

Practising with Voice Visualization Software

The voice student's perspective

Sophia Körber

Bachelor of Music, Voice Major, 6. Semester
University of Music, Drama and Media, Hannover

The more I study and professionalize my singing, the more I realize how many possibilities and ways of learning are open to me. Sometimes I have the feeling they are constantly expanding. All of them have the aim of helping me to develop a consistent technique in order to be able to fulfill the requirements of a fantastic but demanding profession with vocal freedom and passion.

My singing lessons with a professor gives me my main orientation and security in developing my voice, but as I develop and mature as a singer, my independence becomes more and more important to me, especially for my own practising. Initially, the only equipment during my practising consisted of my music, a piano, a pencil and a bottle of water. Then I added a mirror and some materials for body work, for example Flexa-Band, aerostat or a straw. Since my professor showed me the technology for singing I have a new tool: my laptop with the voice visualization programs I installed.

After the first introduction to these programs, I realized that it is fun to play with them. Just the fact of being able to SEE my voice was a wonderful experience and brought me a great "Aha!" effect. Later I developed more interest in the details, and I began to analyze the special criteria of my voice.

The following examples are in no way a complete student's guideline for using technology to practice alone. This article is based on my personal impressions and experiences and intended as an encouragement to others to try it out for themselves.

So far, I have worked only with free software. My favourite programs for practicing are "sygyt overtone analyzer" and Voce Vista for intonation. The spectrogram shows much more than the overtones, so there are many things that can be practiced with it. After warming up my voice, I usually start practicing my repertoire, and but I have also been encouraged to develop additional exercises to improve the sound quality of my voice. At this stage, I boot up my laptop.

I have different "construction sites" and the voice visualization programs CAN support my development in all of them. However, I do not necessarily use it every day.

I had a period during which I did not feel the vocal tract resonance of the different vowels clearly enough. Using the spectrogram on sygyt, I sang some vowels (e.g. "a-e-i-o-u") on one tone and saw the individual images of the different vowels. This exercise was the first way to experiment with vowel colours, positions and formants. Two additional important topics for me are vibrato and the onset and release of tone. For vibrato, I experimented with a *messa di voce* on one tone and worked with sygyt in a pitch where I felt that the vibration was not free enough. By relaxing the muscles in and around the larynx and trying different head positions, I could change the oscillation and speed of my vibrato and see differences in sygyt. That did not solve my problem, but it showed me that there are different vibratory sensations and images that I could work with. For onset and release, I used the programme

to work on my tendency to begin the tone with a hard glottal stop that is too hard. Using sygyt, I could clearly differentiate a hard glottal stop and a good closure of the vocal folds, as well as the quality of the preparatory breath. I could control it much better and achieve a softer, more vibrant vocal fold closure.

Another situation: Some weeks ago, I had to learn an atonal piece very quickly. One problem in learning new, atonal repertoire is that I am so focused on the notes and intonation that I forget technique and expression. If I concentrate on the music, the intonation will be worse. With the pitch-analyzer of Voce Vista, I could concentrate on my physical feeling and see my intonation afterwards or during my singing. This was very frustrating and hard for me but after that unit of practicing, I closed the programme, repeated the piece, and felt how much more secure my intonation had become.

These examples of working with these two programs give just a small insight of into the possibilities for students to work with visualization software. There are many more possibilities to explore! The best way to find them is to experiment and then focus on special aspects of the voice.

For me it has already been very helpful to work with the visualization software. I like to have different ways of practicing because I feel it helps me to work more effectively, and have more freedom from circumstances such as daily ups and downs. Some methods and exercises are perfect for one day, but habit sets in very quickly and you get used to them, but what if you feel tired or are in a bad mood and those exercises does not work that day? But it is not only for such days, that it is important to me to have many possible ways of working. It makes the everyday practice session more interesting and lively and protects keeps me from falling into the habit of false dependency on certain exercises or my teacher. Visualization software is not a replacement for anything. It does not replace any exercise or lesson unit with the teacher, it just helps to support the knowledge and learning processes from another perspective.

As a student coming into higher semesters, I am finding that self-analysis based on the response of my teacher during the singing lesson, a recorder, camcorder or the resonance of the audience after a concert becomes more and more important. So many aspects and perspectives are combined in singing. Integrating visualization software as another aspect is only logical. Learning to use the programs needs some time, lots of curiosity and knowledge, but which method does not need these?

Finally: After practicing with the software, it is a good feeling to close the laptop, forget everything I have seen for a while and concentrate on the art itself again.