

A Venture Back to Move Forward

Kimberly Broadwater



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prov·e·nance (prŏv'ə-nəns) *n.* Place of origin, source. [LAT. *Provenire*, to originate.]

T RUE CONFESSION: I STRUGGLED in mathematics courses. I had the capacity but lacked unquestioning belief. I had to know why two plus two equaled four; I could not accept at face value my teacher's word. If I could visualize two apples next to two apples and combine them through ocular computation, I could comprehend and accept the logic behind the mathematic problem and replicate successfully similar examples. As you can imagine, when I approached more complicated mathematic problems, my tepid relationship with mathematics intensified (Pythagorean Theorem, to give but one example). However, I found an algebra instructor who understood my dilemma and was patient with this *visual learner*. He adapted his teaching strategies to allow for me to be successful.

As an undergraduate voice student, I induced frequent bouts of significant irritation for my voice teacher. She would ask me to approach a note a certain way or to relax my jaw and, instead of blindly accommodating her requests, I would ask "Why?" You see, I *needed* to know why. There were many moments of "Because I say so"; however, later, I would either ask her to explain or I would research until I had an answer. (My sincere apologies to all of my voice instructors.)

Dare I say, the one word question of "Why?" has served me well.

In graduate school at Louisiana State University, a few of my voice pedagogy classmates were thrilled with my presence. My vocal science mentor, Dr. Stephen Austin, often heard "Why?" from me. Dr. Austin was quite patient with my quizzing, and my inquiry would often lead to stimulating conversation. Years later I had a few of my classmates tell me they loved when Dr. Austin and I would get into one of our spirited discussions because it took the pressure off them.

In my first doctoral level research course, I learned a new question: "How?" Through my teacher's academic, experienced eyes, I was able to understand that "Why?" was not an independent variable and the interdependence of "Why?" and "How?" brought significantly more fruitful knowledge. "Why?" alone can bring information, yet it can be hollow knowledge. The marriage of these two questions is pivotal in the search for greater discernment.

I hope that our journey with "Provenance" will be one of why and how. It is easy to document the when and where, but the why and how empower us toward a more thorough awareness of any given topic. We know when

and where Manuel Garcia developed the laryngoscope; however, the why and how allow for a more intimate relationship with the topic, providing fertile ground to plant new seeds of development.

Technology can be defined as “methods, systems, and devices which are the result of scientific knowledge being used for practical purposes.”¹ Technology can enrich the traditional teaching of music, for example, using a tablet to read your music, playing a recording of your music, using accompaniment software, or watching a video of your favorite singer. Additionally, technology can be used in the vocal studio as a method of delivery in Distance Education.

Distance Education is a form of instruction where the learner is separated from the instructor. Perhaps the first recorded example of it is found in the New Testament of the Christian Bible with Paul and his letters to churches instructing them on proper Christian ethics and theology. Following is a very brief history of Distance Education in the Modern Era:

- Sir Isaac Pitman is credited with establishing the first “correspondence course” in the 1840s when he taught a system of shorthand by mailing transcribed postcards to students for corrections.²
- “In 1919, University of Wisconsin professors began an amateur wireless station later known as WHA, the first federally licensed radio station dedicated to educational broadcasting.”³
- In 1922, Pennsylvania State College was the first college to air courses via radio airwaves.⁴
- In 1933, the University of Iowa became the first American university to broadcast TV.⁵
- In 1976, Coastline Community College became the first “virtual college,” with no campus and all courses broadcast.⁶

Innovation and entrepreneurship create advancements in technology. The printing press, modern mail delivery, recording devices, radio, television, and internet are all examples of progress in technological growth. Many educators have embraced the changing landscape of technology and implemented technology within teaching to enhance the learning process.

Currently, there is heated debate concerning the use of technology in the voice studio, but this debate is not new. In 1877, Thomas Edison developed the phonograph (recording machine), which was a device used to record

and reproduce sound.⁷ In 1909, *The Etude Magazine* investigated the importance of the recording machine in the voice studio. You may recognize the names of a number of the voice teachers interviewed, while some will be unknown. Each teacher was well respected and revered during his or her generation of teaching. The opinions offered often reflect conversations that could be heard in today’s discussion of technology in the studio. This article is a good read and stresses the idea that while some things change, some remain the same. Interestingly, no author attribution appears in the magazine.

