



VOICEPrints

March–April 2020

JOURNAL OF THE NEW YORK SINGING TEACHERS' ASSOCIATION

TABLE OF CONTENTS

Spring Event: <i>Workshop with Charlotte Surkin: Teaching Singing to Students with Vision Loss</i>	53
President's and Editor's Messages.....	54-56
NYSTA Professional Development Program	57
Feature Article: <i>Sensitively Addressing Mental Health in the Voice Studio</i> by Ingela Onstad.....	58-62
Feature Article: <i>The Path of the Warrior—Expectations for the Learning and Teaching of Voice Acoustics</i> by Nicholas Perna and Sarah Pigott.....	63-70
Book Review by Anthony P. Radford: <i>Diction in Context: Singing in English, Italian, German, and French</i> by Brenda Smith.....	71-72
NYSTA 2020 Distinguished Voice Professional and DVP Roster.....	73

Spring Event

Workshop with Charlotte Surkin: Teaching Singing to Students with Vision Loss

Sunday, April 26, 2020 3:30–5:30 PM EDT

Pearl Studios, 500 Eighth Avenue, New York City

Free for NYSTA members, students, and guests. Donations welcome.

It is likely that in the course of your career a student who struggles with vision impairment will enter your studio, whether you teach in a university setting, a local music school, a private studio, or conduct a choir. As few resources exist for voice teachers who instruct those with vision loss, this workshop will provide much needed information to help teachers more effectively teach students thus challenged, based on current research and the presenter's own personal experience teaching vision-impaired students.



Charlotte Surkin is a member of the voice faculty at the 92nd Street Y Music School in New York. She had an article published in the *Journal of Singing* through the National Association of Teachers of Singing (NATS) in the 2018 September/October issue. In summer 2017, she lectured at the Conference at the International College Music Society (CMS) in Sydney, Australia. Her topic was "Teaching Singing to Students who are Blind and Visually Impaired." She also serves on the faculty at Marymount Manhattan College, and has been an adjunct assistant professor at Westminster Choir College. Her resume includes vocology internships at Mt. Sinai Hospital with Drs. Peak Woo and Linda Carroll and at St. Luke's Hospital with Dr. Anat Keidar. She has served as alto soloist at St. Patrick's Cathedral in New York City.



PRESIDENT'S MESSAGE

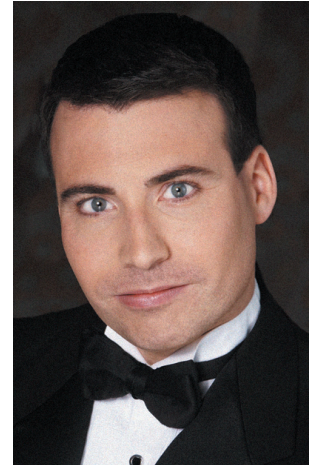
Preserving and Expanding the Deteriorating Canon

I have been a fan of the literary critic Harold Bloom ever since I read his thoroughly engaging *Shakespeare: The Invention of the Human*, which was published during my senior year of college.¹ That book paved the way for me to explore other writings by Bloom, including *The Western Canon*, which I also very much enjoyed, though I soon learned it was controversial due to that fact Bloom's list is primarily made up of works by white men in the European tradition: Shakespeare, Dante, Chaucer, Milton, Joyce, and others.

Bloom was an unapologetic, old-fashioned Longinian critic, who—according to himself—only considers the intrinsic merits of a work when assessing its greatness; aesthetic splendor, cognitive power, wisdom, and strangeness are four of his most frequently cited criteria. Rebelling against most of the critics of his and later generations, he completely disregards any biographical information about the author or social/historical context surrounding a literary work. In 2011, seventeen years after the publication of *The Western Canon*, Bloom defended his position on these matters:

I happily plead guilty also to charges that I am an “incessant canonizer.” There can be no living literary tradition without secular canonization, and judgments of literary value have no significance if not rendered explicit. . . . Any literary critic who issues a judgment of aesthetic value—better, worse than, equal to—risks being summarily dismissed as a rank amateur. Thus the literary professariat censures what common sense affirms and even its most hardened members acknowledge at least in private: there is such a thing as great literature, and it is both possible and important to name it.²

I still love reading Bloom, but acknowledge that in the year 2020, the idea of a fixed canon is not popular. *The Western Canon* was written in 1994 and caused a stir back then, over twenty-five years ago. Fast-forwarding to the present, we are now looking at a country (and world) that is more diverse than ever. Surely works written by people of color, women, and other minority groups—let alone more diverse styles—must be included as we reconceive the canon of vocal literature in the third decade of the twentieth century. I recently took a page from the playbook of Sharon Mabry and began requiring each of my students to program at least one set of songs (or an aria) by a woman composer on their degree-required recitals. It's not enough, but it is a step in the right direction. In other



Matthew Hoch

¹ I have just learned of Bloom's death on October 14, 2019, at the age of eighty-nine. His passing inspired this editorial.

² Harold Bloom, *The Anatomy of Influence: Literature as a Way of Life* (New Haven: Yale University Press, 2011), 17–18.

words, I agree with the prevailing enlightened opinion that the canon needs to be constantly reconsidered and expanded.

Canons, however, do have their value. What could be more canonical than the Schirmer opera aria anthologies or the voluminous Hal Leonard *Singer's Musical Theatre Anthology* series? I remember lugging these books up to the top-floor music library at Ithaca College and chipping away at listening to all of their contents, placing a checkmark beside each piece as I listened to it with score. I did the same thing with such wonderful books as *The Fischer-Dieskau Book of Lieder* and Pierre Bernac's *The Interpretation of French Song*, the latter of which I literally read until it fell apart. Today's students don't go to these resources unless I press them. Their instinct is to look online at websites like the LiederNet Archive (lieder.net) or the Opera Arias Database (www.opera-arias.com). Both are extraordinary resources, but they exhaust me because they are almost too comprehensive. How is an undergraduate student, or any young or learning singer, to separate the "good" from the "great" without a musical Harold Bloom to guide them?

In addition, trying to predict which works from our time will enter the canon is a fool's errand. Sometimes writers are extremely influential in their time, and yet their works ultimately have not become canonical. For example, let's examine the history of music theater: the Ned Harrigan–Tony Hart Irish farces of the 1880s and the Jerome Kern–Guy Bolton–P. G. Wodehouse Princess Theatre musicals of the 1910s were quintessentially important to the development of the American musical, yet these shows are rarely—if ever—revived today. Living in the present (because we have no other option) is therefore perplexing, because we cannot know with any certainty what repertoire we are performing will stand the test of time.

