Although multiple books and articles expound upon the musical culture and progress of American classical, popular and folk music in the United States, there are no publications that investigate the development of extended vocal techniques (EVTs) throughout twentieth-century American music. Scholarly interest in the contemporary music scene of the United States abounds, but few sources provide information on the exploitation of the human voice for its unique sonic capabilities. This document seeks to establish links and connections between musical trends, major artistic movements, and the global politics that shaped Western art music, with those composers utilizing EVTs in the United States, for the purpose of generating a clearer musicological picture of EVTs as a practice of twentieth-century vocal music. As demonstrated in the connecting of musicological dots found in primary and secondary historical documents, composer and performer studies, and musical scores, the study explores the history of extended vocal techniques and the culture in which they flourished.
WHEN WORDS ARE NOT ENOUGH: TRACING THE DEVELOPMENT
OF EXTENDED VOCAL TECHNIQUES IN
TWENTIETH-CENTURY AMERICA

by

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Approved by

Committee Chair
To Dr. Robert Wells, Mr. Randall Outland
and my husband, Scott Watson Crump
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CHAPTER I
INTRODUCTION

“The pathetic condition of the world today is that humanity is bored with the old, and is not ready to accept the new.”¹ Making reference to modern music, the declaration made by Adolph Weiss (1891-1971), the first American student of Arnold Schoenberg (1874-1951), and teacher of John Cage (1912-1992) reflected the acceptance or lack of acceptance of the new sounds emerging from twentieth century Western art music. Much of the modern music was initially shocking to many of its listeners while simultaneously gratifying those ears desiring more than just the common sounds of conventional techniques and compositions. The new aural freedom erupting from the stress of a rising modernism served as a dissolvent to the rules and conventional practices of previous eras challenging the standard compositional devices and opening a gateway into an unchartered sonic terrain.

During this time, Western art music was transforming into a new creature, shifting away from the established approaches of past eras and bringing about new sonic concepts, though not only through nontraditional uses of melody, harmony, rhythm, form and notation. The new aesthetics also affected the instruments and voices that gave sound to the imagination of the composers. Furthering the philosophy of change of many post-

romantic musicians, composers such as Schoenberg, Webern, Berg, Ives, Berio, Stockhausen, Crumb, Cage and a multitude of others swayed the definition of aesthetics to include those practices previously unacceptable. As Barker stated, “All instruments in the twentieth century were exploited or recreated anew for their sonic capabilities.”

The human voice was no exception.

Although nontraditional instrumental uses and techniques advanced at a quicker pace than those for the voice, the philosophical view of the voice as a sound-producing instrument began to shift towards the non-conventional. Bel canto no longer reigned as the sole practice in the vocal world of art song and opera; however, its foundation of expression did not disappear. The beautiful morphed into the expressive, expanding the vocalists’ arsenal to include new modes of production, the category of extended vocal techniques.

**Statement of Problem**

Although scores of books and articles expound upon the musical culture and development of American music in the United States, no investigation into the utilization of extended vocal techniques (EVTs) in the United States has been published. Scholarly interest in the contemporary music scene of the United States abounds, but few sources provide information on the exploitation of the human voice for its unique sonic

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capabilities as it pertains to vocal literature in twentieth-century America, especially regarding EVTs.

Identifying the boundaries of EVTs for the purpose of generating a definition is difficult because the parameters are blurred. Jane Manning, in the second volume of her book *New Vocal Repertory*, finds difficulty in characterizing specific constraints or restrictions for the term.

I am inclined to bristle when asked to explain ‘extended vocal techniques’, since these seem to me to be largely a matter of rationalizing, annotating, and coordinating a variety of everyday sounds, which would all be familiar in different contexts. If the tonal inflections of a baby’s scream were to be notated exactly, or even the precise rhythmic values of *rubato* in Debussy or Delius, the visual result would be extremely complex.³

The term may be more easily defined by what it does not include rather than by its signifiers, but a broad-spectrum explanation of EVTs is needed. Known as “extended vocal practices,” the “extra-normal voice,” or “extended techniques,” to name but a few, EVTs may be defined as a body of practices conveyed through nontraditional methods of vocal production, possibly altering the natural timbre of the voice for the purpose of musical expression. EVTs include such devices as, *Sprechstimme* or *Sprechgesang*, shouting and whispering, laughter and crying, glissandi, microtones, altered or eliminated vibrato, sound production through inhalation and exhalation, vowel morphing, amplified or electronically generated vocal alterations, and nonsense syllables or phonemes, all of which could be accompanied by movement, improvisation and/or the playing of

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instruments by the singer. This list is not exhaustive as EVT\textapos;s vary from performer to performer.

**Objectives and Hypothesis**

The impetus for this study stems not from a desire to clarify what EVT\textapos;s are, but to investigate their origin and evolution in solo vocal repertoire of the United States. Research of primary and secondary historical documents, composer and performer studies, (both past and present), and musical scores will trace the influence of twentieth-century cultural climates, technological advances, artistic movements, musical developments, and performers on the cultivation of EVT\textapos;s. By establishing connections between composers working in the United States who utilize EVT\textapos;s, and the artistic movements and trends influencing Western art music a timeline that highlights the progression of EVT\textapos;s in America will be generated. It will additionally emphasize the classification’s existence as an outgrowth of vocal exploration, exploitation, and experimentation, developing in the experimental music environment of the United States. Exposure to the expressive world of EVT\textapos;s will encourage the inclusion of a body of literature into the vocal studio that is often feared and avoided because of its unknowns.
CHAPTER II
REVIEW OF LITERATURE

Although EVTs are a relatively recent occurrence on the timeline of music history, the practice of extended techniques has existed in the instrumental realm of Western art music since the nineteenth century. Histories of the exploitation of various instruments for colors and expressive purposes frequent musicological texts. However, while examinations into various compositional techniques and performance practices of the twentieth-century persist, in-depth studies of EVTs remain largely unpublished.

As is often the case, those composers who have works remaining in the standard repertory fill the pages of historical texts. Unfortunately, many contemporary composers do not promote their own music through performance and publication. Scores from living composers or the estates of the deceased may be requested, but not all respond favorably if responding at all. Tracking down unpublished scores or original manuscripts containing EVTs becomes a daunting task. However, with the Internet the search is made more productive.

Psychological distance from the recent past may result in further investigation into both composers and performers of EVTs, in addition to the historical movements that impacted them. Perhaps as musicologists continue to survey the parameters of twentieth-century music to determine which musical developments and composers deserve
annotation in history, the category of EVT’s will appear as a classification worthy of exploration. Nonetheless, the lasting impact of those trends has yet to be revealed.

Because the classification of EVT’s is so new to music, resources available for research are limited. The initial starting place for research included basic textbooks of music history and music appreciation courses, available scores, historical and theoretical texts specializing in twentieth-century music, performance practice books, composer biographies and autobiographies, texts containing essays or writings by composers, and books exploring the world of music through technology. Other scholarly resources included reference dictionaries and encyclopedias, dissertations and theses, and journals specializing in singing, music history, music theory, music performance, and contemporary music. Given the influence of literary and visual art movements on musical trends, sources publishing articles discussing specific movements were also researched.

Also utilized were Internet sites that included articles about composers, performers, and musical, literary, and artistic trends. When possible, email and phone interviews were conducted with living composers and other researchers. Additionally, orally documented resources such as the Lexicon of Extended Vocal Techniques, recorded in 1975 by the Extended Vocal Techniques Ensemble at the Center for Music Experiment, and located at the University of California at San Diego, were obtained and studied.

Published scores utilizing EVT’s were plentiful but not easily accessible. Those obtained revealed much about the numerous compositional devices created by composers and the method they chose to explain them to the performer, though no score revealed
any historical information. As previously mentioned, historical textbooks gave little insight to the category itself but provided a snapshot of the political, technological and musical climate in which EVTs developed. Encyclopedias, along with biographical and musical dictionaries were not as accommodating in the explanation of the category, although they provided solid historical information on composers, traditional notation and musical movements.

With few exceptions, books specializing in twentieth-century music did little to further the exploration of EVTs; texts focusing on the notation of contemporary music served the researcher well. Surveying various notational systems utilized in contemporary music of the twentieth century, Risatti’s *New Music Vocabulary: A Guide to Notational Signs for Contemporary Music* made available a considerable amount of notational material used through its publication date of 1975. In his chapter titled “Voice,” EVTs are laid out in an easy to use format displaying the most common notational device, an explanation of the technique, and a composer/work reference symbol used for cross-referencing in the back of the text.

Books specializing in vocal repertoire and performance practices were powerful resources, although they were fewer in number. Sharon Mabry’s book *Exploring Twentieth-Century Vocal Music* explores aspects of vocal repertoire containing EVTs, as well as common characteristics of the period; it also describes many techniques in detail and provided “how-to” practice techniques. It contains a listing of selected repertoire though not comprehensive. Martha Elliott’s book *Singing in Style* also touched briefly on special vocal effects in chapter nine, “Working with Living Composers.” Though she
admits the chapter is not intended to discuss EVTs in-depth, a brief explanation corroborates material found in the Mabry text. She also points to resources that would provide outside information in the “For Further Reading” section of the book. Included in the list were *New Vocal Repertory* and *New Vocal Repertory Volume 2*, both written by Jane Manning. In addition to a thorough description of works from lesser-known composers, Manning provided helpful insight regarding new music in the preface of each text. Regretfully, none of these books provide an in-depth historical record of EVTs. Istvan Anhalt, however, explores the use of the voice through EVTs in the beginning chapter of his book *Alternative Voices*. His text provides the most thorough historical information available on the topic.

Biographies and autobiographies for many twentieth-century composers exist. However, books written about or by composers who have works considered “standard repertory” are more common than contemporary composers who have had their works published. Nevertheless, many of the sources provided supportive information into the compositional techniques of the composer. Additionally, the sources containing essays written by or about composers or specific movements in music were researched but none were found that specifically dealt with EVTs. Books focusing on the furtherance of composition through technology or sound altering did little to explore EVTs other than referencing the alteration of the human voice.

Scholarly journals referencing new music, modern music, contemporary notational systems, twentieth century movements (i.e., Modernism, Expressionism, Cubism, Dadaism, Futurism), technological advances in music such as electro-acoustics,
twentieth-century performance practices, and composers specific to this study were reviewed. Journals were also examined for subject matter specific to EVT's but provided little information on the category as a whole. Since a number of works from the middle of the century forward were written for the vocal techniques of Cathy Berberian, Jan De Gaetani, and Joan La Barbara, journals mentioning these performers were also scrutinized. Additionally, materials related to other extended technique pioneers such as Deborah Kavasch, Meredith Monk, and Joan La Barbara were analyzed. Although scholarly journals provided the bulk of the information explored, they revealed relatively little information about the historical background of EVT's.