THE USE OF THE SOUND REPRODUCING MACHINE IN VOCAL INSTRUCTION AND MUSICAL EDUCATION: A SYMPOSIUM TO WHICH MANY OF THE LEADING VOCAL TEACHERS OF THE DAY HAVE CONTRIBUTED

The Etude Magazine, March and May, 1909.

When the art of printing came into existence the makers of fine manuscripts buried in their monastic cells, the scribes on the street corners and the notaries in their offices all declared the printing press a ruinous invention. But Gutenberg’s machine, the strong right arm of a coming civilization, was not to be held back by prejudice and conservatism. Modern scientists have devised not only a means of retaining the thoughts of men but their voices and their music as well.

The stylus, with which the ancients slowly and laboriously carved the products of the human intellect upon stone, has its modern prototype in the stylus of the sound recording and reproducing machine.

So great and so wonderful have been the improvements in this art that its educational significance, especially for musicians, can no longer remain ignored. The instrument that was once regarded as an interesting curiosity or as a dispensable toy is now becoming an important factor in the advance of civilization. That it will have as far reaching an effect as the printing press is doubtful. Its opportunity is more restricted.

A wonderful industry has already been created for the manufacture of sound reproducing machines. (One factory alone in Camden, New Jersey employs twenty-eight hundred people.) Millions of dollars are invested in the

manufacture of talking machines and records. There is every indication that this industry has become a permanent one, and that the sound-reproducing machine is far from being a transient fad, but has come to stay. It is therefore incumbent upon music teachers to consider the relation of the machine to their professional work.

No machine can ever take the place of a living, active instructor. A machine, however, may be used as a valuable adjunct in education. The record is really a kind of acoustical picture. Imagine how barren the study of geography would be without maps. Not even a Ruskin or an Irving could make a word picture that would have the definiteness of a photograph. The word picture might connote more, but there would still be something lacking which only a photograph or a fine painting could reveal. Word pictures of music are valuable and necessary, but they cannot compare with the sound pictures which the good sound reproducing machines make available.

The sound reproducing machine should augment the interest of the pupil very greatly. The idea that musical mechanical machines will lessen the necessity for good music teachers is about as foolish and untenable as the old fashioned idea that the automobile would put an end to the demand for horses. There is a place for everything and the sound reproducing machine has its place. Records of orchestral works and of the playing of the best bands may be reproduced in the teacher's studio with surprisingly good effect. This is particularly valuable for the teacher living at a distance from the large metropolitan centres where large orchestral works may be heard. It is now even possible to hear an entire opera such as "I Pagliacci," with a company of artists and an orchestra from the world famous Grand Opera House, "La Scala," Milan, the whole performance being directed in person by the composer, Leoncavallo.

The recent improvements in the best machines have done away with the "blast" or rasping sounds that used to mar some records. Only in the records of ensemble work employing more than four voices does any deficiency become apparent in the best machines of the day. No doubt time will remedy even this defect as hundreds of thousands of dollars are being spent annually upon ceaseless experimentation.

The sound reproducing machine should also be of direct financial value to the teacher. Parents who have been deprived of a musical education are encouraged

to give their children an understanding of the great masterpieces. The interest in music of the better class is developed.

Thus from Edison's simple yet marvelous discovery of a few decades ago, has grown a great industry. The apparatus with a little needle tracing its way through the grooves made on a cylinder coated with tin foil and making squeaky little noises that could with difficulty be identified as reproductions of the human voice, has now developed into a class of instruments that store sounds and reflect them at will. The fragile wax cylinder has been supplanted with durable disks and cylinders.

