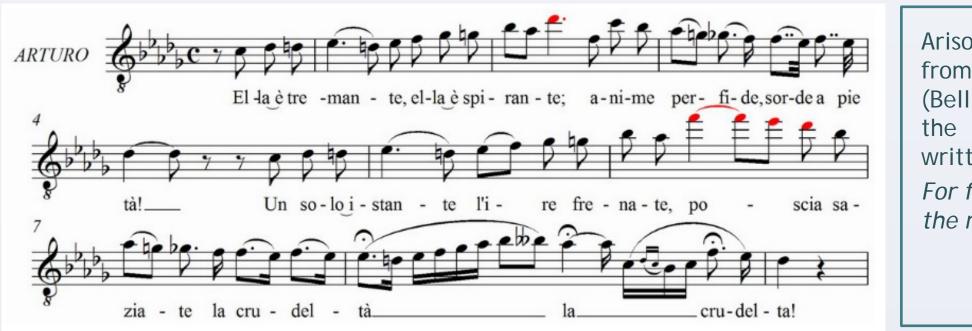
SEEKING AUTHENTICITY IN THE PERFORMANCE OF THE BEL CANTO TENOR REPERTOIRE

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INTRODUCTION

Many tenor roles in the operas of the primo ottocento have exceptionally high tessituras, often with notes well above *high c"* or d". For example, in the role of Arturo the arioso from Bellini's I Puritani *'Credeasi misera'* is composed up to the high f"; in another instance, the duet *'Sulla tomba che rinserra'* from the opera Lucia di Lammermoor requires Edgardo to sing a *high e" flat*.



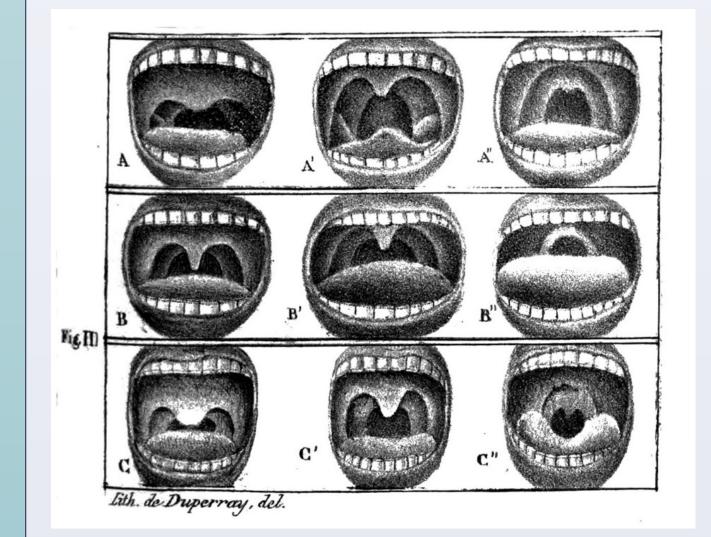
Arisoso 'Credeasi misera' from Act III of I Puritani (Bellini) contains one of the famous f" naturals written for G.B. Rubini. For further discussion of the repertoire view:

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RESULTS

By examining each of these resources concepts of registration, resonance, vocal qualities, and support, a pattern of priorities emerged that allowed us to define what was being taught just before, during, and as a result of these high *bel canto* tenors. There are clear indications that until about the middle of the 19th century opera tenors quite naturally used the *falsetto* register, or a *falsetto*-dominant phonation, rather than model voice for the high tones of their repertoire.

By specific configuration of muscular adjustments in the larynx and modifications of the vocal tract shape these tenors could transform the timbre of a *falsetto* dominant phonation into a sound quality, that was more similar to the *chest register*.



The ENT doctor of the Paris Opera and trained baritone Francesco Bennati conducted in the 1830s studies on the relationship between specific voice register settings and a modification of the shape of the pharyngeal space:

Typically such high passages are beyond the typical vocal compass of modern tenors, so roles like these raise the questions:

- How were tenors in the early nineteenth century coping with the tessituras and extreme high notes?
- How should singers today perform them in an effective and healthy way particularly in the context of historically informed performance practice?

OBJECTIVES

A specific historical singing concept acknowledged as the *voce faringea*, which was used by the high tenors who sang approximately between 1770 and 1850 helps to answer these questions. It is essentially an extinct historical singing practice used to extend the upper range of the voice whereby the *falsetto*, essentially a weak feminine sound, is modified by the singer into a vocal quality that was a more powerful tenor sound which is homogenous with that of the lower registers and is no longer related in quality to the *falsetto* voice.