Dissertations and theses dealing with EVT's or specific works utilizing EVT's were minimal. However, the bibliography of each became a significant tool leading to other resources. Various Internet search engines made reference to sites containing the term “Extended Vocal Techniques,” but apart from those resources available through university sponsored databases, few were scholarly. The Internet, however, served as an invaluable tool providing not only contact information for societies or websites that sponsored the advancement of contemporary music, but also for many living composers. Lastly, a lexicon categorizing seventy-four EVT's and its accompanying cassette tape, *Lexicon of Extended Vocal Techniques* (containing recordings of each sound) was especially useful. Recorded in 1975 by the Extended Vocal Techniques Ensemble at the Center for Music Experiment, University of California in San Diego, it provided live examples of EVT's.
CHAPTER III

HISTORY OF EXTENDED VOCAL TECHNIQUES

Although extended techniques did not exist for the human voice until the twentieth century, from the mid-nineteenth century forward extended techniques were common in the realm of instrumental music. The manipulation of established instrumental playing methods for new sonic possibilities made a significant impact on the sound and vocabulary of instrumental music. Following composers such as Hector Berlioz (1803-1869), one of the first to make use of nontraditional playing methods, musicians began employing unusual techniques for sound production, creating new colors and timbres previously unavailable through conventional practices. The concept of “extended techniques,” or techniques extending beyond previously established practices were developed. The development of extended techniques for the voice, however, occurred at a considerably slower pace.

The transformation towards the treatment of the voice as an instrument of sound gradually transpired in European countries throughout the early decades of the twentieth century, which ultimately allowed for the emergence of extended vocal techniques (EVTs). In the United States, however, composers were embarking on musical experimentalism, that which would continue to flourish throughout the rest of the century. It should be made clear that while EVT-s were not a product of American
experimentalism, the country’s musical environment and exploration significantly contributed to the development and acceptance of the classification.

EVTs are defined as a body of techniques conveyed through nontraditional methods of vocal production for the purpose of expression. Extending from conventional vocal techniques, EVTs often supplement or are used in place of traditional language and notation when words or other traditional symbols are not sufficient for the realization of the composer’s imagination. The classification may include everyday vocal utterances associated with life, which have been extracted from their context and used for artistic purposes. Sounds as simple as a whisper, a whimper, grunting, shouting, humming or speaking are all possibilities, limited only by the imagination.

With the exploration of EVTs, a new spectrum of sound not previously accepted in traditional singing was made available to the vocalist. While different EVTs provided distinct functions, the classification itself enhanced expression. Composers utilized these techniques to convey specific timbral colors, effects or emotions. Deborah Kavasch, composer and founding member of the Extended Vocal Techniques Ensemble in the Center for Music Experiment on the campus of the University of San Diego explained that her usage of EVTs allowed for “Extremes of emotion, from highly dramatic to whimsical and humorous, with a greater palette of timbral coloration.”

I think that EVTs provide a means of dramatic interpretation or playfulness that has expanded the expression of text. The best example of my music that comes to mind is my composition on Emily Dickenson’s “Bee! I’m expecting you!” The words of the poem are actually a letter from a Fly to a Bee, so my idea was to

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Composer and performer Deborah Kavasch, interview by author, 23 February 2008.
present the text as though the Fly were buzzing as it “spoke”, using ululated vowels and consonants (like the “z” of “was”), using a sibilant sound for certain “s” sounds (such as extending the “x” of “expecting”). I used reinforced harmonics on many of the “er” sounds and inhaled croaks on “work” in reference to the frogs. For “birds mostly back” I quoted several measures on the “birds” from one of the traditional cadenzas in *Lucia di Lammermoor* with a dental trill on the last r, intentional tone-painting with mostly traditional sounds here. Somehow I just can’t imagine writing a setting of this poem using only tradition singing, when I believe that the overall effect of my setting is whimsical, gentle and humorous by virtue of using mostly EVTs.⁵

For Joan La Barbara, one of the first EVTs pioneers, extended vocal techniques permitted direct contact with “fascinating sounds that are simply not part of the standard vocal delivery”⁶ but not without consequences. Referring to many composers utilizing EVTs, La Barbara discussed her displeasure with the association of EVT with madness and inexperienced audience members.

You would get these pieces that were written by various people – like *Eight Songs for a Mad King*, by Peter Maxwell Davies, or some things that were written – it was always this kind of crazy thing, and that’s why you used the EVT’s. I see them more as a kind of orchestra that I use – my palette of sounds – so I don’t see them as them “crazy sounds” even though when I first started to do my solo concerts I would sometimes get people in the audience who would start giggling because I used sounds that they either were uncomfortable within a musical situation, or they were so unusual that it was the kind of nervousness that an audience exhibits when they haven’t heard that kind of thing and if they’re immature, they’ll laugh.⁷

Influenced by compositions of Berio written during his time in the United States, British composer Gwyn Pritchard stated that EVTs “allow for a higher level of

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⁵ Composer and performer Deborah Kavasch, interview by author, 23 February 2008.
⁶ Composer and performer Joan La Barbara, interview by author, 23 February 2008.
⁷ Joan La Barbara, interview by Jo Truman, 31, March 2004, transcript, New York City.
abstraction by deliberately obscuring the words.”

The flexibility of the techniques was especially helpful to Pritchard in correlation to his chosen texts. “I wanted to ‘paint’ the text, to highlight its inner meaning (as I understood it), to make the text a fundamental part of the musical process, not just provide a musical setting for it.”

The Beginnings of EVTs

It was no surprise to find the first seeds of EVTs planted in Europe, the cradle of Western art music, before crossing the Atlantic. In her dissertation “The Beautiful in Strangeness,” Linda Brown proposes that the history of EVTs has a direct link with monody and the members of the Florentine Camerata (1573-1587) whose yearnings for a more declamatory method of singing and simple accompaniments called for new vocal practices. Kavasch elaborating further on one of its members, Italian composer, teacher and singer, Giulio Caccini (1551-1618) and his Le nuove musiche (1602), offered this perspective:

His goal is to increase the understanding of the text. ... [He] favors a new style of solo song accompanied by a simple stringed instrument and describes specific ornaments and modes of attack. He discusses these in some detail and advocates their judicious placement for text enhancement rather than mere vocal display... One vocal ornament Caccini describes deserves special mention. The trillo...is a

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8 Composer Gwyn Pritchard, interview by author, 23 February 2008.
10 Nigel Fortune described the Florentine Camerata as a group of “musicians and intellectuals ... who ... conducted learned investigations into numerous subjects, much the most fruitful of which were on the theory and philosophy of music.” According to Fortune, “the groups most significant practical outcome was their experimentation with accompanied solo song or monody (as opposed to the then ubiquitous polyphony).”
11 The aria “Possente spirto,” from Monteverdi’s opera L’orfeo offers a perfect example of this trillo, or what has jokingly been referred to as the “hammer-trill.”
repeated, gradually accelerating single-note embellishment which Caccini uses primarily at cadences in his musical examples... The trillo is similar to a type of ululation, or interrupted sound (literally “howling” or “wailing”), found in other musical cultures... The ululation has entered the vocabulary of latter twentieth-century practitioners of extended vocal techniques....

Michael Edward Edgerton offered yet another starting point, preceding that of Kavasch, for what he calls “extra-normal voice.” According to his perspective of the extra-normal voice, history included “at various times the Sumerian hymn (-800 B.C.), Grecian Odes (600 B.C.), Judaic responsorial and antiphonal psalms (+500 B.C.), Christian plainchant (A.D.), organum (9th c.), Ars Nova (14th c.), and later the nuove musiche of the baroque.” Independent of a specific historically based referential point, the evolution of the singing voice throughout music’s history never experienced as drastic a shift as it did in the musical culture of twentieth-century America.

Although it was not until later in the twentieth century that many composers began consciously exploiting the voice for its sonic capabilities, German composer Engelbert Humperdinck (1854-1921) began the foundation upon which EVTs could be built. While he initially used what would later be known as Sprechgesang in his opera Der Königskinder (1897), he replaced it with conventional singing practices in the 1910 edition of his work. However, most scholars believed that Austrian composer Arnold

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12 In September of 1999, Dr. Deborah Kavasch presented a paper for the 4th International Symposium and Festival “Donne in Musica Gli Incroci Al Borgo” in Fiuggi Città, Italy entitled, “Extended Vocal Techniques: Then and Now.” Her work served as a wonderful tool, corroborating my own research. I was grateful for her willingness to further my project, as she was a pioneer of extended vocal techniques as a doctoral student of the 1970s.


Schoenberg (1874-1951) provided the foundation on which EVT\textsubscript{s} would be built in the vocal melodrama written for actress Albertine Zehme, \textit{Pierrot Lunaire} (1912) in which he combined traditional vocal techniques with \textit{Sprechstimme\textsuperscript{15}}.

As John Potter stated in his exploration of the function of the voice in previous centuries, “changes in singing techniques have inevitably involved new tone colours, but the basic function of the voice until Schoenberg was to carry a text or a melodic line.”\textsuperscript{16} While the function of the voice in \textit{Pierrot} maintained the delivery of the poetry, a new expressive function was adopted through the nontraditional sounds used to convey the text, thus laying the groundwork for EVT\textsubscript{s}. Over the next forty years a number of artistic movements, cultural influences and global shifts gradually prepared listeners to more readily accept new sounds.

\textbf{The United States}

The musical fabric of American vocal literature includes a rich sonic texture saturated with global eclecticism, individuality, and constant transformation. From its birth in 1776, the young country struggled to find its own musical identity. Loosening its grip on the musical traditions of its English ancestry, the country sought to define itself through African American spirituals in the early nineteenth century and later, in the melodies of its indigenous people, the American Indian. Desiring a more sophisticated

\textsuperscript{15} Using this technique, the singer speaks on unambiguous, dictated pitches in a melodramatic fashion, generating a melodic line that exists mid-way between song and speech and allotting the performer a great deal of interpretive license. The term Sprechgesang and Sprechstimme are often utilized interchangeably. A more detailed description of the term may be found in Grove Online Music.

approach to art music, however, many American composers set in motion the trend of studying in European countries. Returning from their educational studies, the newly cultured fixated on European musical conventions and traditions and filled late nineteenth-century American concert halls with works modeled on Germanic, French and Italianate practices or works composed by European masters.

Looking to its older European siblings as its role model, the adolescent country could not develop its own musical identity because it was dependent on that of others. At the turn of the twentieth century, however, global political powers grew unstable and economics began to shift; composers of the American community redirected the country’s musical perspective from Europe towards itself, seeing for the first time the essence of its own identity. Embracing the individuality found in freedom of expression, composers began producing a soundscape the world had never heard before.

In examining the experimental music on American soil, the influence of advancing technologies, artistic movements, societal conflicts and significant international composers created an environment conducive to the blossoming of EVTs. While EVTs were not born of the American music scene, composers working in the United States who rejected the musical conventions of past centuries and embraced the musical freedoms of a young nation once musically unidentifiable created an atmosphere of experimental sounds in which EVTs could successfully surface. The emergence of the classification, however, would not have been possible had it not been for European contributions including composers, artistic movements and the products of
industrialization. Therefore, an attempt to trace a timeline of EVT\textsubscript{s} must address nineteenth-century America and its European neighbors.