As the civilization of ancient Egypt went down into the Pyramids to be exhumed thousands of years later, so are the voices of our great thinkers, scientists, orators, actors and singers being preserved for future generations. What if the sound reproducing machine had been invented centuries ago? We could now listen to the living voices of Rameses instead of regarding a ghastly mummy; we could hear from the lips of Sophocles, Caesar, Dante, Milton, Shakespeare and Washington the vital thoughts of their day; the marvelous interpretations of Malibran, Jenny Lind, Parapa Rosa, Carlotta Patti, and the great singers of the old Italian school could be heard at will; we might even hear Bach at the harpsichord, or Beethoven at his specially constructed piano; the playing of Liszt, Rubinstein, Henselt, Chopin, Paganini and Taussig would no longer remain a memory to future generations. It is only by such comparisons that we can realize the significance of the sound reproducing machine, and musicians should recognize it as an adjunct which must be reckoned with in the future scheme of musical education. Even a prima donna like Geraldine Farrar is now employing the sound reproducing machine to study the interpretation of her rôles from the standpoint of other great artists.

In the study of languages the sound reproducing machine is also of immense value. Here there is a teacher who will repeat the phrase time and time again without exasperation. Its value to the singer who desires to master several foreign languages is undeniable.

It is not unlikely that the names of Thomas Alva Edison, Emil Berliner (the inventor of the basic patents of the disk machine), and Eldridge R. Johnson (the President of the Victor Talking Machine Company, who, through his inventive ingenuity, executive ability

and high artistic ideals, has given the greatest impetus to the art) will some day rank with the great educators of all time.

In order to ascertain the opinions of representative voice teachers upon the value of the sound reproducing machine as a direct adjunct to voice teaching, we sent out the following questions:

Do you think that the sound reproducing machine, in its present condition, is likely to cultivate an artificial, possibly disagreeable tone quality, if used by the voice pupils?

Do you think that records of the great opera singers might cause affectation on the part of pupils?

Do you think that the sound reproducing machine would militate against original thinking so necessary to true vocal progress?

Both sides of the question are presented in the following unbiased replies. For obvious reasons we have employed the term "sound-reproducing machine" to apply to machines of all manufacturers. The teacher who favors the use of such machines should urge his patrons to purchase the best instrument obtainable, as the poorer instruments are no more or less than ludicrous parodies on the better ones.

Karleton Hackett.

There is a great benefit for the pupil in intelligent use of sound reproducing machines. There are great numbers of our students who have heard only three or four of the standard operas, and consequently have no idea of what the singing of opera really means. To hear the great arias sung by the masters of singing is a most valuable form of study, and gives to many an opportunity they could have in no other way to understand some of the possibilities of the voice and the laws of interpretation. Of course, this is liable to abuse, as is any good thing but used understandingly the phonograph is of great practical and artistic value. It has no place in the work of the young student; it is for the singer well advanced to aid him in interpretation.

Mr. Herbert Wilber Greene.

Acknowledging your request for my participation in a symposium "on the *possibility* of the sound reproducing machine as an adjunct for the voice teacher" will say that it seems to me, in view of recent achievements

of the vocal profession, that the subject word should be progress instead of possibility.

I have been in a number of the prominent New York studios this winter, and found sound reproducing machines employed as a part of the regular teaching equipment. In my own experience one of my most ambitious students has used fine records as a model in the study of the principal arias, and found them of the greatest value. In the December issue of THE ETUDE, in the year 1903, under the caption of "The Phonograph as an Aid to Singing," George Cecil wrote, strongly advocating their use. In the November issue of 1905 the subject was treated at a greater length by the present writer. I would suggest that THE ETUDE readers, who have those numbers on their files, review them.

The time is surely coming when singers will be greatly aided by being able to secure and put on the machine records, not only of arias, but of all songs both in the secular and sacred repertory, that are favorable either for program, church or teaching purposes.

W. R. C. Latson, M.D., Editor "Health Culture" Magazine.

The sound reproducing machine can do some wonderful things, but—it cannot do everything. The best sound reproducing records of the human voice can reproduce melody, tempo, approximate pronunciation, dynamics, phrasing—in short, style. But they cannot reproduce, to the satisfaction of the critical ear, tone quality or vowel shading.

To the professional singer who uses comparative records of the same vocal selection as a means of more critically determining the most effective rendition, the sound reproducing machine cannot but be valuable.

Again, to the student under the care of a competent master, a study of high-class records will undoubtedly do much to establish tone ideals of style and treatment. Should such study lead to any affectation or exaggeration, or should the student imitate any undesirable mannerism of the singer who made the record, the master would naturally perceive and correct such errors before injury could be done.

