Reconstructing the "lost art" of the voce faringea. An artistic research project.

What is the difference in the way these tenors interpreted the aria "Com'è gentil" from Donizetti's "Don Pasquale"? For sure, Pavarotti's singing corresponds best to our contemporary listening habits. Nevertheless, what if Pavarotti was wrong in his interpretation of the aria, wrong from the perspective of historical informed performance practice?

Can we expect that a tenor in Donizetti's lifetime would have sung Ernesto's aria in the same way as we have heard it now from Luciano Pavarotti?

Music education and vocal training in particular, has experienced major changes over the last centuries, as have the aesthetic ideals of vocal production and the approaches to the vocal instrument.

Is it not reasonable to assume that modern vocal methods often neglect important aspects of vocal practices of past eras, and that many characteristics of historical sound ideals remain undiscovered? If we intend to properly interpret the vocal music of earlier eras from the perspective of historical performance practice, or to rediscover distinctive historical sound qualities, should we not then question the conventions of current singing practice?

Breaking away from these conventions and personal experience on current sound ideals and vocal aesthetic principles, which I have experienced in my singing training at the university and my career as an opera singer was a precondition for beginning this artistic-scientific research on historical singing traditions of the 18th and 19th Century.

Since then there was no way to do audio recordings yet, historical sound qualities cannot be clearly determined today. An Interpretation of sound descriptions in historical written sources and instructions of the singing masters of the time in their vocal pedagogy literature thus remain the only way to explore and to reconstruct certain characteristics of historical singing traditions. Key subject of my research thereby are the voice register strategies of opera singers in this period and how they reflect sound ideals that differ from our current ones.

Also the sound characteristics of Pavarotti's, de Lucia's and Giorgini's interpretations we've heard before are primarily based on different voice register strategies.

The authors of the two most important vocal pedagogy books of the 18th Century, Pier Francesco Tosi and Giambattista Mancini classified, the chest register (voce di petto) as the register used for the low range and the "Falsetto" (or voce di testa) used for the high range of the voice.

The confusing equating of the terms "voce di testa" and "falsetto" in historical singing pedagogy literature is reason for still having no consensus among vocal researchers, voice teachers and singers about which register actually was meant by the authors. If they described a form of the register that is in modern voice science named "falsetto", or the voice function which is often called head register, or full head register.

I am using the established terms "modal register" that combines the chest, the full head register and the zona di passaggio for the voice function I am using as a tenor and "falsetto" for the register I am using as a countertenor.

In classical singing, today the use of the falsetto is something of a taboo for tenors. This technique, which is the basis of the countertenor's art, is nowadays used by singers of other voice ranges almost exclusively for buffo purposes or in contemporary music. For this reason, training the falsetto register is barely relevant to modern vocal education.

However, it is clear from various passages in singing method books from the 18th and 19th centuries and colourful descriptions in historical sources, such as reviews and music magazines articles, that the artistic use of the falsetto was part of the singer's technical repertoire, especially for the great Tenori di grazia of the Rossini-Bellini-Donizetti period. Sound descriptions and instructions in historical vocal pedagogy literature indicate that they were trained to use a modified form of the falsetto, also known as the voce faringea.

Using this special technique the tenors of the time could guide their voices with security and ease up into highest ranges, yet producing a clear, brilliant and well carrying tone. Agility and elegance in phrasing the cantilena was the ultimate goal of their vocal art.

The leading tenors of the time used the voce faringea so skilfully that the audience could hardly recognize the transition into the modal register.

From the 2nd half of the 19th Century on, however, the vocal art of the "Tenori di Grazia" was replaced by a more dramatic sound ideal, and the technique of the sound modified falsetto became more and more forgotten.

To discover new opportunities of vocal expression for the interpretation of voice literature of the 18th and 19th centuries by reconstructing this forgotten voice quality of the voce faringea is the purpose of my artistic-scientific research project. As a professional tenor and countertenor, I have the necessary technical tools and artistic experience with both the modal and the falsetto voice to allow me to experiment with different voice registers.

In experimenting with the voice, I have developed a technique to modify the sound of my falsetto so that it approaches a modal quality that corresponds to historic descriptions of the voce faringea. This technique contains physiological and functional modifications of the voice source, produced by the vocal cords and the resonating system.

An important question that came up was, however, how to present and document my research findings within the framework of an artistic and scientific research project.

A major step forward therefor was a research stay at the Royal Institut of Technology in Stockholm. In cooperation with Professor Johan Sundberg, one of today's most renowned voice scientists, I have recorded and studied in research laboratories invers filtered samples of various registers in my voice: of the modal and falsetto register and the voce faringea. We have measured, compared and documented various physical parameters of the glottal functions during phonation, for example, the subglottic air pressure, the closed an open phase of the vocal folds, the glottal air leakage and the volume of the two lowest component harmonics. Some of these parameters provide clear information about specific sound characteristics of the different voice registers.

The results of the analysis of my sound signals I have compared then with the findings of two studies from 2001 and 2008: "Voice source differences between falsetto and modal registers in counter tenors, tenors and baritones" by Carl Högset Johan and Sundberg (Log Phon Vocol 2001: pp. 26 - 36) and

"Relation between perceived voice register and flow glottogram parameters in males" by Gláucia Laís Salomão and Johan Sundberg (J. Acoust Soc Am 124 (1), July 2008:... pp. 546-551).

For the Högset/Sundberg study, the same physical parameters of sound samples (as in the examination of my vocal registers) in the modal and falsetto registers of tenors, baritones and countertenors were analysed and the characteristics of both registers documented. In the Salomão/Sundberg study the researchers examined, what parameters to be responsible for that a vocal sound is perceived as sung in either modal or falsetto register.

I could find that the measured values of the parameters in my modal and falsetto register are consistent with those documented in the other two studies. However, the values of my voce faringea show clear that I produced falsetto-based tones with strong modal sound components.

With the focus on artistic expertise and the development of methods that stimulate artistic practice a permanent interaction between artistic activities and traditional research methods forms the basis of my research project. By bringing artistic interpretation to bear on historical source material and by documenting my vocal experiments, inspiration and creativity can have an impact on traditional research methods and vice versa.