**A Global Perspective**

A close look at the political and economic circumstances surrounding the world at the turn of the twentieth century revealed much about the United States and the evolution of the music taking shape on its soil. The period, commonly known in America as Modern Times, (1898-1918) presented the world with new mechanical and technological advances that indirectly affected the creation of EVT\textsubscript{s}. \(^{17}\) The invention of both the phonograph (1877) and the record player (1890s) enabled the recording and preservation of music, while the emerging silent “moving picture show” of the late 1800s and early 1900s required accompaniment of musicians. From a mechanical standpoint, the furtherance of the engine created a direct impact on trains and automobiles and allowed for the flight of the first airplane in 1903. Electricity also fueled global progress affecting not only homes, but also businesses and industry, resulting in exponential growth and the migration of people from rural settings into promising cities. In a global perspective, the United States was the world’s most industrial nation.

Along with the United States, the economic climates of European countries experienced an increase of wealth by way of international trade through the importation and exportation of raw materials, manufactured goods and foods. However, the

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\(^{17}\) For a more detailed global perspective see the seventh edition of *A History of Western Music* edited by J. Peter Burkholder, and written by Burkholder, Grout and Palisca.
progression was not without its growing pains. With multiple nations and powers struggling for world dominance, the first mass global conflict erupted: World War I (1914-1918). The international progression of music drastically slowed as composers and musicians alike fought for their countries, or fled to avoid persecution. Countless mechanical and technological innovations created to make life simpler were now being used to mass-produce machinery that could kill. The United States, however, remained a safe haven for those seeking sovereignty for much of the war, even following its inclusion in April 1917, after which the country emerged as a global power.

In the years before and during World War I, the surge of economic development on American soil brought about internal social conflict. Immigrants began flooding the borders of the United States, seeking safety and freedom from their warring countries. Within the country’s boundaries, the African-American population began shifting northward for opportunities offered to other industrial families, but met resistance in the form of racism, which caused the beginnings of segregated communities. Economic divisions became more prevalent, and the study of human behaviors flourished, while the shifting societal views spilled into every aspect of American culture, especially that of music.

The musical consequences of these events found no limitations, and while the seeds of EVT's were just being planted, the American musical scene was being made ready to exploit the human voice. Electricity and the development of the phonograph not only allowed for the preservation and instantaneous reproduction of composers’ music, it also allowed the music to exist in places where its composers and performers could not
be. Additionally, the influx of immigrants and European visitors to the United States placed Western musical conventions directly in contact with the country’s musical culture. The migration of the country’s people from its rural settings to its flourishing cities, served as inspirational material for both poet and composer, while the segregation of the African-American population birthed a new musical culture in and of itself.

**The American Voice at the Turn of the Century**

From a hindsight view of Western art music, the composers and compositions of nineteenth-century Europe foreshadowed many future musical developments and advanced compositional techniques for the voice, but because of the youth of the United States as a nation, there was neither history nor identity fully independent of European strongholds to solely cultivate EVT$s$. Its music was a “melting pot” of slave Spirituals, Native American melodies and elements, cultural idioms from its diverse emigrant body, and European conventions spread across three distinctive realms of music: classical, popular and folk. A gradual progression towards a national voice capable of supporting the development of EVT$s$, however, began to emerge through the compositions of American musical pioneers such as Stephen Foster (1826-1864), George Whitefield

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18 The nineteenth-century spirituals of American slaves were an interesting body of literature to consider while developing a timeline for extended vocal techniques. However, because they did not evolve from “classical” European models brought from composers studying in Europe, nor were they a product of rejection of those European models, they were not considered as essential to the development of EVT$s$ for this study. However, a brief encounter with the history of the slave spiritual’s revealed many characteristics common to those of extended vocal techniques including, the bending or sliding between pitches, the inclusion of shouts or moaning, the addition of expressive vocalizations accompanying the text, and the technique of improvisation. In addition to the aforementioned vocal characteristics, many of the other stylistic attributes were further developed in ragtime, blues, jazz and many other styles heard throughout American popular and folk music today. The impact of nineteenth-century spirituals on EVT$s$ in the United States should not go unnoticed.
Chadwick (1854-1931), John Philip Sousa (1854-1932) Edward MacDowell (1860-1908) and Arthur Farwell (1872-1952). It was the unique compositional techniques of Charles Ives (1874-1954), however, that introduced America to the concept of the *avant-garde.*

**Avant-garde**

Although originally defined as the advancing front line of the French military, the term avant-garde came to be associated with French artists of the late nineteenth and early twentieth century whose techniques rejected previously accepted traditional practices for the radically new and different. The implications of this movement and the term itself later shifted to the realm of Western music and came to be associated with composers who consciously created works and/or techniques which gravitated away from standard musical conventions and trends. The adaptation of this terminology began first in Europe, but migrated to the United States in the years before World War I. Although initially progressing at a slow speed, the movement quickened as younger generations began to compose. While the movement lacked consistency in style, it shared the common view of replacing old ideas with new practices. From such radical innovations, EVT would blossom.

Not all composers conformed to the philosophy of willfully upending traditional conventions. Those known as modernists viewed their compositions as a furtherance of conventions previously established, while simultaneously continuing the natural progression of musical evolution. Others, through a more maverick approach, sought to replace standard European traditions altogether, with what they viewed as a more unique
sound, resulting in new sonic uses of tonality or the complete abandonment of the convention. An expanse of the country’s soundscape through the combination of both philosophies was first evident in the compositions of American composer Charles E. Ives.

Charles Ives (1874-1954)

A businessman by day and a composer by night, Charles Ives, “the founder of the experimental-music tradition in the United States,”19 helped shape the voice of American music as the first composer to “step deliberately outside European musical conventions in major works.”20 According to American composer Arthur Berger, “Charles Ives had been writing distinctly American music since before the turn of the century but he had done so in oblivion.”21 Born in a small Connecticut city where his father was a bandmaster and music teacher, Ives studied the organ and learned theory from his father; but of all the influences from his father, of utmost importance was the passion for experimentation with sound, leading not only to advanced instrumental techniques but to vocal practices as well.

Although his working life centered on his insurance company, Ives & Myrick Insurance Agency, one of the most successful in the nation, Ives composed music in the evenings and on the weekends. His output of songs, totaling 160, was the largest body of American art song repertoire by a single composer of early twentieth-century American

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vocal music. He experimented with polytonality and the concept of juxtaposing ideas and techniques together. The “American original” composed without apology or conviction, believing that expression linked music to text, an idea that resurfaced in later exploitations of the voice.

His progressive ideas were far more advanced than that of his contemporaries, and as Kyle Gann, author of *American Music in the Twentieth Century*, pointed out, his forward thinking foreshadowed many trends to come.

Ives’s music, most of it written in near-total isolation, contains a list of innovations that anticipates the majority of 20th-century musical trends: unprecedented dissonance, densely heterogeneous textures, instrumental groups set apart from each other in space, unusual means of playing the piano keyboard, classical appropriation of ragtime, quarter-tones, simultaneous tunes played in different tempos, and widespread quotation of folk music, popular music, and hymns.  

Carol Kimball, in her book *Song*, also explained his advanced compositional techniques “predate by several decades, the later “avant-garde” works of Schoenberg, Prokofiev, and Stravinsky.” This is especially important as Schoenberg’s *Pierrot Lunaire* (1912), is argued by many scholars to be the foundation on which EVT was built. Ives was also beginning to utilize the voice in a non-traditional fashion similar to Schoenberg’s

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25 No conclusive documentation was ever found which would suggest that Schoenberg or Humperdinck influenced Ives.
Sprechstimme by combining both speech and singing in a “half spoken” style in his piece *Nov. 2. 1920* (1921) assembled in his collection, *114 Songs*.

It is important to discuss Arnold Schoenberg and his workings with the human voice through the composition *Pierrot Lunaire* (1912). Although Schoenberg was not an American citizen, nor was he influenced by the experimental work of Charles Ives in the United States during the time *Pierrot* was composed and premiered. His perfected use of *Sprechstimme* was an extension of the earlier established vocal practices of the nineteenth century. These were the same vocal practices that were being taught in America and utilized on the American concert stage. Both innovative men were composing, at least for part of their lives, on different continents: Ives in the United States, and Schoenberg in Austria. Both men were pioneers, specifically with regards to their harmonic practices, although Schoenberg was later known for upsetting the aesthetics of tonality, while Ives was known as the father of experimental music in America. Although, most scholars place the roots of EVT's in *Pierrot Lunaire*, possibly because of chronology, Ives also utilized the voice in innovative ways. Unfortunately, Ives’s efforts remained largely unknown until after World War I.

It is possible, through the advancing technologies of the twentieth century that Charles Ives heard Schoenberg’s *Pierrot Lunaire* before composing *Nov. 2. 1920*, but no historical documents have been discovered that would suggest this. Schoenberg, on the other hand, knew of Ives, and greatly admired his aural boldness and experimental techniques. A comparison of *Pierrot* and *Nov. 2. 1920*, finds that both utilized the voice

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to express the text in a unique way that extended outside the realm of traditional vocal techniques. Although by today’s standards, the techniques would not be considered unusual, the appearance of both was innovative for its time. Through both Schoenberg and Ives, the scope of America’s musical culture widened to prepare for the entrance of EVT. More importantly, however, through the compositional techniques of Ives, the United States became a haven for musical experimentalism, which would allow later composers to explore every imaginable sonic possibility. His philosophy of song and perhaps a foretaste of the future were best summarized in the final lines of the post-face of 114 Songs.

A song has a few rights, the same as other ordinary citizens. [...] Must it always be a polite triad, a “breve gaudium,” a ribbon to match the voice? Should it not be free at times from the dominion of the thorax, the diaphragms, the ear, and other points of interest? [...] Should it not have a chance to sing to itself, if it can sing? – to enjoy itself without making a bow, if it can’t make a bow? – to swim around in any ocean, if it can swim, without having to swallow “hook and bait,” or being sunk by an operatic greyhound? If it happens to feel like trying to fly where humans cannot fly, to sing what cannot be sung...who shall stop it? – In short, must a song always be a song? 27

The Undoing of Nature

The worlds of philosophy, literature and the visual arts have had a constant impact on the evolution of classical vocal literature, but in the twentieth century those worlds became intimately intertwined. In rebellions against traditional conventions, Cubism, Futurism, Dadaism and Surrealism emerged on the pages and canvases of the Western

world, overthrowing the reflective naturalness of the past, exalting the advancement of
the future, and challenging the accepted traditions of a world in turmoil, through art,
literature and music. Although Cubism had the least impact on the voice as an instrument,
the philosophies of Futurism and Dadaism dealt a huge blow to the singer as a classical
performer, but its impact would not be felt until decades later when the “original
instrument,” the voice, would be dehumanized and exploited as a producer of sound.

Cubism

Evident in the paintings of Georges Braque (1882-1963) and Pablo Picasso (1881-
1973), Cubism, the term and the movement, was birthed in Paris in 1908 as the result of a
comment made by the French art critic Louis Vauxcelles about a Braque painting suggesting the work looked to be created by tiny cubes, The movement sought to
depict a distorted view of objects by highlighting the object’s constituent elements
through geometric shapes, thus shifting focus from the object itself to the parts that
created it. The component parts were often rearranged, thereby destroying the image of
the object as a whole as it naturally appeared. The result created a collage effect, serving
as evidence of the Cubist’s desire to banish the philosophy of art imitating nature.

