VoceVista: A Pedagogue's Tool from the Pandemic Toolbox

Vocalists of many kinds - performers, teachers of singing, pedagogues, voice scientists - have had their worlds turned upside-down by the COVID-19 pandemic of 2020. Those of us who are teachers by profession have concurrently maneuvered both the frustrating limitations and the unexpected benefits of teaching voice through digital apparatuses. Voice teachers spend careers training both eyes and ears, developing discernment in both observation and diagnosis. During a time in which face-to-face singing is considered a high-risk endeavor, a reliance on video conferencing technology also comes with unique diagnostic challenges. In addition to a limited visualization of students' body-instruments, teachers must also consider the impact of software filtration on the perception of tone - for the pedagogue and the student alike - while using these mediums. Platforms such as *Zoom*, while offering many benefits, compress and filter sound; perceived sound quality is also impacted by the quality of hard technology used: e.g., external microphones and speakers, computer cameras, or internet connection, despite whatever small modifications may be made within a given online platform.

Like so many teachers, I have explored a variety of options for teaching remotely. And just as would be true under traditional standards, different approaches yield better or worse results for different students. However, I continue to find invaluable feedback even under these circumstances, which results from previous engagement with the vocal acoustics software VoceVista Video. I was first introduced to an early version of VoceVista by Kelley Hijleh, a founding member of the Singing Voice Science Workshop. Even as a student, while I did not yet have the knowledge to understand how this technology was functioning in the studio, I was nevertheless aware of - and intrigued by - the results which followed.

Vocal acoustics, a distinct subsection of voice science and vocal pedagogy, has seen a surge of interest and research over the past decade. VoceVista, conceived by the late Donald Miller - whose invaluable pedagogy texts have shaped countless professional and academic voice studios - and recently developed by the Sygyt Software company, is a leading voice spectral analysis software. It provides a wealth of visual feedback for auditory information. Although there is much existing and developing research which highlights the conceptual and scientific facets of vocal acoustics, less attention has been given to the application of VoceVista Video in the applied studio by non-experts. Vocal acoustics can be an intimidating and cerebral component to twenty-first-century pedagogy, pandemic or otherwise. However, particularly considering the fluid teaching demands amid this pandemic, the intuitive visual design of the spectrogram and spectrum can provide tools for mitigating numerous vocal concepts: vibrato, legato, vowel clarity, registration, etc. In my experience, students respond well to these visual cues, even without explicit acoustic knowledge or training. As I was once told by one of my own voice teachers: "Just as a mirror provides visual feedback about our bodies, acoustic software provides visual feedback about our sounds."

The goal of this session will be to provide examples of practical application in VoceVista, geared towards teachers and students *without* previous expertise in vocal acoustics. I will demonstrate the ways in which acoustic software can provide us with necessary functional knowledge during this time of remote teaching, which can continue to inform and strengthen our teaching thereafter.

Furthermore, I will describe how teachers of singing can utilize certain features in VoceVista to provide non-verbal feedback to their students which they can actively apply.

Prior to the extraordinary demands of a pandemic teaching environment, the preferred teaching implements for the voice studio may have been vastly different. However, as we continue to develop effective modes of teaching during this period, we may in fact discover additional skills and tools which will only aid us further when we emerge on the other side.

Elizabeth Thompson made her debut to Bloomington-Normal audiences as the mezzo-soprano soloist in Beethoven's *9th Symphony* with the Illinois Symphony Orchestra (2018). An art song enthusiast, Thompson performs recital and chamber works on a regular basis, with a particular affinity for Russian, Scandinavian, and modern repertoire. Operatic highlights include leading roles in *Carmen, Suor Angelica, Florencia en El Amazonas, Maria Stuarda, Die Zauberflöte*, and *The Consul*. Thompson earned a Doctorate of Musical Arts degree from the University of Illinois in 2015 and has received awards through the Orpheus National Vocal Competition and the Metropolitan Opera National Council Auditions. A student-centric teacher, she emphasizes skills which provide a technical foundation to support thoughtful dramatic communication and longevity of the vocal instrument. Thompson teaches Applied Voice and Vocal Pedagogy at Illinois State University and serves as the Voice Area Coordinator.