All we can do is our best, daring to cast our own aesthetic judgment when determining what music we choose to program and celebrate, looking for best representatives of the art form across all genres. Long after we are gone, maybe time will reaffirm some of our choices.

"In great attempts, it is glorious even to fail." – Cassius Longinus (ca. 213–273 AD)

I wish all of you a sublime beginning to your spring.

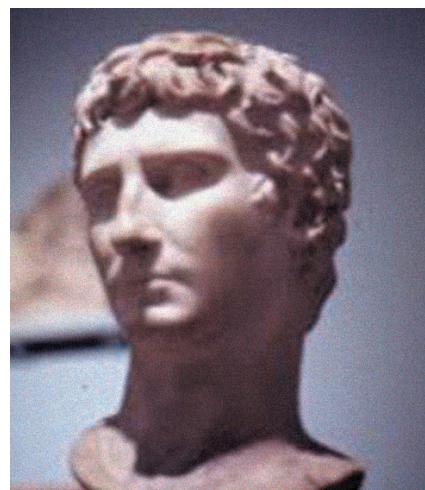
Sincerely,

Matthew Hoch, DMA

President, New York Singing Teachers Association (NYSTA)



Harold Bloom (1930-2019)



Gaius Cassius Longinus



EDITOR'S MESSAGE

Dear Readers,

A big part of being good teachers is recognizing our limitations. With regard to the mental health of our students, we often tread a fine line and we risk giving advice that we are not qualified to give. Ingela Onstad, an expert on mental health counseling for performers, offers some practical tips for speaking with students on mental health issues, and even more importantly, supplies information about when and how to refer students to additional resources.

One of the most gratifying parts of being a teacher for me is watching a student make the transition from student to colleague. Nick Perna and Sarah Pigott have travelled this journey, and as such they are able in their article to shed light on acoustic voice pedagogy from two vantage points—as both the student and the teacher.

In addition, we have a review of Brenda Smith's *Diction in Context: Singing in English, Italian, German, and French*. As someone on the front lines of teaching diction in the classroom, I'm always happy to know of a new resource on the topic.

Happy reading! As always...

Anna Hersey
Editor-in-Chief



Anna Hersey

VOICEPrints

Volume 17, No. 4

Dr. Anna Hersey
Editor-in-Chief

Dr. Lorelee Songer
Associate Editor

Dr. Ian Howell
Associate Editor

John Ostendorf
Designer



NYSTA Professional Development Program

Since its earliest years, NYSTA has sought to foster standards in the profession. In the 1920s and 1930s, the organization led efforts to require certification by the New York State government for all voice teachers. While state certification was never implemented, its intent came to fruition with the establishment of our Professional Development Program (PDP). The program was guided by noted pedagogue Oren Lathrop Brown, and spearheaded by past NYSTA President Janet Pranschke. Thanks to the continued efforts of Past President David Sabella, online courses were developed in 2007. Every year, the NYSTA board strives to bring new and innovative courses to all who are interested in learning more about the teaching of singing, bringing the most up-to-date information and filling the gaps that may be missed by traditional pedagogy classes. Currently, 49 people have earned the honor of being a NYSTA Distinguished Voice Professional.

NYSTA's Professional Development courses are led by top experts in the areas of voice pedagogy and voice health. The courses are designed to give a well-rounded education to those wanting to learn more about fact-based teaching of singing. After completing the five core courses (**Vocal Anatomy and Physiology, Voice Acoustics and Resonance, Vocal Health for Voice Professionals, Singer's Developmental Repertoire**, and **Comparative Pedagogy**) and successfully passing the exams, registrants earn a Certificate of Completion and the honor of being a NYSTA Distinguished Voice Professional. Congratulations to all those who have earned this honor!

ON-DEMAND LEARNING

Study 24 / 7 at your convenience. Start any time and receive four months of access.

NYSTA's Oren Lathrop Brown Professional Development Program presents

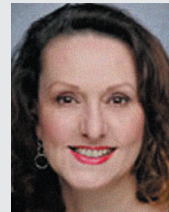
SINGERS' DEVELOPMENTAL REPERTOIRE



Christopher Arneson



Judith Nicosia



Jeanette LoVetri



David Sabella

This groundbreaking course establishes methods and criteria for selecting repertoire appropriate to different voice types at various stages of development.

All vocal categories in both classical voice and musical theater voice will be discussed. The musical theater section will also include a detailed examination of contemporary pop/rock shows and the vocal demands they make on the singer, and will address choosing appropriate character-driven audition material.

Register at WWW.NYST.ORG

For information, contact NYSTA's Professional Development Program Director Felix Graham at pdpdirector@nyst.org.



Sensitively Addressing Mental Health in the Voice Studio

By Ingela Onstad

An adolescent student walks into your studio for her weekly lesson. Over the past few months she often seems down and appears disinterested in the music that she once was excited about. She is distracted and seems fatigued. Occasionally she makes negative comments about herself in the lesson and seems to be struggling with self-esteem. Although you have a good rapport with this student, she tends to brush off any inquiries you make about her well-being, denying that anything is wrong. Your instincts and experience as a teacher tell you that she is not being completely truthful and you wonder how to best help her.

An adult student walks into your studio for his weekly lesson. He is enthusiastic about singing, but has confided that he feels a lot of performance anxiety. You have observed that he often displays physical symptoms of anxiety, such as appearing jumpy, restless, and unfocused. The student makes frequent, self-deprecating comments and seems to be very hard on himself. At his recent voice jury, he was so nervous that he could barely perform and you were surprised that he decided to continue with his major. You are concerned that his anxiety is more pervasive or serious than he is letting on, as he has not mentioned that he has an anxiety disorder or is accessing mental health services.