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28 Both Joan La Barbara and Meredith Monk have made reference to the voice being the original
instrument of mankind. While La Barbara had a 1970s album called “Voice is the Original Instrument,”
Monk began her vocal explorations in 1965. There is no historical documentation supporting which
performer made the statement first.

29 Historically, French poet and art critic Guillaume Apollinaire (1880-1918) is said to have had a
significant association with Cubism. During his short life he was also credited with coining the term
“Surrealism.”
The concept of the collage was not only a thumbprint of Cubism, but also of future artistic movements, as well. “Although music was never recognized as an essential part of the cubist program,” Thomas Greer stated, “it functioned in a manner similar and often on an equal footing with the other arts.”

Explaining the aesthetics of music influenced by Cubism, Greer stated “...in music, consonance, formerly the dominating sound in many instances, gave way to the dissonance, the latter intended to be heard as a prominent fact in the music rather than as a subordinate melodic and harmonic consequence.”

Slonimsky further described the corresponding musical movement of cubism.

The musical counterpart of cubism in art is the erection of massive sonorous complexes moving *en bloc* at different speeds and angular motion. Such harmonic boulders produce the best effect in poly-triadic structures. Cubist music must be static, with a low potential. There should be no intermediate melodic or harmonic shifts between Cubists complexes, but tremolo effects within each unit may contribute to resonant power congruent with massive sonic structures.

**Vocal Implications: Cubism**

Composers who were influenced by Cubism made use of Slonimsky’s sound collage. The cubist philosophy of taking things apart and putting them back together in an unusual way arguably foreshadowed the collage of vocal production represented in later decades when the philosophy of the singer as the producer of vocal beauty (*bel canto*)

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30 Thomas Henry Greer. “Music and Its Relation to Futurism, Cubism, Dadaism and Surrealism, 1905 to 1950” (Ph.D. diss., North Texas State University), 224.
31 Thomas Henry Greer. “Music and Its Relation to Futurism, Cubism, Dadaism and Surrealism, 1905 to 1950” (Ph.D. diss., North Texas State University), 226.
shifted towards the philosophy of dehumanizing of the vocal apparatus as an instrument of sound.

Futurism

At the same time Parisian Cubists were upending the aesthetics of nature along with other conventions of the artistic world, Italian Futurists were rejecting the Romanticism of the past, favoring instead the liberation and industrialization of the future. Grounded in the principles laid out in Filippo Tommaso Marinetti’s (1876-1944) 1909 manifesto, *Fondazione e Manifesto del futurismo*, published first in Paris and later in Italy, Futurism came to fruition, challenging the past and all of its components with great belligerence. Heralding the sights and sounds of technology through industrialization, the movement positioned the modern machine as its source of inspiration and embraced a philosophy of dehumanization that had not previously existed. Although Futurist artwork revealed Cubist tendencies, the philosophy of the movement added a layer of violence and conflict through the celebration of man’s triumph over nature, and called for the destruction of all things that stood in the way of advancement or progression.

Musical materialization of the movement was proclaimed in the *Manifesto of Futurist Musicians* (March 11, 1910), written by Italian composer and musicologist
Francesco Balilla Pratella (1880-1955), who one year later also published his *Manifesto Tecnico della Musica Futurista* (March 11, 1911). Exactly two years after that, painter-turned-composer Luigi Russolo published his *Futurist Manifesto*. Seeking to define music through the art of noise, Russolo created “a new art of noises, *Arte dei Rumori*.” Not only were new instruments invented, although “rudimentary and crude,” Steven Connor suggested the instruments gave “a larynx to the accidental noises of the world,” resulting in a new genre, *bruitism*, which consisted of musical compositions created through noise.

Few futuristic musical examples exist, as the movement was short-lived and largely confined to the work of Pratella and Russolo. Futurism itself died with its father, Marinetti in 1944, if not before. However, its impact served as a reference point for later compositions, as Slonimsky explained: “The future of the Futurists appears passé, but they opened the gates to the experimenters of the actual chronological future, which none of them lived to witness.” Furthermore, as Slonimsky pointed out, “Human noises – whistling, shrieking, grunting – were cultivated by the Italian Futurists and further

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33 An archived collection of Pratella is available in Italy at the Centro di documentazione e ricerche sulle avanguardie storiche. However, further information is available from online at Fondazione Primo Contin Onlus, http://www.fondazionepromontorio.org/archivio/fondi/balilla_pratella.html.


37 Nicholas Slonimsky. *Music Since 1900 5th.* (New York: Schirmer Books, 1994.): 1120. Under the title *Bruitism* Slonimsky states, “The pioneer work of Bruitism was *Arte dei Rumori* by the Italian Futurist Luigi Russolo, in which he codified the noises of friction, attrition, sibilation, percussion and concussion. Edgar Varèse elevated the inchoate Bruitistic scheme to a purely musical form in his epoch-making work *Ionization*.”

propagated by the cosmopolitan of the avant-garde.” It must be noted that an undeniable foreshadowing of later movements can be identified, especially that of electronic music and the EVTs of later decades.

Vocal Implications: Futurism

As Istvan Anhalt deduced in his book *Alternative Voices* (1984), “The almost unprecedented intellectual ferment between 1900 and 1914 produced and/or sustained a great variety of artistic movements,” among them, Cubism and Futurism. Although each affected the artistic world in a different manner, they all foretold the dehumanization of the voice. Anhalt corroborated the fact that it began with Marinetti’s futurist movement. A catalyst for the philosophical shift from the voice as an instrument of beauty towards the voice as an instrument of sound was made evident in Marinetti’s 1916 work, "La declamazione dinamica e sinottica" (The Dynamics and Synoptic Declamation).

Exploring first his disappointment in the current declamatory style, Marinetti continued to explain his boredom with traditional vocal practices: “questa declamazione passatista, anche quando è sorretta dai più meravigliosi organi vocali e dai temperamenti più forti, si riduce sempre ad una inevitabile monotonia di alti e di bassi...” (“This declamation traditionalist, also when it is supported from the most wonderful vocal organs and the stronger temperaments, is always reduced to one unavoidable monotony of high and

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41 An online version of the “La declamazione dinamica e sinottica” is available at http://www.irre.toscana.it/futurismo/opere/manifesti/declama.htm
To remedy the monotony of such traditionalist practices, Marinetti proposed new conventions which addressed the dress of a performer, the face and eyes, the use of the arms, instrumental accompaniment, and other suggestions. What served the current study most, however, was the specific request to “disumanizzare completamente la voce, togliendole sistematicamente ogni modulazione o sfumatura. Disumanizzare completamente la faccia, evitare ogni smorfia, ogni effetto d'occhi” (“Dehumanize the voice completely systematically removing each subtlety and nuance. Dehumanize completely the face, avoiding any facial expression and any effects of the eyes”).

The request to dehumanize the voice by systematically removing all subtleties and nuances exemplified the futuristic desire to destroy the past and promote the future, but it also unlocked the door that withheld EVTs from the avant-garde. The same held true for the dehumanization of the eyes and face. Anhalt offered an explanation of Marinetti’s desire for the human voice.

Whatever these impressionistic allusions may have meant for him, he wanted the use of the voice to be different from ‘normal’ prosody or from its expressionistically intensified variants. He probably wanted various kinds of artificial or even abstract vocal utterances or delivery styles.42

Although the futurists did not live to see the fruition of their labor outside of the workings of Pratella and Russolo, later composers opened the door of separation, which allowed for the manifestation of EVTs alongside of nineteenth-century vocal traditions,

which held tightly to bel canto, liberating the vocal apparatus from the body, and allowing its exploitation through EVT.

Dadaism and Surrealism

Concurrent to the later stages of Cubism and Futurism was the eruption of World War I (1914-1918). In addition to targeted cities, countries, and mass civilizations, musical cultures across the globe were crumbling beneath the destruction of war. While the United States remained unblemished as it watched from a distance until April of 1917. Meanwhile, on the neutral grounds of Switzerland a new artistic movement was stirring: Dadaism.

Promoting an entirely negative philosophy resulting from the anguish and annihilation of World War I, Dadaism, the movement of protest founded by Tristan Tzara (1896-1963) on February 8, 1916 in a Zürich café, violently promoted the hatred of all music, poetry, art and politics exemplifying bourgeois values. The movement’s “anti-art” defied logic and rationalization in its rejection of traditional aesthetics and conventions. Whereas the art of Cubism sought to distort nature, the anti-art of Dadaism strove to destroy nature while enraging its audience. Language became an early victim of anti-art. Evolving from the artistic protest were Hugo Ball’s sound-poems, or poems without words, made up of various linguistic sounds. The appearance of the avant-garde poetry provided a significant example for later composers interested in the voice as an instrument of sound. However, Dadaism, though similar to Futurism “in its furious
onslaught on all established values...failed to offer a new art to replace the old.””\textsuperscript{43} It did, however, prepare “a well-manured ground for the flowering of such fertile stylistic vegetation as Surrealism,””\textsuperscript{44} as Slonimsky concluded.

Deriving much of its inspiration from the psychoanalytical explorations of Dr. Sigmund Freud (1856-1939), the artistic movement Surrealism juxtaposed the conscious with the subconscious and flourished especially between World War I (1914-1918) and World War II (1939-1945). The term Surrealism, coined by Apollinaire in his 1903 play \textit{Les Mamelles de Tirésias}, came to be associated with the artistic movement after the 1924 publication of André Breton’s (1896-1966) \textit{Manifesto of Surrealism}. Although the movement had its roots in Dada, it was not a complete proponent of the negative. While some pieces maintained the violence of the Dadaist, many works depicted beauty, although the common goal was still to shock the audience.

Aspiring to expose the unconscious and unite it with the rational through the oneiric (dream-like) state or automatism,\textsuperscript{45} the Surrealist often blurred the boundaries of reality. Through the joining of what appeared to be opposites, Slonimsky described Surrealism as an oxymoron “exemplified by such images as cold flame, thunderous silence, painstaking idleness, [and] quiet desperation.””\textsuperscript{46} Although the movement evolved first in the artistic and literary realms of Paris, it later manifested itself throughout the world in the 1920s and 1930s. Its impact on EVT\textsc{e}s, however, was felt in later decades.