When, however, we consider the use of the sound reproducing machine by the student working without a master, the case is different. Here much depends upon the temperament and capacity of the student. The young

man or woman possessed of a voice of good quality, a fine ear and some degree of mimetic ability, would be practically sure to imitate, if only in small degree, the quality of the instrument; and that voice would be injured.

Dudley Buck, Jr.

The following are my answers to your questions:

I think the use of the sound reproducing machine might tend to produce poor tone quality. In fact I do not see how it is at all possible for either of these instruments, in their present lack of perfection, to be of any aid to the voice student so far as sensuous beauty of sound is concerned. On the other hand, I think the sound reproducing machine might be of aid in many ways, i.e., it would teach phrasing, show what vocal effects were, what it meant to enunciate well, what legato singing was, etc., etc. I also fail to see how it could be detrimental to original thinking. It is certainly true that in any kind of work we first learn by imitation, but the person who thinks does not stop at imitating, but allows his personality to enter his work, and thus becomes a creator.

Louis Arthur Russell.

Regarding question relating to sound reproducing machine in Voice Teaching.

That the sound reproducing machine can be made useful in the teaching of interpretation appears to me beyond question. Just how, when, and with whom it should be used is a matter requiring great discrimination on the part of the teacher.

I have never yet heard a sound reproducing machine record that could be looked upon as representing a perfectly clear tone; the auxiliary sounds with which even the best instruments are more or less tainted require dismissal from the mind of the keen-eared listener before real pleasure can be derived from the hearing.

On the other hand, the singer whose ear is not keen enough to realize these by-tones, but hears the sound as a complete and more or less perfect (or satisfactory) quality, is, of course, not being benefited by the hearing of the record.

The student singer needs a model tone quality for his guidance, and that has not yet been produced by the sound reproducing machine.

It is, however, also beyond question that the hearing of "good" records made by the singing of first-class artists can be made very useful in the matter of interpreta-

tion study, for these records generally aim at the best, giving excellent report of the emotional content of the aria, tempo, dynamic nuance, etc.

So rigid a model, however, taking into consideration nothing of the individuality of the listener, and answering no questions, lacks much of the pedagogic import which students are seeking, and it appears to me that a student who places any great reliance upon a sound reproducing machine for his models would be subjecting himself to a variety of influences, not all of which are good.

Again: For the average student of singing to attempt to imitate the sound reproducing machine records of the great singers of the day would produce many sad results; for such a class of study would surely result in superficial, and more or less artificial, imitation. Yet, when a singer knows, we may say thoroughly, an aria, it would be likely to aid him somewhat in interpretation, if he has not already had good coaching in the matter. To hear a sound reproducing machine record of an aria, as sung by an artist whose interpretation might be looked upon as authoritative, would surely be a valuable aid; and when one has reached a high plane of excellence in personal work, the hearing through a sound reproducing machine of various interpretations of one's own repertory would be a valuable process of study. This latter class of study, taking it for granted that the student is advanced as regards his individuality in singing, and is looking for a broadening in music culture, which is obtained only by the placing of one's own mind alongside of others, also implies the personal ability required in all "comparative processes" of study.

I consider the sound reproducing machine, in its present condition of perfection, or imperfection, as not being adapted for the general use of teachers with students in the early phases of voice culture, tone placement, color, and general vocal control; yet an occasional reference to a good sound reproducing machine record might be of value to the student for the exemplification of certain principles being presented to the young singer.

Another thought presents itself with respect to the use of the sound reproducing machine in voice teaching, and that is the making of records from the student's own voice, comparing the various results from time to time, noting defects, irregularities (unevenness), etc. This use of the sound reproducing machine, however, presents a number of difficulties, largely summed up as the result

of the inability of the teacher to so adjust conditions of machine and singer as to get what we know as a good record. However, the average result might prove beneficial, and not extremely expensive.

There is a certain amount of imperfection of vocal tone which displays itself very markedly through a record and it might be well in many cases to make apparent to the student through the sound reproducing machine his most glaring defects.

Arthur L. Manchester.