Scenarios like these are not uncommon in the teaching studio, whether in private or higher education. Mental health disorders affect a significant percentage of the population. According to the National Institute of Mental Health (NIMH), an estimated 31.1% of adults in the U.S. experience any anxiety disorder at some point in their lives, and an estimated 31.9% of adolescents (ages 13-18) experienced any anxiety disorder in the past year. Females are shown to suffer from any anxiety disorder more often than males in both adult and adolescent studies.¹ Depression statistics for adults show that 7.1% of all U.S. adults had at least one major depressive episode, with the highest prevalence (13.1%) in the age group 18-25. In adolescents (ages 12-17), 13.3% were shown to have had at least one major depressive episode, and females are more likely to suffer from major depression than males in both age groups.²

According to NIMH, suicide is a major health concern in this country. It is the tenth overall leading cause of death in all age groups in the U.S., and the second leading cause of death for individuals between the ages of 10-34. Overall, suicide rates increased by 31% between the years of 2001-2017, with males being nearly four times more likely to commit suicide than females.³ It is a necessary yet challenging aspect of modern-day teaching that we consider mental health issues in our students in order to create

¹ National Institute of Mental Health, Statistics on Any Anxiety Disorder, https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml#part_155094 (accessed December 29, 2019).

² National Institute of Mental Health, "Statistics on Major Depression," <https://www.nimh.nih.gov/health/statistics/major-depression.shtml> (accessed December 29, 2019).

³ National Institute of Mental Health, "Statistics on Suicide," <https://www.nimh.nih.gov/health/statistics/suicide.shtml> (accessed December 30, 2019).

an environment that fosters growth. Yet we must also realize our limitations in helping students cope with said issues, and know how and when to refer students to appropriate services. While it is common within the realm of our profession to help students with music-related anxieties or fears, we may be acting in a negligent manner if we are not addressing greater mental health issues that could be pervasive outside of the studio as well.

How can we as voice teachers best support our students in their mental health struggles? It can be tricky to navigate these matters in the voice studio for many reasons. First, the NATS Code of Ethics states “members should maintain appropriate boundaries in psychological, emotional, and personal contact with students...even when a student may encourage or request such interaction.” (NATS, 2019, 2.02).⁴ In our profession, we are well aware that our duty is not to be a therapist, but to teach our students to sing and perform to the best of our abilities. Yet oftentimes the lines feel blurry due to factors such as the intimacy of the teacher/student relationship, our own personal journey with mental struggles as performers, and the emotional nature of our artistry. To further complicate matters, it is within the purview of professional voice teaching to assist students with mental health tips and tricks as they relate to performing or practicing.

But how do we assess appropriate psychological boundaries surrounding mental health in our studios? The issue is this: if we sense that a student’s progress is seriously impacted by their mental health, then we must address this issue if we are to help them grow and progress. Additionally, we often create warm and trusting relationships with students and have a deeper intuition and knowledge about their well-being. If a student’s mental state appears to be preventing progress over a long period of time, then we may no longer be able to effectively teach such students until they access a higher level of support and improve their overall mental and emotional health. In order to best facilitate delicate conversations surrounding mental health, we can look to communication methods from the field of counseling psychology for support. Empathy, reflection, normalizing, and gentle inquiry are basic tenets of communication in the mental health fields. These skills can create greater ease and tact in interactions with students and can support teachers in their ability to assess whether the students’ issues are best addressed by a mental health professional.

Empathy

Empathy begins with the ability to relate to a student from a place of acceptance and understanding and can create a positive environment in the teaching studio. Communicating empathetically with students is a skill used widely in supportive teaching studios, but is especially important to keep in mind while addressing possible mental health issues. Teachers

⁴ National Association of Teachers of Singing, “Code of Ethics,” <https://www.nats.org/code-of-ethics.html> (accessed December 28, 2019).

can be especially adept at empathetic communication due to their own lived experience with mental health issues relating to their craft. Empathy can be created by displaying attentiveness, otherwise known as your verbal and non-verbal behaviors.⁵ Good eye contact, a calm tone of voice, attentive silence, active listening skills, and relaxed posture can all help support empathetic communication.

Reflection

Reflection is a type of neutral observation made without value judgements. A reflective statement might sound something like “Jane, I’ve noticed over the past few months that you make a lot of self-deprecating comments.” Or “Jane, you often appear very anxious during lessons.” Reflective statements give people feedback and a chance to hear how they appear to outside observers. Additionally, reflection offers people a chance to confirm or correct the impression they are giving, leading to more clarity of communication.⁶ People who are struggling with undiagnosed mental health issues are often not yet aware of their issues, and reflective statements can help them gain greater awareness by pointing out how they may appear from others’ perspectives.

Normalizing Statements

Normalizing statements involve the recognition of universal kinds of struggle. A normalizing statement may be something like “I know that performing often brings up a lot of anxiety for students” or “I’ve seen many students feel very discouraged from time to time.” Normalizing the situation can help students feel less isolated in their struggles and underlines the universality of human struggle. As well, teachers are in a unique position to share our own experiences with mental health as it relates to performing and we can also demonstrate our empathy through normalization by using personal examples.

However, we may need to go further in our support of students by exploring possible greater mental health issues and referral sources. After approaching a student using empathy, reflection or observation, and normalizing statements, teachers can use a line of gentle inquiry such as “I wonder if this (anxiety, fatigue, low mood) is something that is also affecting you outside of the voice studio or in other aspects of your life?” If the student responds in the positive, it is a good clue that he or she is experiencing more pervasive symptoms of anxiety or depression (or other mental health concerns) and that additional support may be necessary. If the student identifies that the symptoms are only related to their craft, it may still be a situation where outside support could be useful. This can only be decided on a case-by-case basis. There is no definitive way to determine if a student needs mental health services other than that student accessing these services and deciding for themselves. In this day and age, we are speaking about mental health issues more than ever before, yet stigma or lack

⁵ Samuel T. Gladding, *Counseling: A Comprehensive Profession*, 7th ed. (Upper Saddle River, NJ: Pearson Education, Inc., 2013), 137.

⁶ Mark E. Young, *Learning the Art of Helping: Building Blocks and Techniques*, 5th ed. (Upper Saddle River, NJ: Pearson Education, Inc., 2013), 106.

of awareness still surround these issues and their treatment. Teachers' support can go a long way in continuing to normalize access to mental health services. For example, if a teacher is aware of other students that have utilized therapy or coaching services, they can normalize this with other students and share those students' improvements. However, it is extremely important to communicate this in general terms, without compromising other students' confidential information shared within the confines of the teaching hour.

Pitfalls

There are possible pitfalls that teachers should be aware of in broaching such topics. First and foremost, unless a certain amount of trust exists in the teacher/student relationship, it may be wise to leave such conversations until a later date. This must be determined on a case-by-case basis, but when in doubt, leave a little more time to truly get to know a student. They may be displaying signs of mental or emotional struggles due to the newness or unfamiliarity of the teaching relationship. Directly confronting their mental health may lead to a breakdown in communication. If we approach these topics too early in the teaching relationship, a student may become defensive or feel ashamed or embarrassed.