\textsuperscript{43} Nicholas Slonimsky. \textit{Music Since 1900 5th}. (New York: Schirmer Books, 1994.): 1122.
\textsuperscript{44} Nicholas Slonimsky. \textit{Music Since 1900 5th}. (New York: Schirmer Books, 1994.): 1122.
\textsuperscript{45} Automatism is a core approach of Surrealism and synonymous with the free association used by Freud.
\textsuperscript{46} Nicholas Slonimsky. \textit{Music Since 1900 5th}. (New York: Schirmer Books, 1994.): 1172.
Vocal Implications: Dadaism and Surrealism

While Marinetti’s publication lobbied for the destruction of past vocal conventions, promoters of Dadaism lobbied for the destruction of nearly everything. Believing that the existing culture was evil and should be destroyed, the movement of protest generated a massive impact that rippled through every artistic circle. The most significant impact of Dadaism on the evolution of EVTs came through the creation and performance of Hugo Ball’s (1886-1927) sound-poems or “poems without words.”\footnote{Deborah Kavasch, “Extended Vocal Techniques: Then and Now.” Paper written for the 4th Symposium and Festival D\textit{onne} in Musica Gli Incontril Al Borgo 6-12 September 1999. Fondazione Adkins Chiti: D\textit{onne} in Musica Fiuggi Citt\`a, Italy.} Quoting Ball, Anhalt stated, “Language as a social organ can be destroyed without the creative process having to suffer. In fact it seems that the creative process even benefits from it.”\footnote{Istvan Anhalt, \textit{Alternative Voices: Essays on Contemporary Vocal and Choral Composition.} (Toronto: University of Toronto Press, 1984), 12.}

With the invention of what Anhalt and Kavasch referred to as “abstract phonemic language,”\footnote{Deborah Kavasch, “Extended Vocal Techniques: Then and Now.” Paper written for the 4th Symposium and Festival D\textit{onne} in Musica Gli Incontril Al Borgo 6-12 September 1999. Fondazione Adkins Chiti: D\textit{onne} in Musica Fiuggi Citt\`a, Italy.} the voice was freed from expression through traditional text, rendering any sound artistic, and inviting composers to utilize phonemes and non-sense syllables as compositional devices. This form of anti-art provided the perfect grounds on which the vocal “noise” of the avant-garde could legitimately play. As a result, Anhalt concluded, “This idea came to generate the ‘texts’ of many recent compositions for the voice.”\footnote{Istvan Anhalt, \textit{Alternative Voices: Essays on Contemporary Vocal and Choral Composition.} (Toronto: University of Toronto Press, 1984), 12.}
Although it was primarily a visual art and literary movement, Dadaism assisted in the destruction of the foundations of conventional vocal practices which in turn further leveled the grounds of standard practice making room for the re-invention of the voice as an instrument of sound and the formal introduction of EVT’s. Like Futurism, however, the impact was not immediately felt. Corroborated by these findings was Kavasch’s research, which explained the existence of “a delay of a generation or more between those writers and the composers who responded to similar themes and problems.” Nearly twenty-five years passed between the conclusion of Dadaism (1923), and the 1950s, the decade in which EVT’s began to emerge.

Dadaism started to subside in the years between the World Wars, but it did not lay dormant for long. It influenced the creation of Surrealism (1924) and had a significant influence on composers of later decades, namely John Cage. While Dadaism informed the development of Surrealism, very little documentation was found which specifically examined the significance of Surrealism on the development of EVT’s. Although more sources cited the sound-poem of Dadaism, resources specifically addressing Surrealism and vocal production were few and far between. Additionally, because Surrealism had no formal ending date, it was difficult to rule out the significance of its impact on any composers writing in the Post-war years of World War II.

What may be concluded of Surrealism’s impact on the development of EVT’s arguably existed through twentieth-century theatre and the poetry utilized by composers

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of the Surrealist movement. As Anhalt explained: “It is readily evident that the ideas of
these men influenced the emergence of such intuitive compositional approaches as
indeterminacy and to an extent also the orientation that regards music as a process.”52
Discussion of the effects of such writers as André Breton, (1896-1966), Samuel Becket
(1906-1989), James Joyce (1882-1941), and other writers including, Charles Baudelaire
(1821-1867), Arthur Rimbaud (1854-1891), and Stéphan Mallarmé (1842-1898) further
supported Anhalt’s investigation of EVT in his first chapter of Alternative Voices.
Specifically quoting the French playwright, Antonin Artaud’s (1896-1948)
manifesto, Theatre of Cruelty (1930), Anhalt had this to say:

What the theatre can still take over from speech are its possibilities for extension
beyond words, for development in space, for dissociative and vibratory action
upon the sensiblity. This is the hour of intonations, of a word’s particular
pronunciation.53

Additionally, Anhalt explained that Artaud’s Manifesto sought the inclusion of sounds
outside of the spoken word, a desire that resurfaced in the EVT of the 1950s and beyond.

He asks for the incorporation of cries and onomatopoeia into the language of the
stage and for the inclusion of Oriental expressions that change ‘words into
incantations.”54

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52 Istvan Anhalt, Alternative Voices: Essays on Contemporary Vocal and Choral Composition.
(Toronto: University of Toronto Press, 1984), 17.
53 Istvan Anhalt, Alternative Voices: Essays on Contemporary Vocal and Choral Composition.
(Toronto: University of Toronto Press, 1984), 17.
54 Istvan Anhalt, Alternative Voices: Essays on Contemporary Vocal and Choral Composition.
(Toronto: University of Toronto Press, 1984), 17.
Through his study Anhalt was able to connect the poetic and theatrical realm to that of EVT. Because “their instrument – language – underwent a momentous change,” so also would the singer through EVT.

**Beyond World War II: The Post-War Years**

The World Wars were instrumental in causing the continental migration of various groups of people, both soldier and civilian alike. Proponents of Cubism, Futurism, Dadaism and Surrealism shifted from continent to continent, seeking refuge and influencing artists and musicians during and after both World Wars. Composers such as Arnold Schoenberg immigrated to the United States bringing with them their unique musical conventions. Both classical and popular music in the United States began reflecting the political and social conditions of its people, specifically during the depression. Whereas some countries were imposing specific modern music regulations and bans, the musical environment of the United States welcomed the individuality of the foreign composer and the foreign composer welcomed the environment of experimentation.

After World War II, the United States enjoyed an economic boom that brought improved communication, advanced technologies, an expansion of the higher education system and a new zest for the exploration of sound. It was the perfect time in American history for EVT to emerge. Ives prepared the ears of the nation for the unusual. Cubism

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and Futurism presented the world with the concept of the collage, Dadaism offered the language of non-sense through its sound-poems and Surrealism provided a dream-like atmosphere capable of sustaining the bizarre sounds. With the stabilization of the world’s political climate, as Kavasch pointed out, “The late 1940s and 1950s saw a rebirth of interest in innovative composition for the voice with such composers as Cage, Berio, Stockhausen and others.”

Thus, EVTs in America developed in the hands of the avant-gardist, both inside and outside of the classroom, through aleatoric and indeterminate techniques from the 1950s forward, the advancing technologies of electronic music in the 1950s and 60s, the minimalism of the 1960s and 70s, and the classrooms of higher education from the middle of the century forward. For the first time in Western art music, Europe was looking towards the United States to see what its experimental environment would offer and the country presented John Cage.

John Cage (1912-1992)

Of the novel techniques that developed as a part of Dadaism, the principles of indeterminacy and aleatory created one of the more significant and lasting impacts on both American and European composers through the music of American composer John Cage. Cage, who was himself no stranger to the philosophical pulses of Dadaism, sought to make music from sounds that were typically not deemed musical and in doing so, achieved compositional liberation through the destruction of established conventions.

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In compositions aleatoric in nature, some of the artistic choices usually made by the composer were left to chance, and therefore not a product of specified composer intentions. Cage’s most notable composition utilizing this principle was *Music of Changes* (1951) composed through use of the Chinese book of oracles *I-Ching*.\(^{57}\) In indeterminate music, certain aspects of the music were also unspecified leaving no possibilities for mistakes, as Slonimsky explained:

In nuclear physics, the principle of indeterminacy states that it is inherently impossible to determine both the position and velocity of any subatomic particle beyond the liminal degree of accuracy. This notion has impressed some modern composers and moved them to apply the indeterminacy principle to composition with aleatory or stochastic elements. If the position of a note is indicated precisely, then the rhythm must be optional, and vice-versa. The performing musicians are free to improvise either the actual notes in the nucleus considered indeterminate, or its rhythm, but not both.

While both practices resulted in multiple consequences, the most obvious impact was felt in the realm of notation and interpretation.

Cage utilized the voice in his later compositions as a vehicle of sound, not necessarily beauty; EVT’s operated on the same premise. The abnormal did not exist, nor did anything non-musical; every sound had significance. Douglass Kahn stated, “After him there is no dividing line between musical sound and ordinary sound because all sound becomes music.”\(^{58}\) Cage took the opportunity to compose in such a way that both he and his audience could experience the sound of anything, including silence, in its

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\(^{57}\) The *I-Ching* is an ancient Chinese book of philosophy that is used by some to assist in making decisions. It is referred to in English as the “Book of Changes.” John Cage utilized the philosophy and methods of chance of the *I-Ching* to make artistic decisions while composing.

purest form. His work with the human voice was no different, as he explored the possibilities of what was and what could be. Cage’s use of EVT can be heard in his pieces One Voice (1958) and Solo for Voice I (1958), in addition to the aforementioned A Flower and Aria.

Luciano Berio (1925-2003)

As Deborah Kavasch’s research confirmed, the Italian composer Luciano Berio appeared to be one of the first composers to experiment with the human voice as a producer of sound and used his wife, American performer and composer, Cathy Berberian as his instrument. His work Sequenza III, written for Berberian, “stands out as one of the early pieces to use the voice in many ways that extend beyond traditional singing.” While he is not an American composer, he lived and worked in America for a brief time while composing many of his works for EVT.

Beginning in the 1960s, Berio began to exploit the voice for its sonic capabilities. In an interview, translated by David Ormond-Smith, Berio described his interest of the voice:

I have always been very sensitive, perhaps overly so, to the excess of connotations that the voice carries, whatever it is doing. From the grossest of noises to the most delicate of singing, the voice always means something, always refers beyond itself and creates a huge range of associations, cultural, musical, emotive, physiological, or drawn from everyday life, etc. "Classical" vocal music, whose implicit model was instrumental music, obviously transcended the bitumen

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of everyday vocal behaviour. As has already been said many times, the voice of a great "classical" singer is a bit like a signed instrument, which, as soon as you have finished playing, you put away in a case. It has nothing to do with the voice that the great singer uses to communicate in everyday life.  

Berio’s desire to eliminate the wall dividing the singing voice from the communicative voice used for speech and other everyday sounds was evident and in his work Sequenza III, Berio did just that. Providing an excellent summary of the EVTs present in the work, Kavasch discussed the piece:

The sound palette of this piece includes muttering, whispering, whimpering, whining, rapidly articulated singing, humming, laughing, coughing, sighing, gasping, tongue clicks, trills, and tremolos. These sounds, combined with descriptive instructions for performance such as “apprehensive, anxious, urgent, accusing, desperate, serene, calm, joyful, coy, giddy,” etc., suggest an almost schizophrenic personality represented in the music; the element of theater seems to predominate.

Anhalt explained his interpretation of Berio’s theatrical vocal work:

In Sequenza III Luciano Berio has created a vocal portrait of a woman, probably North American, who goes through a series of puzzling and disturbing vocal behaviors, making us wonder why she expresses herself in this manner and what she wants to convey to us. It seems that she is in no mood to address us through a coherent discourse, spoken or sung, and perhaps she is incapable of doing so.

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60 Luciano Berio, Two Interviews With Rossana Dalmonte and Bálint András Varga, trans. and ed. by David Ormond-Smith (New York: Marion Bayars, 1985), 94.
Berio’s compositional goal was “to assimilate and control not only every aspect of ‘classical’ singing, but also those aspects which, because of acoustic considerations and because they disturbed the message, had necessarily been excluded from tonal music.”63 It was through this piece that his ability to conquer such a task came to fruition. Demanding the technique of a highly trained singer and the unrestraint of a skilled actor, the EVT used to create the schizophrenic mental state of the singer are intense and emotionally driven. Sequenza III confirmed the establishment of the category of EVT as a permanent force in twentieth-century avant-garde vocal music.

