Two timbres are necessary here, the clear timbre for the note bb<sup>1</sup>, and the covered timbre imitating the sounds of the harmonica for the graceful passage. The syllable *na* short and delicate.

Inhalation jerky with joy. Tones from outside. Soft. Brilliant. Slow. Open timbre. These notes slow and equal. Jerky Inhalation. Inhalation.

Lo co-nos-co After the voice. lo sen-to uel mio co-re After the voice. e la mano d'I-so-li-na

pp

f

Covered tones. *cresc.* This passage should be performed by supple movements of the throat. *dimin.* These four notes equal and connected, but without portamento.

il suo - - no il suo - no del la - mor

colla parte.

pp

Brilliant and clear timbre. Harmonica-like tones. The pharynx contracted, the tones mellow.

ah! che la prima vol-ta che l'in-ten-si e che di lei mac-re - si e raun in can-to

After the word *acces.* *forte. piano.* *ritard.*

pp

Slight exhalation. Open timbre. Light note and syllable. Rapid appoggiatura performed without portamento. Smooth, equal and slightly covered notes. After the accompaniment an inhalation of surprise. Inhale. Round on the light.

h'ina allor - e ra fe - li - ce or tis - ta - so pianiss. la forse a me forse a me pe - na - sa

Melancholy voice. Ringing. Sustain the voice over all the notes. Laughing physiognomy. Outburst of the soul. Clear timbre. Ringing. Pharynx contracted. And<sup>te</sup> mosso.

il su - o do lo con - so - la ca - ro suo no lu - - sin

Soft mordent. Tones imitating an echo. smorzando. Inhalation after the portamento.

ghier dolce o gnor mi seen - - deal cor dol - ce o - gnor mi seen - - do al cor de al cor la ri de al cor tu ri

Pharynx contracted. Echo. doler. cresc.

chia mi al mi o pen - sier i pia cer d'uu cas - - to a - mor quel bel di che ci ra - ter dun cas - - to a - mor



Mouth laughing. Pharynx contracted. Slight movements of the larynx. Portamento arpeggio.

Sob, Jerky Inhalation.

Make a slight exhalation before the [d].

Sob, Jerky exhalation.

Noisy exhalation.

Exhalation.

pi de sua pu-ra vo - - - lut - ta h! Do - ve an - do h! Do - ve an - do do - h! ve an -

*sempre immer* *secondando den Ge-zug* *il canto unterstützend.*

Held. Strong. 6 fast notes.

Breath. Slow.

Exhalation.

Exhalation.

Exhalation.

rall

do do veando mio hen que! di h! a - h! mai più h! a - h! mai più a - - h! mai più no non mai più ri - tor - ne -

*sempre* *secondando il canto* *colla parte.*

Release the tone with an exclamation.

Pharynx contracted. Tone imitating an echo.

adagio.

Inflections.

Prepare the consonant [m] without breathing.

Take.

ra mai più mai più a - h! mai più ri - tor - ne - ra a - - - h! mai più no non mai

*a tempo.*

*forte*

più ri - tor - ne - ra



## *Appendix B*

# RECORDED PORTFOLIO: PRODUCTION

The recordings that feature in the four-CD Recorded Portfolio that accompanies this thesis were made in the Clothworkers' Centenary Concert Hall in the School of Music at the University of Leeds. They were recorded by the department's Studio & Recording Technician, Kerry-Anne Kubisa, using the following apparatus:

### *Microphones:*

Neumann U87 – vocals\*  
DPA 4011 – stereo pair  
DPA 4009 – stereo pair  
4 x KM184 – piano

### *Recording equipment:*

002 rack  
Earthworks preamp  
Audient ASP008 preamp  
MacBook Pro

\* An AKG C414-XLS was used for recording sessions on 14 - 16 April 2014.

Recordings in the Portfolio are presented chronologically: CD 1 comprises performances recorded on 25 and 26 June 2012, CD 2 comprises performances recorded on 22 – 24 July 2013, and CD 4 comprises performances recorded on 14 – 16 April 2014.<sup>1</sup> (CD 3 consists solely of frequency experiments completed by Kerry-Anne Kubisa in April 2014 using the audio of CD 2. Further details can be found in Chapter Six.)

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<sup>1</sup> CD 2: Track 4, Adelina Patti: Bishop *Home, sweet home* (1905), is the only exception. This track was re-recorded in April 2014 to better reflect the intended tempo.

The Recorded Portfolio represents performance and research development throughout the project and is not intended as a commercial product. With this in mind, editing of the vocal component was undertaken only where unforeseen circumstances affected the success of the take as a whole. Such instances included external traffic noise (emergency vehicles, aeroplanes, etc.) or undesirable noise within the School of Music building (insects, contractors, etc.). The majority of the tracks in the Recorded Portfolio consist of one complete take.

Following the recording of CD 1 the sudden onset of dust mite allergy and associated asthma presented additional difficulties in subsequent recording sessions. The repertoire to be recorded was carefully organised to minimise problems with stamina and aid the management of symptoms, and reasonable concessions (such as performing longer works in component sections, and taking regular breaks) were made to accommodate these unavoidable difficulties. Despite this, rhinitis symptoms sometimes inhibited the clean onset of the voice, and in extreme cases resulted in a subsequent edit where such an occurrence affected the success of the take as a whole. This approach was felt to be fair considering both the necessary length of the recording process in comparison to a relatively brief live performance, and the fact that the recording environment could not be modified in an attempt to limit allergy symptoms. Less prominent examples of onset difficulty remain in the Recorded Portfolio.

It should be reiterated that the majority of the tracks in the Recorded Portfolio consist of one complete take, and that editing was kept to a minimum. The amalgamation of takes where necessary (sometimes due to extraneous noise only) represents the full extent of editing in the Recorded Portfolio; there are no examples of tempo or pitch manipulation of any kind.

The mixing process comprised the balancing of audio levels where necessary, whilst the mastering process ensured the relative continuity of audio levels across the Recorded

Portfolio as a whole. Editing, mixing, and mastering were completed by Kerry-Anne Kubisa using ProTools HD9 software.

This is an honest account of the processes involved in the production of the audio files that form the Recorded Portfolio; the audio that accompanies this thesis is a fair and accurate representation of the performances given in recording sessions.

*This account of the recording process presented by Sarah is an accurate description of events.*

*Kerry-Anne Kubisa (29/04/14)*