Certain lines of communication should be avoided, even in positive and caring teacher/student relationships. For example, using phrases that contain "shoulds," "have tos," or "musts" can often be perceived as unnecessarily judgmental or accusatory (i.e., "you really *shouldn't* worry about this much" or "you *must* stop thinking this way"). Also, excessive questioning with too many "why" questions can come across as an interrogation (i.e., "*why* do you feel that way?" or "*why* do you think this is happening?"). These types of questions may be appropriate in certain situations, but basic counseling psychology tenets suggest relying first on active listening, empathizing, and reflecting students' behavior back to them. If there is a need to know more, a simple "tell me more about that" can be a gentler way to access additional information.

Most importantly, a responsible and aware teacher can compile resources within the community to suggest to students or students' parents. Most university or college campuses have free or low-cost counseling services for students. Students can also access services in their community (private practices, community agencies, hospitals, religious organizations) that offer counseling. There are often resources in the community that offer free or low-cost/sliding-scale counseling services if finances are an issue. Many insurance policies include mental health benefits that allow people to access counseling

⁷ *Psychology Today*, "Find a Therapist," <https://www.psychologytoday.com/us> (accessed December 29, 2019).

services for the cost of a copay (or free for people on Medicaid). For more comprehensive information about services in your community, you can use the “find a therapist” search function at the website “Psychology Today.” Students can call the phone number on the back of their insurance or Medicaid card to find out more information about their mental health benefits.

Crisis Hotlines

Crisis hotlines (or “warm lines”) offer no-cost services to people in crisis. Hotlines exist primarily to deal with crises; “warm lines” are for people who are just looking to talk to someone. Many states also offer a state-centered crisis line (often called “crisis and access line”) that can provide lists of resources to people in need of services. While it is impossible to know which type of services will be suitable for a student, providing a list of a few resources in the community can set a healthy boundary within the studio and help the student recognize that their needs may go beyond the scope of voice teaching. Finding the right type of services is as individual as choosing the right voice teacher, and often comes down to personal chemistry and a feeling of trust.

Despite our best efforts in caring, open communication surrounding mental health, we may still experience situations where a student shuts down or refuses to acknowledge that there is an issue. This may stem from many sources: feelings of shame or embarrassment, cultural differences in dealing with mental health, stigma around accessing services, family pressure, and/or fear about expressing problems openly. While this may be frustrating for the teacher, we must respect our students’ choices about their own health, even if it is impacting their ability to grow in lessons.

Conclusion

In conclusion, the voice teacher/voice student relationship is a unique constellation that must be built on trust and caring. Although voice teachers may often feel like confidants or friends, we should never take on the role of professional counselor to our students, lest we create too much dependency and step outside of what is ethical for our profession. It is up to each teacher to decide how to sensitively broach topics of mental health by using methods based in counseling psychology, especially when it is apparent that a student’s progress is directly affected by their mental well-being.



Ingela Onstad has enjoyed a varied, international career in opera, concert work, and contemporary music. Highlights of her German operatic career include roles at Dresden’s Staatsoperette, Oldenburgisches Staatstheater, and Landestheater Schleswig-Holstein. Her concert career includes recent performances with the Santa Fe Symphony, Klavierfestival Lindlar (Germany), Durango Bach Festival, New Mexico Philharmonic, Tulane Vocal Arts Festival, and the Mid-Columbia Symphony.

A champion of contemporary works, she has created operatic roles in two world premieres and performed diverse works by Schoenberg, Kurtág, Schwanthner, and Berio, among others. She maintains an active private voice studio in Albuquerque, NM and holds a bachelor of music degree from McGill University and a master of music degree from the University of New Mexico.

In addition to her active performing career, Onstad is a Licensed Mental Health Counselor (LMHC) and holds a master of arts degree in counseling. She presents nationwide on topics relating to mental health and performers at institutions including Tulane University, Colby College, University of New Mexico, Rio Grande NATS, University of Texas at El Paso, and Portland State University. With her business Courageous Artistry, she offers performance anxiety coaching for all types of performing artists. www.courageousartistry.com.



The Path of the Warrior— Expectations for the Learning and Teaching of Voice Acoustics

by Nicholas Perna, DMA and Sarah Pigott, MM

Since the advent of the personal computer and the proliferation of affordable spectrographic programs, interest in applying voice acoustics principles in the voice studio has seen tremendous growth that continues to expand. The voice teacher or voice pedagogy professor who attempts to learn and teach voice acoustics can expect to face many challenges along the way. At the VocalFri Podcast (www.vocalfri.com) we call this The Path of the Warrior.

The authors of this column have spent the past five years together in professional collaborations, as professor-student, professor-graduate assistant, and finally as research collaborators and podcast co-hosts. Additionally, Author 1 (Nicholas Perna, referred to as NP) has been teaching graduate voice acoustics for over a decade. In this piece we attempt to chronicle some of the experience and perspectives gained through our time of learning voice acoustics, teaching voice acoustics, or observing others learn voice acoustics. Our mutual hope is if you have never invested in the journey of learning applied voice acoustics, that this column will inspire you. If you are already planning to teach a resonance unit or an entire voice acoustics pedagogy course, this column will provide keen insight into what hurdles await you.

The article contains content from both authors together, some from the perspective of the professor/instructor (NP) and some the student/learner (Sarah Pigott, referred to here as SP). Portions of the content of this article can also be found in casual audio format on the VocalFri Podcast episodes “Learning the Path of the Warrior” (9/13/19) and “Instructing the Path of the Warrior” (9/20/19).

“Words, words, words...I’m so sick of words...”

Before we begin to discuss voice acoustics, there are some terms that require clarification. First and foremost are the terms “harmonic” and “formant.” In a 2015 forum in the *Journal of the Acoustical Society of America*, a team of industry leaders recommended a clarification of acoustics terminology and symbology specifically related to voice acoustics.¹ They recommended a change from source harmonic (even previously referred to as overtone) to oscillating

¹Ingo Titze, et. al., “Toward a Consensus on Symbolic Notation of Harmonics, Resonances, and Formants in Vocalization,” *Journal of the Acoustical Society of America* 137/5, (May, 2015): 3005-3007.

frequency of the fundamental. Harmonic sound is represented as multiples of the fundamental (f_0), or $1f_0$, $2f_0$, $3f_0$, etc., which more closely reflects the mathematics of the fundamental frequency times the factor of the harmonic.