**Electronic Music and EVT**

At the same time Berio was combining the everyday sounds of the voice with the sounds of the “classical” singer, he was also composing with the latest electronic equipment of his time. Advancing technologies occurring before, during, and after the wars, led to a wealth of new resources available to the composer, both in the United States and abroad, including the microphone and the tape recorder. While the microphone allowed for a more authentic recording of the human voice, the invention of the tape recorder allowed for its archiving and manipulation. A 1935 product of Germany,64 the tape recorder was introduced to the United States in the late 1940s and, like the phonograph and the record player before it, allowed for sound of any kind to be captured in real time. However, unlike the materials used to reproduce sound on the phonograph

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and record player, the tape recorder stored the information on magnetic tape opening up a world of new possibilities of the use of EVT.

Vocal Implications

In addition to these technologies, the appearance of numerous electronic studios and the French musique concrète\textsuperscript{65} fueled the fires of the avant-garde. Steven Connor, author of the article “The Decomposing Voice of Postmodern Music,” further explained:

With the development of recording and amplification technologies at the end of the nineteenth century, the division between "classical" or serious music and mass music began to take shape. However, both modern mass music and modernist music grew out of the encounter between the ideal of the free, expressive, bodily voice, and the captured, manipulable, disembodied voice of the phonograph and the telephone. The mass market in sound and music that rapidly grew up through the twentieth century, sustained by the technologies of amplification and reproduction, was centered on the human voice. Even more important perhaps than the gramophone's power to store and propagate the human voice was the power given by the microphone, which was the guarantee of the voice's integrity against the powers of "music," which was now diminished to the mere frame or occasion for the singer and his or her song. The voice became a powerful and marketable commodity.\textsuperscript{66}

The preservation of sound on magnetic tape considerably affected the use of the human voice through musique concrète, influencing further development in the realm of EVT.

For example, the American composer Richard Maxfield “collected 30 seconds of coughs

\begin{footnotes}
\item[65] Do I need to explain this? April 1948 in Paris by Pierre Schaeffer, a French radio engineer, “Experimenting with the newly invented magnetic tape, he found that a heterogeneous collection of songs, noises, conversations, radio commercials, etc. recorded on tape, presented a realistic phonomontage which may serve for actual composition by superimposing fragments of tape recordings in a polyphony of random sounds, splicing the tape in various way, running it at different speeds, or backwards, etc.”
\end{footnotes}
at a modern ballet recital and expanded these bronchial sonorities into a five-minute orchestral work entitled *Cough Music.*

EVTs manifested themselves in numerous works of composers utilizing electronic music. With the technology offered through early electronic music, composers had the opportunity to manipulate the voice to achieve any sonic desire while simultaneously creating a recording that could serve as an accompaniment. Of the American composers utilizing this technology alongside EVTs, Milton Babbitt is the most well known, having composed the familiar vocal example *Philomel* in 1964.

*Philomel* (1964)

Composed for and premiered in 1964 by Bethany Beardslee, *Philomel* was a work that combined both live performer (Beardslee) and a prerecorded tape of synthesized vocal material (Beardslee’s voice) and electronic sounds. The text of the work, derived from the story of Philomel found in Ovid’s *Metamorphoses*, eerily portrayed Philomel as a nightingale, recalling her rape, the cutting out of her tongue, and her transformation through the simultaneous voices of the live performer and that of the tape. As Susan McClary pointed out, “The violent distortions and ruptures of the singer’s voice in the piece bear witness to Philomel’s rape and to the fact that her tongue has been ripped out;”

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presented the EVTs of *Sprechstimme*, screaming and glissandi, and, like Berio’s *Sequenza III*, required the technique and drama of a skilled vocalist.

**Minimalism and EVTs**

Not only did the 1950s and 60s witness an explosion of technology, it also beheld a number of compositions utilizing EVTs through this technology including Stockhausen’s *Gesang der Jungen* (1956), Berio’s *Visage* (1958), and Pauline Oliveros’s (b. 1932) *Sound Patterns* (1961) to name but a few. The experimental phase in American music continued through its newest fascination, Minimalism. The impact of Minimalism on EVTs, however, did not present further evolution. With a return to the hierarchy established through tonality, some EVTs began to observe the gravitational pull of tonic and in many cases, like other instruments, adopted the minimalistic pulses of simplicity and repetition.

**Higher Education and EVTs: Extended Vocal Techniques Ensemble**

In the years following during and following World War II many American and emigrant composers found themselves teaching in universities throughout the United

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69 Coined first in the artistic world in 1965 by an art critic, the term minimalism was applied to those works that simplified materials and techniques and portrayed the object in an obvious manner, without reflecting the emotion or sub-consciousness of surrealism. The practice often included the repetition of simple elements in the work. Although the technique and resulting body of work was avant-garde at its inception, it was welcomed by both its users and audience and became very popular. Minimalistic composer Philip Glass, a Juilliard student who studied with Nadia Boulanger, wrote the opera, “Einstein on the Beach” (1976) using only solfege syllables for its text and primarily repeated arpeggios for its accompaniment. While in a sense, he redefined opera through his use of solfege syllables he did not further the exploitation of the human voice.
States, including such composers as Darius Milhaud (1892-1974), Paul Hindemith (1895-1963) Roger Sessions (1896-1985) as well as Schoenberg and Babbitt. This does not include a number of European composers who temporarily resided in the country as conductors and performers. Not only was the United States a haven of safety, it was a country in whose academic institutions provided freedom for its music instructors and students to explore both traditional and experimental performance and compositional techniques. The most notable of such institutions in the 1970s was the Center for Music Experiment at The University of California at San Diego. Dr. Deborah Kavasch served there as an archivist and founding member of the Extended Vocal Techniques Ensemble.

In an interview with Kavasch, she recalled her experiences with the center:

About 2 weeks after I started doctoral studies at UCSD, I was offered a research assistantship at the Center for Music Experiment. It was a research arm of the Music Department, was funded by Rockefeller and Ford Foundation grants, and had quite a few resident research fellows (including singers Linda Vickerman, and Philip Larson, and trumpeter Ed Harkins, plus several dancers, other instrumentalists, electronic music and computer researchers) and two doctoral RA’s including myself and John Celona. Since the Center had been in existence only one year starting in 1972 as a Project in Music Experiment, my duties as archivist in 1973 were supplemented by other activities, including joining in the newly formed Extended Vocal Techniques Group, later called the Extended Vocal Techniques Ensemble, which was officially an ORU (Organized Research Unit) at CME (Center for Music Experiment).

We had no official director, although Linda Vickerman often acted as spokesperson when we eventually went on tour and gave masterclasses, but it was quite a democratic organization. Our weekly rehearsals were all recorded, and we were encouraged by the CME director, Roger Reynolds, to organize the various sounds into categories and record them as a lexicon. The first lexicon used terminology from speech/phonetics that ultimately seemed too cumbersome. A second lexicon was recorded that used descriptive terminology and was organized
in three categories: monophonic, multiphonic, and miscellaneous (“car crash” was much easier to write than trying to figure out the technical term).\textsuperscript{70}

Serving as an assistant from 1973 to 1978 and then as an Associate Fellow from 1978 to 1979, Kavasch participated in the on-going process of extended vocal technique studies, which involved one and a half hour meeting sessions three days a week. “The ensemble’s sessions involving exploring a variety of vocal sounds, sharing sounds we had heard on recordings of ethnic music or sounds that we had come up with on our own, perhaps from childhood or later or just improvised on the spot.”\textsuperscript{71} The group not only “explored how to produce the sounds, but also began to use them in improvisational contexts.”\textsuperscript{72} Kavasch wrote the first notated work for the group, \textit{the Owl and the Pussycat}.

The ensemble and the center served as an influential place of study for EVTJs, especially in the mid 1970s.

In the early and mid-1970s there were frequent visitors to the Center, including many composers and performers from the US as well as other countries--Germany, Iceland, United Kingdom, Australia, Japan, et al. Julius Eastman, a baritone who had been performing Peter Maxwell Davies’ Eight Songs for a Mad King, visited briefly and shared with us the vocal techniques he was using and developing. Joan La Barbara, then a vocalist from the East Coast, presented a concert of music which surprised me with its similarity to the sound resources used by EVTE but differences in the musical contexts she created. At one point we heard recordings of Roy Hart, who specialized in multiphonic sound production linked with primal scream therapy. We heard of the David Hykes Harmonics Choir in New York, which specialized in overtone singing and chanting/droning similar to that of Tibetan monks.... Performance artist Diamanda

\textsuperscript{70} Composer and performer Deborah Kavasch, interview by author, 23 February 2008.
\textsuperscript{71} Composer and performer Deborah Kavasch, interview by author, 23 February 2008.
\textsuperscript{72} Composer and performer Deborah Kavasch, interview by author, 23 February 2008.
Galas first worked with extended vocal techniques by sitting in on some of our rehearsals to learn and practice sounds from our developing vocabulary.... I heard a 1981 performance of the British quartet, Electric Phoenix, and in a recent conversation with one of its founding members learned that they had formed in the late 1970s after hearing some of the work of EVTE.

The Extended Vocal Techniques Ensemble was dissolved in the early 1980s partially as a result of Kavasch’s moving from the area. However, the Center for Music Experiment still exists at UC San Diego under the Center for Research in Computing & the Arts. Both its contribution and the ensemble’s contribution to twentieth-century vocal music cannot be overlooked. The Center for Music Experiment, which Kavasch likened to the Florentine Camerata, not only brought together a catalogue of artists and well-known composers, but it also served as a catalyst for the global dissemination of EVT’s through the continuous exchanging of ideas. Its impact still resonates today through current classical and popular vocalists such as Joan La Barbara and performance artists such as Meredith Monk.

Conclusion

As Anhalt explained, “the years since the end of the Second World War constitute a period of intensive experimentation in music. This spirit has affected composition for the human voice.”73 The decades from the 1950s to the 1970s produced a number of vocal compositions utilizing nontraditional conventions, thereby allowing for the fruition of EVT’s in the United States. The results of such experimentation, as Anhalt concluded

were “a repertoire of remarkable, not to say bewildering, diversity.” While American music experimentation continued beyond these decades, the evolution of EVT-style found its culmination in those years through its composers and the successful American performers who brought them to the public.

The use of EVT-style is not a forgotten tool. Although some have argued that EVT-style met an abrupt ending at the conclusion of the 1970s, composers and performers such as Meredith Monk continue to successfully utilize EVT-style to evoke images and emotions that traditional vocal conventions fail to produce. Through her music, and the experimentation of others such as Joan La Barbara and Deborah Kavasch, EVT-style continue to serve not only the classical world, but also that of the entertainment realm through popular music, movies and TV/radio commercials such as those put out by Honda and Mercedes. While solo vocal literature still embraces the sounds of EVT-style, the world of choral music has successfully adapted the production of EVT-style, as may be observed in a number of new music ensembles and compositions from across the globe. Although the impact of EVT-style on music beyond the boundaries of classical repertoire has yet to be explored, the classification has significantly impacted the use of the voice as an instrument of sound.