Replying to your inquiries regarding the use of sound reproducing machines in teaching voice, I would say that I do not think the sound reproducing machine is likely to cultivate an "artificial, possibly disagreeable tone quality," for no sane student will attempt to imitate its tone quality. There is, I think, some possibility that immature students will acquire affected mannerisms in their effort to imitate the singing of artists as shown by the phonograph records. I do not anticipate any serious inroads upon the present state of thoughtfulness of the average student of singing by the use of the phonograph. To be frank, I do not believe the subject of much value to students of singing.

D. A. Clippinger.

Below is my answer to your three questions:

First—My opinion is that tone quality can be studied to much better advantage with a teacher than by listening to an imperfect machine.

Second—A general idea of the rendition of operatic airs might be gained from listening to a record, but the up-to-date teacher has heard all the great artists do these things, and I pin my faith to a live teacher rather than to a machine.

Third—I cannot see that the phonograph would have any effect on original thinking. I have observed that most people very soon tire of these mechanical reproductions. I do not apprehend that such contrivances will ever come into general use in the studio.

Lena Doria Devine.

In reply to your request for an opinion from me as to the usefulness of the phonograph in the studio I beg to say:

My experience with the sound reproducing machine is quite limited, as I have only recently become inter-

ested in its possibilities as an aid to the singer and the voice teacher.

I have always been prejudiced against the use of any mechanical musical instruments in the studio where all attempts at mere imitation should be discouraged, especially when the instrument is so imperfect as the sound reproducing machine has been until within recent years. It must be admitted, however, that the perfected type of the sound reproducing machine of to-day is capable of reproducing with marvelous accuracy the quality of the human voice.

It is my intention to use it in the future more extensively, not only in illustrating the interpretation of songs and arias but also in pointing out defects in voice production which latter the sound reproducing machine often exaggerates.

J. Harry Wheeler.

The sound reproducing machine, as an adjunct to the singing teacher, is highly commendable, and its musical benefit to the vocal student is almost inestimable. By its records, one may gain the style, expression and phrasing of the recitatives and arias of the leading operas, oratorios and other vocal compositions as rendered by the greatest vocal artists of the day. For instance, suppose one wished to study the aria "Celeste Aida," what better example of style could be found than that rendered by Caruso, by means of the sound reproducing machine, or "Ah! Forse Lui [*sic*]," by Sembrich, etc., etc. one may also hear a perfect pronunciation of the different languages in which arias are sung.

While these invaluable benefits may be derived from the sound reproducing machine, still *it would not be safe for the student to imitate the tone quality*, as frequently the tone is very imperfect.

It might be feared that arias studied by means of the sound-reproducing machine would tend to imitation, thus retarding the development of temperamental individuality. There need be no fear of this. The fact of the student being sufficiently interested to make a study of an aria as sung by different artists would prove that instead of retarding, would greatly stimulate his musical temperament.

Frederic W. Root.

The glittering intensity of vocal timbre shown with metallic exaggeration by the sound reproducing records

that are popularly heard is the product of an exceptionally powerful voice which has had ten to twenty years of constant exercise.

Any effort of a young singer with undeveloped organs to reproduce such timbre will, without skillful guidance, result in forced register and mismanaged breath. An experienced teacher may, with advantage to the pupil, point out certain characteristics of tone and style exhibited by means of the sound reproducing machines, but great discrimination is required.

Whether or not it would be of use, it would certainly be of much interest if a pupil could have such records of his own voice at different periods of his culture. It would help him to hear himself as others hear him and so might assist toward the correction of faults, and it would enable him to estimate his progress from time to time.

Louis C. Elson.

I venture to doubt the efficacy of the sound reproducing machine as a teaching medium in vocal work. The expressive term of “canned music” that has been applied to this school of musical mechanics, contains a deeper meaning than is at first apparent. We do not get the full flavor of a peach or a pear from the canned article, nor the entire glory of a great voice from its reproduction. That wonderful things have been accomplished with what at first was regarded as a mere toy may cordially be conceded, but the machine cannot replace the vocal teacher.

Sight goes hand-in-hand with hearing in a vocal lesson. The bearing of the artist, his facial expression, his gestures, form an important adjunct to the tone production. The sound reproducing machine at its best would reduce matters to ‘*vox et praeterea nihil!*’

Dr. B. Frank Walters, Jr.