The term “formant” has possibly caused as much confusion and debate as any voice related term, even rivaling “belt voice,” “bel canto,” and “support.” Formant has been defined as “a peak in the output spectrum envelope radiated from the mouth.”² However, as the JASA forum suggests, and much of our voice pedagogy literature cites, formant is often erroneously defined as “a resonance of the supraglottal vocal tract.”³ The former refers to a result after a Fast Fourier Transform (a mathematical process used to analyze the component parts of a complex signal)⁴ has been applied to the sound wave, and the latter refers to the resonant frequencies of the physical tube shape of the vocal tract. These are two different, but related phenomena that have been utilizing the same term in voice pedagogy literature. The authors of the JASA column recommended a clear differentiation of the two, designating formant as a radiated spectral peak on the spectrogram (F_1 , F_2 , F_3 , etc.) and the resonances of the vocal tract labelled (f_{R1} , f_{R2} , f_{R3} , etc.) which better represent their physical reality.

²Ibid.

³Ibid.

⁴Eric W. Weisstein, “Fourier Series,” from MathWorld-A Wolfram Web Resource. <http://mathworld.wolfram.com/FourierSeries.html>

“It’s Not the Destination, It’s the Journey” – Challenges at the Start

Anyone who has studied voice acoustics can relate to how daunting the onslaught of information is at first glance. As the quantity of pertinent information grows so does the shock when first facing this subject.

NP: The greatest challenge varies from student to student. A scientifically-inclined, curious thinker may take to the information more easily than a student who prefers the abstract nature of learning that the arts often provide. For the latter, getting past the vocabulary alone can be a challenge. However, the difficulty that I see most commonly is the desire for immediate application during the process of learning. Seemingly abstract concepts take time to synthesize. The first time learning a voice acoustics model can require patience, because students likely will not understand the abstract during the process.

SP: Venturing into the world of voice acoustics is tricky because to fully understand the beginning you need to have learned about the whole model. Voice acoustics functions somewhat like a circle in that there is no true beginning or end. As a result, whatever information a class begins with can be overwhelming, but as you make your way through the material, areas of confusion become clear. In fact, by the end of the course you might feel like you finally have the knowledge to tackle the material you started with. In this sense, studying voice acoustics resembles the words on the

Snitch that Dumbledore bequeaths to Harry Potter: “I open at the close.” Studying voice acoustics is a never-ending cycle of learning new information and starting anew on the model of the voice as you know it.

“Wibbly-Wobbly, Timey-Wimey” – Staying Up-to-Date

The science of the singing voice is a continually growing body of knowledge, which means that the content of a voice pedagogy course should have a similar evolution. As a teacher, deciding when to incorporate new information and how quickly this information can become dated can pose a conundrum.

NP: At the beginning of the course it is important to make students aware that you are providing them with the most up-to-date information possible in that year. Typically, this statement is followed by revealing that if they take the course in a subsequent year, the content will likely have been added to or revised, even if just slightly. Due to the rapid rate of change, the course becomes less slanted towards content mastery and replaced by the two-step process of where to find new information and how to decipher and evaluate materials. As an instructor, it is important to stay up-to-date by researching, reading, attending conferences, and participation in other continuing education such as NYSTA’s Professional Development Program or by attending one of the various summer voice workshops. That being said, even staying completely current in a subfield of voice pedagogy such as voice acoustics is a challenge.

In a recent conversation with colleagues who have been exposed to new theories of exploring voice acoustics, I was asked about teaching new models simultaneously alongside trusted models such as source-filter theory (SFT). Staying up-to-date on acoustics is not the only function of the instructor. It is your job to ensure that the material you are teaching has been adequately scrutinized by the science, pedagogy, and medical voice community. This is an important part of the process of peer review for publication or conference presentation acceptance. However, just because a paper was published or presented does not guarantee sufficient evidence it should be taught. It is your job as a voice pedagogy professor to determine whether or not any information you are teaching has been rigorously reviewed, and if the acoustic information can be made practical to a singing teacher. SFT has been disseminated and explained enough to be succinctly communicated to singing teachers. There are new models in development that are asking deep questions. Some of those new ideas are rightly challenging the status quo. Use a practical test for yourself prior to teaching any model for voice acoustics. Try to explain that model to a non-singer in your life. If they easily can re-frame the information you

convey, you are likely ready to communicate that model to a class of singers or singing teachers.

To aid in the dissemination of information, I synthesize content from several voice acoustics sources. In the second semester undergraduate pedagogy course (where I teach resonance) we go the entire way through Bozeman's *Practical Vocal Acoustics*.⁵ I highly recommend this text for anyone's first encounter with voice acoustics, student or otherwise. A graduate voice acoustics course is a different matter. In that course I teach material from the Bozeman, Ian Howell's "Parsing the Spectral Envelope,"⁶ Donald G. Miller's *Resonance in Singing*,⁷ Johan Sundberg's *The Science of the Singing Voice*,⁸ and soon hope to include content from Julian Chen's *Elements of Human Voice*,⁹ along with various articles by Ingo Titze and other noted figures in voice acoustics.

One Fish, Two Fish, Red Fish, Fried Fish – or – The Many Models of Singing Voice Acoustics, Their Pedagogic Order and Inclusion

There are different models that could be used to approach voice acoustics. The most common is SFT which can easily be found presented in pedagogy writings by Miller,¹⁰ Bozeman,¹¹ or McCoy,¹² the non-linear source filter model described by Titze,¹³ and newer models that include psychoacoustics and perception as presented by Howell.¹⁴ All three of these perspectives are being disseminated in the voice community and worth mentioning in a voice pedagogy class. Deciding how to present them, in what order, and knowing which will be the most helpful can prove a challenge for the student or teacher.

SP: From a teaching perspective, the nonlinear source-filter model has proven to help with the demographic I predominantly teach (middle and high school students). Many of these students need indirect methods to produce clear phonation, and as a result, I use a lot of semi-occluded vocal tract exercises (SOVTE) to work with them. My students tend to be taking voice lessons for the first time and SOVTEs coax their voices to coordinate more efficiently without them having to figure out how to do it. After the students have experienced that coordination, they often can recreate it for themselves more easily. That being said, concepts of non-linearity helped me as a teacher to clarify the use of SOVTEs to improve consistent vocal fold oscillation in my students.