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CHAPTER IV
NOTATION AND PERFORMERS

Notation and EVTs

In order to visually notate the new sonic vocabulary made available through EVTs, enhancement of the standard post-Renaissance notational system had to be made. The parameters of melody and the concept of form began to dissolve in the hands of post-Romantic composers such as Wagner; the aesthetics of harmony were being challenged through the works of Schoenberg. While the development of proportional notation was altering the universal readability of durational values for sound and silence, apart from the scattered descriptive word(s) such as whispered or *geflüstert*, a symbolic representation of timbre remained non-existent. However, according to Jean-Charles François, “timbre cannot be written. It can only be produced.” Nonetheless, composers desiring an exact realization of their aural imaginations gradually began pioneering notational systems filled with personalized graphics and symbols. When it was appropriate for interpreting a desired sound, composers utilized the pre-existing symbols. In other instances, they invented notation of their own bringing chaos into the realm of musical literacy for both professional and amateur readers. Although the conventional

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system of notation needed a face-lift to adequately reflect the emerging aural structures, it ended up with a total makeover beginning with Schoenberg’s *Pierrot Lunaire*.

Austrian composer, and later American citizen (1941), Arnold Schoenberg foreshadowed not only the coming of EVTs through *Pierrot*, but also, further notational metamorphosis. His notation for *Sprechstimme* did not disrupt the standard system but added to it, initiating the move towards timbral notation. Although Schoenberg utilized traditional summative notation for rhythm, as may be observed in Figure 1, he placed an “x” on the stem of each note-head to be expressed through *Sprechstimme*. While Schoenberg did not describe his notational alteration, he clearly articulated the effects of the proper execution and intended results of the correct production of *Sprechstimme* in the preface of the work, which is available in Appendix A.

At the same time Schoenberg was experimenting with the voice through *Sprechstimme*, American composer Charles Ives (1874-1954) was beginning to incorporate non-traditional vocal sounds in his music, especially that of the “half spoken” voice of *Nov. 2. 1920* (1922) and the speaking voice utilized in *Charlie Rutlage* (1920). As may be observed in the first measures of *Nov. 2. 1920* in figure 2, Ives utilized traditional notation with the inclusion of the term “half spoken” written over the vocal line. Performers realizing the piece would approach the melodic line in a similar fashion as the *Sprechstimme* of Schoenberg. In *Charlie Rutlage*, figure 3, the singing voice morphed into a speaking voice, reaching outside of the traditional boundaries formerly

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76 Many modernist composers following Schoenberg looked to his compositional techniques speculating why, with such radical departures from tonality, did he not also advance or alter rhythm.
established by Western art music. In comparison to Schoenberg’s *Pierrot Lunaire*, Ives utilized summative rhythmic notation for the vocal line in *Charlie Rutlage*. Whereas an addition was made to the stem to indicate *Sprechstimme* in *Pierrot*, in Ives’s work, the note-head was abolished from the note indicating recitation.

Following Schoenberg and Ives, early composers (utilizing what would later be termed EVTs) provided a map-like legend in the beginning pages of their scores to
interpret their unique symbols, if not a description of the sound achieved. Of such clear, early examples involving special notation was *A Flower* (1950) written for voice and closed piano by Schoenberg’s student, John Cage (1912-1992). Cage, the inventor of the prepared piano, composed an accompaniment realized through unconventional techniques, and a vocal line that, when properly performed, imitated various birds.
through the use of phonetic sounds [u] and [wa], and specific articulations as may be observed in Figure 4.

Similar to Schoenberg, at the beginning of his score, Cage offered an explanation of performance specifications for both vocalist and pianist, and while there were EVT's written in, the notation of the vocal line utilized conventional symbols. The piano
Note: According to the preface, the realization of measure 35 requires the pianist’s fingers to “play” on the front of the lid and quickly move to the back part of the lid. The vocal line specifically requests the singer to phonate “like a wild duck.”

accompaniment, however, does not do so and for this reason the piece is included as a representative example of the change notation was undergoing. The notation Cage used for his prepared piano accompaniment was efficient in that it simultaneously indicated rhythm, and the part of the fingers to be used for performance. Note in Figure 5 the use of staff spaces to indicate where on the closed lid of the piano the rhythmic accompaniment is to take place.

The notation of both Pierrot and A Flower allowed for the reconstruction of each piece’s distinctive attributes, and afforded listeners the opportunity to distinguish each work as it was initially composed, even when considering varying performers. While the notation for the accompaniment had to be adjusted to indicate how to achieve the desired non-traditional piano sounds in A Flower, the notation for the voice remained largely undisturbed. However, through new compositional techniques introduced by John Cage
in the 1950s, the world of notation underwent a sudden shift. Adding another layer of complexity to the realization of notated timbre, John Cage began utilizing the principles of indeterminacy and aleatory. As Martha Elliott explained in her book *Singing In Style*, notation continued to evolve as the result of furthered experimentalism:

> Experimentation in the 1950s and ‘60s resulted in two innovative and divergent paths: one attempted to notate every element of performance with more precision and control, and the other rejected precision by seeking more freedom in improvisation and indeterminacy. Composers developed new systems and
symbols for notation tempo, pitch, duration, intensity, articulation, and color, using them alone or in combination with traditional notation.\textsuperscript{77}

Additionally, Sharon Mabry stated in her book \textit{Exploring Twentieth-Century Vocal Music}, “Since there has been no attempt to dictate a frame or specific notion for indeterminateness, composers have been free to organize sound in quite varied and picturesque ways.”\textsuperscript{78} Examining aleatoric music, Mabry concluded:

In this case, the piece is allowed to find its own flow, texture, and aesthetic meaning by purposely giving general outlines rather than specific directions for melody, pitches, rhythm, tempo, dynamics, and coordination of events or musical lines. Even the length of the work may differ each time it is performed.\textsuperscript{79}

In the newly proclaimed freedoms of aleatoric and indeterminate compositions, both aural and notational possibilities for EVTs became endless, as can be observed in figure 6, page 1 of John Cage’s work \textit{Aria} (1958). However, much more detailed descriptions of the notations became necessary. In the preface to \textit{Aria} Cage explained his approach to notation:

\begin{quote}
The notation represents time horizontally, pitch vertically, roughly suggested rather than accurately described. The material, when composed, was considered sufficient for a ten minute performance (page = 30 seconds); However, a page may be performed in a longer or shorter time-period.\textsuperscript{80}
\end{quote}

\begin{thebibliography}{9}
\bibitem{80} John Cage, \textit{Aria}, (New York: C. F. Peters, 1965), preface.
\end{thebibliography}
With the introduction of indeterminacy and aleatory in the 1950s, standard notation was destroyed. No longer were the symbols of the post-Renaissance music able to convey the sounds of the avant-garde. Composers began utilizing the philosophy, “anything goes” to generate notation, which may be observed in a fragment of Luciano Berio’s (1925-2003) 1966 composition, Sequenza III (1966), figure 7.

The individual symbols for EVTs required a new thoroughness of explanation from the composers. In the case of Sequenza III, every symbol’s meaning was explained at the beginning of the score. Berio also explained the division of time on the score, the use of the singing voice versus that of the spoken voice, phonetically notated sounds, and the symbol for specific sounds, such as laughter, finger snaps, coughing. Berio concluded his preface with the following suggestion to the performer:

“Hand, facial and bodily gestures besides those specified in the score are to be employed at the discretion of the performer according to the indicated patterns of emotions and vocal behavior (tense, urgent, distant, dreamy etc.). The performer, however, must not try to represent or pantomime tension, urgency, distance or
dreaminess ... but must let these cues act as a spontaneous conditioning factor to her vocal action (mainly the color, stress and intonational aspects) and body attitudes. The processes involved in this conditioning are not assumed to be conventionalized; they must be experimented with by the performer herself to her own emotional code, her vocal flexibility and her ‘dramaturgy’.”

*Sequenza III* made a significant impact to the world of EVT's, as will later be discussed in more depth. Although the notational devices were newly invented, and clearly explained by the composer, not all composers offered such generous explanations of their intended sounds. As the symbols of notation continued to move further away from those of the common practice period, graphic notation, or music represented by graphics became popular. Cathy Berberian’s work *Stripsody* is an early example of

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graphic notation as may be observed in figure 8. Commissioned “on behalf of the Bremen Radio for the Festival of Contemporary Music of May 1966”\(^{82}\) and inspired by comic strips, *Stripsody’s* notation was represented by pictures and expressions from comic strips such as “Superman” and Charles Schultz’s “Peanuts.” Although Berberian prefaced the work by explaining the organization of the symbols on three lines representative of different pitch levels and those collected symbols, which represent “scenes,” the singer is free to interpret the symbols as if he or she was a “radio sound man, without any props, who must provide all the sound effects with his voice.”

The introduction of *musique concrète* and electronic music in the United States did not provide a resolution to the notational struggles of EVTs. The accompaniment to Milton Babbitt’s (b. 1916) *Phonemena* (1969-1970) served as a perfect example of a work that was unable to be notated. When considering the purchase of the score,

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performers had the option of buying a tape of electronic sounds to serve as accompaniment, or the angular serialistic vocal line of phonemes could instead, be accompanied by piano. Although his use of summative rhythm allowed for ease of reading with consideration to the voice, an initial challenge could be found in the interpretation of the text created by phonemes. Coupled with the seemingly random electronic sounds on the tape, the piece was not for the vocally inept.

The attempt to dictate every desired sound within the musical score has never existed without conflict. Jean-Charles François contested,

It is in taking notation seriously that one destroys it as a viable system, in making it a total representation, that is, in making it unreadable and overspecialized, contingent upon a local context and a private communication: in fact, nonrepresentative of generalized universal principles. Our system of notation implies, for the perception of pitches over time, a neutralization of timbre into homogeneous standard objects. The correctness in the perception of the score in this way is always guaranteed.\(^83\)

Avant-garde composer Trevor Wishart viewed the strict use of conventional practices confining: “A perception and conception of music focused through notation can lead to an abstract formalist approach.” Additionally, “a preoccupation with conventional notation can lead us into formalism, a situation where there is no longer any experiential verification of our theories about how to compose music.”\(^84\)

These differing philosophies active throughout the decades of the twentieth-century, though not necessarily in total conflict with each other, co-existed prior to and

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during the blossoming of EVTs. Both supported positions common to composers: the
first avoiding the overspecialization of the notational system for ease of readability and
familiarity, and the second striving for freedom of expression through the avoidance of
formalism. The existence of the philosophical disagreements, however, did not provide a
solution for the lack of standardization common to contemporary notational devices.
François reiterated the purpose behind the musical score:

In this century of abundance and diversity of musical productions, notation can
first be considered as the tool, which allows the musician, from one minute to the
next, to pass from one music to another, from old styles to new music, from one
living composer to another. Notation is taken here as an instantaneous
representation of musical ideas, and its instantaneous reading allows for its
automatic realization.85

However, Wishart’s “inevitable clash of values” occurred “when the classically trained
musician comes into contact with music from an alien tradition,”86 that of contemporary
notation and EVTs.