In answer to your inquiry regarding my opinion of the use of sound reproducing machines in vocal teaching in order that students may profit by the interpretations employed by different singers in various grand opera airs, I submit the following:

I do not believe that such use of the sound reproducing machines would be likely to cultivate in students an artificial or disagreeable tone quality, simply because it is almost impossible to imitate, unless one possesses a vaudeville mimicry.

The faithful copy of a superb rendition could, it seems to me, be called a commendable affectation. By repeti-

tion this would become eventually “second nature,” and hence as unobtrusive as the original.

With many students the tendency would undoubtedly be unthinking, parrot-like imitation. This is to be prevented only by the analytical teacher who renders and demands again of his students the why and wherefore of the interpretation, and the application in other compositions of the principles so elucidated.

NOTES

1. Technology (n.d.); <https://www.dictionary.com/browse/technology?s=t> (accessed August 16, 2018).
2. Hope Kentor, “Distance Education and the Evolution of Online Learning in the United States” (*Curriculum and Teaching Dialogue* 17, nos. 1 & 2 (2015): 23.
3. *Ibid.*, 24.
4. Charlie Osbourne, The history of distance learning (April 1, 2012); <https://www.zdnet.com/article/the-history-of-distance-learning-infographic/> (accessed August 14, 2018).
5. Matt Novak, Predictions for Educational TV in the 1930s (May 29, 2012); <https://www.smithsonianmag.com/history/predictions-for-educational-tv-in-the-1930s-107574983/> (accessed August 14, 2018).
6. Getting Connected: A Brief History of Online Education (n.d.); <https://www.onlineschoolscenter.com/history-of-online-education/> (accessed August 27, 2018).
7. Phonograph (n.d.); <https://www.britannica.com/technology/phonograph> (accessed August 16, 2018).

Dr. Kimberly Broadwater serves as an Associate Professor of Music at Mississippi Valley State University and as Music Coordinator. Dr. Broadwater teaches private voice lessons, Vocal Pedagogy, Diction, and Class Voice. She serves as the Chair of the Institutional Review Board at Mississippi Valley State University, is an active performer, and presents workshops and master classes.

As a researcher, Dr. Broadwater maintains an active pursuit of new data and historical information. Among her accomplishments are the following presentations: “The Effects of Singing on Blood Pressure in Classically Trained Singers” at the 26th Annual Care of the Professional Voice Symposium, “Video Conferencing in the Voice Studio: Is the Technology There?” at the Pacific Voice and Speech Foundation and UCLA Voice Center for Medicine and the Arts Voice Conference, and “Environmental versus Biological Effects of the Human Voice” at the Care of the Professional Voice 36th Annual Symposium.

Hailed as a singing actress, Dr. Broadwater has performed in operas, oratorios, symphonic literature, and in recital. She has performed the roles of the Third Lady, *The Magic Flute* (Mozart); Dame Quickly, *Falstaff*

(Verdi); Augusta, *The Ballad of Baby Doe* (Moore); Hata, *The Bartered Bride* (Smetena); Gil, *The Shepard's Story* (Caudill, World Premiere); Susanna, *The Secret of Susanna* (Wolf-Ferrari); Miss Todd, *Old Maid and the Thief* (Menotti); Terentia, *Captain Lovelock* (Duke); and First Knitter, *A Game of Chance* (Barab). Additionally, Dr. Broadwater has performed in *Gloria* (Vivaldi), *Messiah* (Handel), *Marcha de Galvez* (Constantinides), *Lord Nelson Mass* (Haydn), *Three Japanese Dances* (Rogers), *Missa brevis in F* (Mozart), and *Requiem* (Mozart).

Dr. Broadwater maintains memberships with the National Association of Teachers of Singing, Mu Phi Epsilon-Professional Music Fraternity, and Pi Kappa Lambda-Professional Music Honor Society.

A native of Cleveland, Mississippi, Dr. Broadwater received the Bachelor of Music degree in vocal performance from Delta State University, the Master of Music degree in vocal performance from Louisiana State University, and the Doctor of Musical Arts degree in vocal performance with an emphasis in voice science at Louisiana State University.

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