In my own singing, different models have helped influence my singing technique at different times. Recently the introduction of psychoacoustics to my pedagogic knowledge has provided a new perspective on my own singing that has forced me to reevaluate some of my technique. This new insight gave me a fresh direction to take my own voice and helped me see new areas for growth. Specifically, separating frequencies using

⁵Kenneth Bozeman, *Practical Vocal Acoustics: Pedagogical Applications for Teachers and Singers* (Hillsdale, New York: Pendragon, 2013).

⁶Ian Howell, "Parsing the Spectral Envelope: Toward a General Theory of Vocal Tone Color." (DMA diss., New England Conservatory of Music, 2016).

⁷Donald G. Miller, *Resonance in Singing* (Gahanna, OH: Inside View Press, 2008).

⁸Johan Sundberg, *The Science of the Singing Voice* (DeKalb, IL: Northern Illinois University Press, 1987).

⁹Julian Chen, *Elements of Human Voice* (Hackensack, NJ: World Scientific Publishing Company, 2016).

¹⁰Miller. *Resonance in Singing*.

¹¹Bozeman. *Practical Vocal Acoustics*.

¹²Scott McCoy, *Your Voice: An Inside View* 3rd Edition (Gahanna, OH: Inside View Press, 2019).

¹³Ingo Titze, "Nonlinear Source-Filter Coupling in Phonation: Theory," *Journal of the Acoustical Society of America* 123/5, (May, 2008): 2733-2749.

¹⁴Howell, "Parsing the Spectral Envelope: Toward a General Theory of Vocal Tone Color."

frequency filters in Voce Vista Video¹⁵ along with understanding the impact of Absolute Spectral Tone Color¹⁶ for filtered frequencies helped me understand which timbres of my voice needed to be reinforced to give more overall resonance balance. This new method of evaluating my own voice allowed me to recognize an area that was lacking.

Beginning with SFT first meant that everything after built on that model; however, observing other students study the models in a different order allowed me to recognize how models appeal to varying styles of learning. Source filter theory and non-linear source filter theory both follow logical steps which appeals to how my brain organizes information. Other students more easily understood the psychoacoustics side and might have done better starting with their model built on listening and perception.

NP: Personally, I learned SFT from the mentorship and writings of Dr. Donald G. Miller, the original creator of Voce Vista.¹⁷ Having been entrenched in an SFT world gave me a solid foundation of examining specific interactions of vocal tract resonances and source harmonics. Having a bit of a nerd-based personality, watching a spectrogram piqued my initial interest in this field, however I have not always found that students shared the same passion solely based on seeing a $3f_o : f_{R2}$ interaction on a G4 tenor [a] vowel, or seeing the bundling of energy created in a Singer's Formant Cluster. Since not all students shared my visual interest in the spectrogram, as an instructor I have had to find other ways to motivate students in this information.

An important step for building interest at the beginning of a resonance unit or acoustics course is getting the students to hear why these interesting voice phenomena occur. Teaching singing is about the ability to hear. I have found those students desiring immediate application can be momentarily satisfied by hearing an important voice phenomenon before understanding the acoustics behind the noise. For example, if you hear a classical western tenor or baritone do a decrescendo, you will see an increasingly steep roll off in the spectral slope during the decrescendo. If you filter out the higher harmonics using Voce Vista Video the singer can immediately relate the visual phenomenon to what they hear. Or similarly, if you have a soprano sing a G5-G4 scale and notice the difference in the higher energy above 2 kHz, then filter that sound out and add it back in, you can see and hear the contribution the higher energy is playing in the timbre and carrying power of the voice. You can express that if a soprano wants to be heard in the hall over an orchestra that they will need the high spectral energy of auditory roughness¹⁸ on the G4, much more so than the G5 where they started. Hearing the phenomenon makes it real to the singer.

¹⁵ For more information on the features of Voce Vista Video see <http://sygyt.com/en/>

¹⁶ Howell, "Parsing the Spectral Envelope: Toward a General Theory of Vocal Tone Color."

¹⁷ For more information on the the original version of Voce Vista see <http://vocevista.com>

¹⁸ Ian Howell, "Necessary Roughness in the Voice Pedagogy Classroom: The Special Psychoacoustics of the Singing Voice," *VOICEPrints* (May-June, 2017): 4-7.

Due to the desire to gain student interest with hearing phenomena, I now begin class with material based on Dr. Howell's psychoacoustics information relating to singing voice perception. I then move on to vocal tract resonances as presented in *Practical Vocal Acoustics* by Bozeman. Singers are more comfortable with concepts of articulation (jaw, tongue, larynx) than they tend to be with words like formant. Presenting vowel changes (modification, migration, substitution) and how vocal tract shapes make those changes in the lowest two vocal tract resonances is the second step.

Finally, as a last step I move on to source harmonics, specifically focusing on how those source harmonics interact with the lowest two vocal tract resonances to affect timbre, but also, how differing glottal configurations can alter overall spectral slope and how increased higher spectral energy above 2 kHz impacts overall timbre. Typically, most textbooks begin with harmonics. I have found that risks losing the attention of those who are turned off by math.

SP: I found starting with formants to be a good starting point because it's mathematical and felt very logical. My brain understands information that follows a formula which helped me make sense of this approach. While formant is a foreign term to most singers, the idea that the articulator shape impacts vocal tract resonances is very akin to vowel modification/substitution/migration—a concept that every singer has encountered. Starting with information that was based on something I was already familiar with helped make the concept more accessible. Others could benefit from starting in a different concept depending on their own personal learning styles. For experiential and conceptual learners, starting from sound perception did prove more useful.

NP: There is a plethora of additional material that could be presented in a voice acoustics course. Dr. McCoy spends a good bit of his resonance chapter in *Your Voice: An Inside View* explaining the vocal tract as a resonance tube through concepts of wavelength resonators. I have taught this material before and each time saw students lose interest in the overall subject matter. Often the question with acoustics can be "how much science is too much science?" I find that presenting wavelength resonators is unnecessary to convey the concepts required to use voice acoustics principles in the applied studio, and so for the most part, aside from the doctoral level course, I now avoid even presenting this material. As an instructor if I feel a topic can have some appearance of applicable value to the voice pedagogy it will appear in the course.