"[In addition to the chest voice and the falsetto] among tenors we can find a new register [...] The tenors who are in possession of this technique sing with the greatest ease and almost no force often up to b flat, b and even c while the sound of their high notes has something so little falsetto-like, that it probably gave rise to the often-heard, and likely erroneous, opinion that they sang these high notes in chest voice." [1]

During the second half of the 19th century the singing tradition of these great tenors finally went out of fashion and a new more dramatic verismo vocal ideal took hold. The objective of this research has been to excavate and to reconstruct this historical singing concept of the *voce faringea*. It is based at the intersection of theory and practice by demonstrating the historical basis for the voce faringea, reconstructing the training techniques and showing how these techniques can be used in contemporary performance practice. Illustration of the oral cavity of a soprano at rest (A), during phonation in chest register (A') and head register (A"), of a tenor at rest (B), during phonation in chest register (B') and in *voix pharyngienne* (B") and a baritone at rest (C), in chest register (C') and in *voix pharyngienne* (C"). Illustration of Lepelletier de la Sarthe (1833) based on designs by Bennati. [3]

Some of the most important aspects of singing in the *bel canto* era are the *messa di voce, portamento, chiaroscuro,* vocal timbre, and each of these aspects play an important part in the development of the *voce faringea*. Techniques that were discussed include larynx position, pharyngeal shape, vocal fold damping, and breath management.

Also we discussed how the use of acoustic analysis, including first and second formant tuning, using VoceVista can be effective tools in understanding how the voce faringea functions.

EGG CQ (A)	CQ 0.53, CL 0.25		
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Spectrogram (A) 5 kHz	Cursor 7262 ms 1614 Hz	EGG (A) 7 ms, Time 7262 ms	CQ 0.53, CL 0.25
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EGG CQ (B)	CQ 0.41, CL 0.25		$f \to f \to f$
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Using the VoceVista EGG and software: spectrogram (left), and EGG signal (right) of the *voce faringea* (top) and the *counter tenor falsetto* (below).

See further analyzes of the differences between the voce faringea and the counter tenor falsetto: spectrogram, power spectrum, LTAS and listen to audio samples of the two vocal functions.

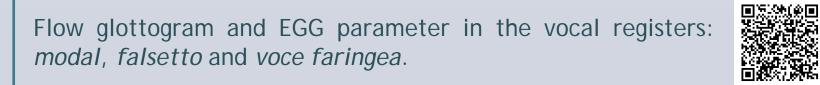


#### **METHODS**

Analysis of historical sources, such as vocal pedagogy literature, physiological and anatomical treatises, as well as periodicals of the time has yielded important evidence regarding the voce faringea. By comparing how these historical observers discussed the performances, and what characteristics were used to describe the noteworthy voices, an informed discussion of the technique was developed. Historically relevant testimony describing the sound of different vocal register mechanisms, as well as various historical theories about the background, physiology of the *chest voice* and the *falsetto* register support the research concerning the voce faringea.



In addition scientific measurement methods such as electroglottography, spectrum analysis and flow glottography were used to investigate the physiological, functional and acoustic peculiarities of the voce faringea [2].







 Spectrogram (B)
 5 kHz
 Cursor
 5975 ms
 341 Hz
 EGG (B)
 7 ms, Time
 5975 ms
 CQ 0.41, CL 0.2

 VoceVista 3.2
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The research demonstrates the possibility of reconstructing a tenor technique, and is be composed of both audio and video materials of teaching that draw on the *voce faringea* concept for singers today. It is focused toward offering a suggestion concerning what might have been, but mainly to inspire contemporary and historical informed performance practice, or as Stephen Preston put it, 'to explore the possibilities of the creative present, not to recreate the sounds of history.' [4]

### **CONCLUSION**

By using the *voce faringea* concept the characteristics of the *chest register* are combined with those of the *falsetto* and enable tenors to produce the highest tessituras with absolute assurance, ease and brilliance. At the same time, like the tenors of the *bel canto* era, they would be able to sing with increased artistry, preserve their vocal longevity and lose any fear of high notes.

Today, through the training of the *voce faringea*, research into historical register strategies may represent an important aspect in the search for authenticity in the informed interpretation of the *bel canto* tenor repertoire.

## **REFERENCES**

[1] Sieber F. 'Das ABC der Gesangskunst. Ein kurzer Leitfaden beim Studium des Gesanges von Ferdinand Sieber in Dresden' *Neue Zeitschrift für Musik* Vol. 35, No. 12, (September 19th 1851), p. 118 f. [transl. By Alexander Mayr]

[2] See the section "Strömungsglottogramm- und EGG-Parameter in den Stimmregistern: Modal, Falsett und voce faringea" in the dissertation: Mayr A. Die voce faringea, Rekonstruktion einer vergessenen Kunst doctoral dissertation at the University for Music and Performing Arts Graz, 2014

[3] Lepelletier de la Sarthe, A. (1833). Physiologie médicale et philosophique: Volume 4. (Chez Germer Baillière Paris, 1833), Appendix
[4] Preston, S. 'Sounding Aporia: navigating via historical impossibility to a new sonic world,' Conference on *The Construction of Musical Performance Norms* (King's College London, 24 May 2014)