Tools, Toys, and Technology

The amount of technology available and marketed towards voice teachers and voice pedagogy teachers can make it seem like a lab full of equipment is a requirement to teach voice. While we might all enjoy having access to an imaginary lab, it



Dr. Nicholas Perna is Associate Professor of Voice and Voice Pedagogy at Mississippi College. He is a Presser Music Foundation awardee and currently a voice research associate at the University of Mississippi Medical Center. His primary research areas are laryngeal manipulation and singing voice acoustics.

Perna has presented research on three continents at notable events such as the International Congress of Voice Teachers, the Voice Foundation's Annual Symposium on the Care of the Professional Voice, and the NATS National Conference. Publications include articles in *Journal of Singing*, *Journal of Voice*, and *VOICEPrints*. He served on the 2019 faculty of the Singing Voice Science Workshop, and this year joins the faculty of the Acoustic Vocal Pedagogy Workshop at New England Conservatory.

In opera he has appeared with Mississippi Opera in leading tenor roles. Symphonic appearances include Mahler's *Das Lied von der Erde*, Beethoven's *Symphony No. 9*, *Messiah*, and *Carmina Burana*. Perna is a 2019-20 semi-finalist for the American Prize for men in opera. Along with Dr. Mandy Spivak, he created *The Comprehensive Britten Song Database*. He holds graduate degrees from the University of Miami and the University of Houston. He is the creator and co-host of the *VocalFri Podcast*, <http://www.vocalfri.com>.

is unfortunate that some technology comes with a hefty price tag. Still, most program needs can be met with a laptop, speakers, and relatively inexpensive software.

NP: In order to adequately teach voice acoustics there are few pieces of technology that are recommended. A laptop, Mac or PC-based, with Voce Vista Video installed is of paramount importance. I cannot imagine teaching the course without it. I use both the Madde voice synthesizer and Voce Vista Video's tone generator for class. Voce Vista Video is available for a reasonable price at <http://sygyt.com/en/>. Madde is freeware and available for download at <http://tolvan.com>. A reasonable quality pair of speakers is necessary. That said, speakers, microphones, and pre-amps are all an advantage when you are having singers record examples for in-class exercises. For recommendations on recording equipment specifications for voice see Hunter et. al.¹⁹ and Svec et. al.²⁰

As previously mentioned, the availability of affordable spectrogram programs like Voce Vista partially led to the boom of interest in voice acoustics in the applied studio. The inclusion of Voce Vista 3.x in Miller's *Resonance in Singing*²¹ joined both useful perspectives and research on voice acoustics with the older version of the software. In 2017 I made the switch from the 3.x version of Voce Vista (PC based) to Bodo Maass's new design of Voce Vista Video (VVV - both Mac and PC-based versions), version 5.x. We would like to recommend all users move to this platform of the software. That version combines Voce Vista with Overtone Analyzer, which was Maass's original program. VVV 5.x includes the ability to filter out or add back any part of the spectrum. The most recent version includes a tone generator, similar to the Madde voice synthesizer. but that is much more versatile. The program will soon include the ability to capture video with your onboard webcam or load a video directly from YouTube. There are more useful features in VVV Pro that include the ability for multiple types of electroglottographic analysis.

SP: The ability to deconstruct a real human voice and hear its component parts was groundbreaking. It so easily allowed me to hear and see the concepts we had been discussing in class. Not only could I see and hear examples but when those recordings were voices of people I knew personally from hearing in various performance venues, it made the material much more concrete. Additionally, it was eye-opening to use this tool to dissect famous voices I admired and strove to emulate. Frequency filters may have the biggest pedagogic application of any available voice acoustics technology because they can change the manner in which voice teachers hear singing. They can greatly simplify ear training as a student.

Practical Practicum Practice

A challenge of teaching any voice pedagogy topic is trying to resolve a balance of time. There is never enough time for

¹⁹Eric J. Hunter, Jennifer Spielman, A. C. Starr, Peter S. Popolo, "Acoustic Voice Recording, "I am seeking recommendation for voice recording hardware...", *Perspectives on Voice and Voice Disorders* 17/1 (2007): 7-14.

²⁰Jan G. Svec and Svante Granqvist, "Guidelines for Selecting Microphones for Human Voice Production Research," *American Journal of Speech-Language Pathology* 19/4, (November, 2010): 356-368.

²¹Donald G. Miller, *Resonance in Singing*.



Sarah Pigott completed her M.M in Voice Performance and Pedagogy at Mississippi College and now is the voice instructor at Mount Pisgah Arts Academy. Her current research area is laryngeal manipulation which she has co-presented at Voice Foundation. She has also co-presented at both Regional and State NATS and will be co-presenting on this topic at National NATS in Knoxville.

Pigott has performed with Mississippi Opera and also attended Songfest and the Franco American Vocal Academy (FAVA). With Dr. Nicholas Perna, she is also the co-host of the VocalFri Podcast, your weekly dash of voice science, pedagogy, and nerd pop culture.

everything in any course in any semester, and unfortunately, a practicum portion of a course is often overlooked. In an idyllic voice teacher training program, every unit might coincide with a month, or more, of practical supervised teaching experiences. Having adequate time to learn application for voice acoustics principles is no different. If you are dedicated to working practical exercises and teaching of voice acoustics into your curriculum, Bozeman's *Kinesthetic Voice Pedagogy*,²² the follow up to his seminal *Practical Vocal Acoustics*, makes a fine textbook for the practicum portion of voice acoustics.

²²Kenneth Bozeman,
Kinesthetic Voice Pedagogy.

Takeaways

VocalFri readily admits that a working knowledge of voice acoustics is not necessary to sing well or teach voice well. There are colleagues all around us who do both very well and are not familiar with voice acoustics. There are portions of this deep material that we do not contend to know. A majority of those parts consist of more rigorous math than we are trained to understand. Voice teachers should have more conceptual knowledge of the voice than a singer needs in order to instruct other singers, including *Fach* differences, style differences, and gender differences. Voice acoustics by itself will not make you a good voice teacher. What a functional knowledge of voice acoustics can do is make you a better teacher faster. Even a working understanding of source harmonic interactions with f_{R1} can help you anticipate most timbral acoustic registration shifts in all human voices. Even better still is a working knowledge of the framework of singing voice perception, which can train the voice teacher's most valuable commodity, your ears.



BOOK REVIEW: *Diction in Context: Singing in English, Italian, German, and French*

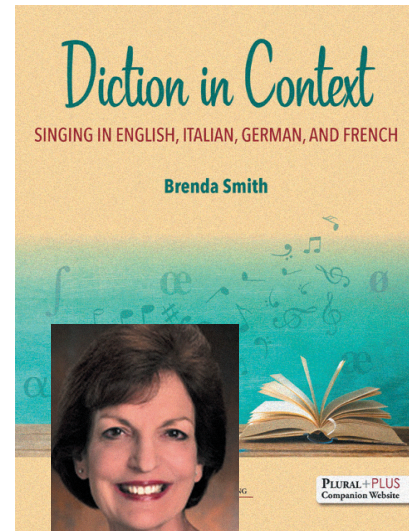
by Brenda Smith

Reviewed by Anthony P. Radford

As a diction teacher, I struggle with the fact that students can easily find the IPA and translation for a song online. They no longer take the time to look up each word, learning about meaning, conjugation, and other aspects of a foreign language in the process. As a result, students no longer delve far enough into the text to bring out the true meaning, and rarely seem to get a grasp of how to convincingly perform in a language they don't necessarily speak. The textbooks I have used over the years have had different views on how to go about teaching students the sounds and symbols of IPA and how to apply them to poetic texts. As a discipline, I think we have always had a problem with taking what we are learning in diction and applying it to poetry, in its fullest sense. Since singing is something we do, not something we only talk about, it is the application of the pronunciation and grammatical rules (which sometimes conflict, depending on the source) during performance that students find most challenging. When I first saw Dr. Brenda Smith's new book I hoped it would offer some original ideas about how to teach my course.

Dr. Smith understands that when we engage in the act of singing, it is an event that exists in the moment. It is not an act during which the singer can think about an intellectual theory or concept. The preparation of the performance must be so thorough that language, meaning, and intent become second nature. Dr. Smith provides a clear process to make this so, and proves the value of "taking the slow way." For each language, she begins by asking the student to learn the relevant IPA symbols, then moves through the grammar, and into poets and composers and their works. This approach has its eye firmly on the application of the "rules," while proving that there is a reason for doing this; because diction lives inside an ecosystem of opportunity and discovery all within the wonderful world of poetry. We will become better singers if we know these poems fully, not just pronounce them well.

It is also refreshing to have a diction text that moves us beyond the scholarship already out there. Students can



Brenda Smith

be confused by the variations among experts in the rules applied to any particular language. Smith chooses an interpretation (Grubb, for example, in French), identifies this method as the rules she turns to, and moves on. With multiple options in French, German, and Italian in particular, Smith rises above the debate of how to pronounce the sounds by identifying a leading source and proceeding to apply those rules.

In method, content, and structure, Smith's book represents a refreshing move forward in the pedagogy of diction instruction. I would highly recommend teachers of diction to take a look at this work and apply it in their classes.



Anthony P. Radford is Professor of Voice and Opera at California State University, Fresno, where he serves as Coordinator for the Voice Performance degree and is director of the Fresno State Opera Theatre. He teaches voice, opera, vocal pedagogy and vocal literature. His teaching brought him to Germany where in 2018 he coordinated a CSU Summer Arts course titled "Romantic Lied in Germany" taking 30 singers to Germany to study with an international faculty at the Hochschule für Musik in Trossingen.

He is a published author, a presenter at many international and national conferences and a regular adjudicator with NATS. He served as the review editor for the Opera Journal and on the Board of Directors of the National Opera Association as research chair. His review of *The Roscoe*, a new American opera, was published in "Bootlegger of the Soul: The literary legacy of William Kennedy" (2018) by the State University of New York University Press, a Festschrift to Pulitzer Prize-winning author William Kennedy.

Originally from Toronto, Radford holds a BA in Political Science from York University and a Master of Music degree from New England Conservatory of Music. He was an Othmer Fellow at the University of Nebraska, Lincoln where he earned a Doctor of Musical Arts degree.



NYSTA Distinguished Voice Professionals

Catherine Aks	Candace Goetz	James Henry Moore
Lawrence Alexander	Hilda Harris	Fonteini Moschidi
Andrienne Angel	Grace Hart	Lili Nehman
Tania Apfelbaum	Kari Hatfield	Janet Pranschke
Maria Argyros	Matthew Hoch	Kari Ragan
Nancy Bos	Katherine Hoffman	Bethany Reeves
Alan Bowers	Patricia Kadvan	Michelle Rosen
Ben Caston	Taina Kataja	David Sabella-Mills
Enzo Citarelli	Joan Lader	Jane Seaman
Nikki Renée Daniels	Layne Littlepage	Patricia C. Sheridan
Jan Eric Douglas	Rosemary Lohmann	Ajda Snyder
Barbara Dyer	Peter J. Ludwig	Justin Stoney
Jack Eppler	Natasha Lutov	Charlotte Surkin
Carol Flamm	Christina Matula	Debra Vanderlinde
Amanda Flynn	Bruce McClurg	Jody Weatherstone
Ena Freeman	Josephine Mongiardo	Ann Marie Wilcox-Daehn
Robin Lynne Frye	Bruce Moore	

NYSTA 2020 Distinguished Voice Professional



Nikki Renée Daniels will be in the upcoming Broadway revival of *Company*, playing Jenny. She recently completed the Chicago run of *Hamilton*, as Angelica Schuyler. On Broadway she has starred in *The Book of Mormon* and the 2012 Tony Award Winning Broadway Revival of *The Gershwins' Porgy and Bess*. Other Broadway credits include *Fantine* in *Les Misérables*, *Anything Goes*, *Aida*, *Nine*, *Little Shop of Horrors*, *Lestat*, and *The Look of Love*.

Daniels made her New York City Opera debut as Clara in *Porgy and Bess*. Other New York credits include Martha Jefferson in *1776* at City Center Encores! and Rose Lennox in *The Secret Garden* at David Geffen Hall. On television Nikki has appeared as a featured player on "Chappelle's Show," "Madam Secretary," and "The Sound of Music: Live."

She has performed as a soloist with numerous symphony orchestras across the country and Canada, and at Carnegie Hall. She holds a BFA in musical theater from the University of Cincinnati, College-Conservatory of Music. Her debut solo CD, *Home* is available on *iTunes* and *CDBaby.com*. For more information please visit nikkireneedaniels.com.