The lack of standardization in contemporary notation causes initial confusion and
discouragement for those singers trained in interpreting the notational system of the
common practice period, though still desiring to explore EVTs. As one might imagine,
the main obstacle for professionals and amateurs alike is the process of interpreting the
symbols that visually represent the sound, without even considering the challenges of
recreating experimental vocal productions. Mabry concurs, stating, “Mental patterns,

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85 Jean-Charles François, “Writing Without Representation, and Unreadable Notation,”
formed through years of reading traditional notation, are turned upside down.” The level of literacy is diminished once again to an elementary status; the experienced musician is reduced to a beginning reader. Jean-Charles François claims:

What is at stake here is not the degree of complexity of the sound object to be represented, but the ability of the musical community to recognize this sound object, no matter what the context in which it will appear, and the ability of the performing community to reproduce the sound object each time it is called for.

Without a standard system for contemporary notation, composers’ works will continue to be misinterpreted, and well-trained singers will by-pass much of the “classical” twentieth-century vocal repertoire.

Independent of various schools of thought, the reasoning behind the drastic notational makeover is justified through the composer’s desire to express specific characteristics that words or other compositional devices could not. Furthermore, as will be explored in the next chapter, the post-war cultural climate of the country welcomed the individualism. Robert Cogan, author of the essay “The Art-Science of Music after Two Millennia,” maintained, “to wholly predetermine and notate every detail of sonic nuance (in addition to everything we now notate) would be to create a monstrosity of control and complication, a notation at once unreadable and unperformable.” Composer Cornelius Cardew (1936-1983) without apology has been quoted as saying, “A composer

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who hears sounds will try to find a notation for sounds;” composers utilizing EVTs in twentieth-century America did just that.

**Performers of EVTs: Past and Present**

Although interpreting EVTs via contemporary music notation often proves to be an extreme challenge, performers, both past and present, have accepted the task and excelled in the realization process. As was common for many pre-twentieth-century composers, contemporary composers also write vocal music for specific vocalists, and as Martha Elliott points out, “specific singers with unusual abilities.” She continues explaining, “In some situations a particular voice inspires a composition. In others a number of factors may come into play, including the politics of commissions, performer’s availability, and venue possibilities.” Such is the case of Cathy Berberian whose unique sonic arsenal inspired compositions for her, not only written by her husband, Luciano Berio (1925-2003), but also numerous other composers including Igor Stravinsky (1882-1971), Darius Milhaud (1892-1974), William Walton (1902-1983), John Cage (1912-1992), Roman Haubenstock-Ramati (1919-1994), Bruno Maderna (1920-1973), Henri Pousseur (b. 1929) and Sylvano Bussotti (b. 1931).  

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Cathy Berberian (1925-1983)

Although Cathy Berberian’s love for music began with opera at the early age of 7, the American born performer, composer and wife of composer Luciano Berio, studied mime, writing and voice. With the combination of her technical abilities as a vocalist and her dramatic flair, she grew to become one of the most illustrious figures of contemporary vocal recitalists in the twentieth century. Known as a “virtuosic interpreter of new music,” Berberian’s inimitable vocal abilities and reputation helped to establish her as the most recognized performer of EVT. Viewing the voice as an instrument with unlimited possibilities, Berberian’s vocal palette encompassed the solid technique of a classically trained singer, the subtle nuances of a folk artist, and the potential to make the everyday sounds of life morph into something musical through EVT.

Berberian was not concerned with the potential of damaging her instrument through the performance of EVT. “Mine is not a natural voice in the sense of a Flagstad or a Gigli.” However, she acknowledged, “Only with a strong classical background can you know the rules that prevent your voice giving out.” In reference to her own instrument, she believed her voice was not sizeable, but rather well suited for the lighter orchestras, in need of amplification. She was a witty, intelligent performer who

captivated audiences across the globe through a body of literature that she believed was “defined by works whose model is Schoenberg's *Pierrot Lunaire.*”

She enjoyed tremendous success through contemporary music, both as a performer and as a composer. Her untimely death in 1983 saddened the world of Contemporary Music. Her presence brought life and liberty to the sounds of so many, most notably that of her husband through his compositions *Sequenza III* and *Circles* among others. The colorful sound palette of her voice continues to resonate as a resource for performers of EVT. As Rebecca Young-Hie Kim said, “her contributions to postwar music are amply and unequivocally evident, and the historical impact of her activities continues to be highly appraised, an inspiration to generations to come.”

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**Jan DeGaetani (1933-1989)**

A student of the Juilliard School, American mezzo-soprano Jan DeGaetani was known most for her precision, clarity, wide range and EVT. Specializing in avant-garde music, she performed and recorded such works as Schoenberg’s *Pierrot Lunaire,* and premiered George Crumb’s (b. 1929) *Ancient Voices of Children* (1970) and his haunting work *Apparition* (1979). The Crumb/DeGaetani collaboration proved to be a fruitful one as she premiered many of his vocal works. An even stronger collaboration, though, existed between her and Gilbert Kalish, her accompanist; the two worked together for over three decades.

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Similar to Berberian, her unique vocal capabilities inspired works from many composers in addition to the aforementioned George Crumb, such as Elliott Carter (b. 1908), Pierre Boulez (b. 1925), Jacob Druckman (1928-1996), Sir Peter Maxwell Davies (b. 1934), and Richard Wernick (b. 1934). Her recorded works total over 60 projects. She also had a smaller instrument and focused on the new music of the period, rather than opera, while performing lighter repertoire of the Medieval and Renaissance periods, in addition to nineteenth-century Lieder.

Jan DeGaetani suffered health impairments, ultimately losing her battle with leukemia at the age of 56. Her legacy lives on however, in the voices of many of her Eastman School of Music and Aspen Music Festival students, including that of Renee Fleming, Dawn Upshaw, William Sharp and Karen Holvik.98

Joan La Barbara (b. 1947)

Classically trained performer and composer Joan La Barbara began exploring her voice and what would come to be known as EVTs by way of curiosity.

...At a certain point I began to become more and more aware of contemporary music and heard instrumentalists who were working with extended technique and really trying to uncover new ideas and new sounds and I was very intrigued- and I didn’t hear any singers doing that at that time. There was, of course, the work of Cathey [sic] Berberian, but to my mind it’s a sort of beginning of extended technique; she used things like laughing and coughing, gasping, a little but of inhaled singing- so it was sort of rudimentary. I was curious about it and wondering why no one else was doing it.99

98 A brief biography of Jan DeGaetani is available at http://esm.rochester.edu/places/portraits/degaetani.php or at http://artofthestates.org/cgi-bin/piece.pl?pid=3
The curiosity and exploration paid off for La Barbara, whose statement, “voice is the original instrument,” is cited in numerous interviews, biographical reviews and serves as the title of her seminal work on the 1975 CD archiving the multi-faceted instrument she possesses. Like Berberian, she also has experienced success as a composer, collecting multiple awards in the United States and Europe, including the 2004 Guggenheim Fellowship in Music Composition. Her resume also boosts of seven National Endowment for the Arts fellowships among numerous other honors and recordings.

In addition to befriending and performing with her mentor John Cage (1912-1992) during the earlier stages of her career, La Barbara also performed and recorded with Philip Glass (b. 1937), one of the most influential composers of the second half of the twentieth-century. She premiered vocal works of American composers inspired by and written for her special talents. Her work includes recordings of American landmark compositions such as John Cage’s “Solo for Voice 45,” Robert Ashley’s opera “Now Eleanor’s Idea,” and Philip Glass and Robert Wilson’s “Einstein on the Beach.” La Barbara has also served in multiple faculty positions, including those at the California Institute of the Arts, Hochschule der Künst in Berlin, The College of Santa Fe and the University of New Mexico. Though her resume continues to grow, it cannot do justice to the unique sonic capabilities of her vast EVTs vocabulary.

Bethany Beardslee (b. 1927)

Also known for her realizations of contemporary vocal music, American soprano Bethany Beardslee premiered numerous works of American composers. Though her
specialty existed outside the realm of EVTs, she was the voice American composer Milton Babbitt (b. 1916) utilized in the composition *Vision and Prayer* (1954) and the work *Philomel* (1964), a composition whose accompaniment is a tape of electronics and Beardslee’s own voice.

Were there no Bethany Beardslee, she could not have been invented; the innocent Michigan lass who went to Juilliard and sang in Mozart operas was soon thereafter to be hailed for her performance of works from the French repertory by the Francophile Virgil Thomson... She sang the songs of Schoenberg, Webern, Berg, Krenek, and a range of composers from here at home to abroad. These were often first performances, as of the Webern Opus 25 songs, of which Bethany gave the world premiere in New York in 1952, eighteen years after the songs were composed. Her repertory ranged not only across continents but across centuries, from that of the New York Pro Musica to the first work for soprano and synthesized tape, my *Vision and Prayer*.

All of this she performed with what Martin Bernheimer has described as a "silvery, lyric soprano" so effortlessly and punctiliously as to have been achieved only by sedulous effort, intense concentration, and musicianship invented by her.

Bethany had to be heard to be believed...[^100]

Although her status as a singer boasted a mastery of works of Viennese composers, such as Schoenberg, Webern, and Berg, like her vocal contemporaries listed above, her voice served music of earlier centuries as well. Beardslee also maintained a successful teaching career including appointments at Westminster Choir College, The University of Texas at Austin, The University of California at Davis, Brooklyn College and City University of New York. Even though she officially retired in the early 1980s,

she continued to perform with the voice that came to be known as, “indissolubly associated with the music of our time.”  

We can only be extraordinarily grateful for having been able to hear her as she bestowed that artistry upon the works of past centuries and the classics of our own century. There is no doubt, however, that her composer-colleagues will be eternally indebted to her for bringing their own works to life. To have heard one's own work performed by Bethany Beardslee was to have received a once-in-a-lifetime performance.


Composer and performer Dr. Deborah Kavasch is an authority on EVTs; the doctoral research assistantship for her Ph.D. (1978) was housed in the newly established Center for Music Experiment, on the campus of the University of California, San Diego. In addition to serving as archivist for the Center, she also became a founding member of the Extended Vocal Techniques Ensemble, “a group of musicians interested in exploring the musically expressive capacities of the human voice through study of other musical cultures and improvisation.”

Working with such renowned contemporary composers as Robert Erickson, Roger Reynolds, Kenneth Gaburo, Pauline Oliveros and Bernard Rands, Kavasch composed the first notated work for the EVT Ensemble, *The Owl and the Pussycat*, in 1974, based on the poem of Edward Lear. Her dissertation entitled *Requiem* (1978) was followed by

102 Richard Goode as quoted in the liner notes to the album *A Tribute to Soprano Bethany Beardslee*. CRI, Inc. CR 724, 1969.

Earning numerous grants and residencies, the gifted composer is herself, versed with the vocal gifts to tackle both traditional and contemporary vocal works. The Los Angeles Times described her as a “multifaceted, multi-timbral vocalist” with “articulate radiance,” while the Cleveland Plain Dealer boasts of her “astonishing range and agility.”\textsuperscript{104} The singer and composer frequently premieres new vocal literature and conducts presentations on new music at symposia and festivals both nationally and internationally. Her voice can be heard on the CDs of her original works, The Dark Side of the Muse, and Fables & Fantasies under the TNT Classical Label. She continues to work as a Professor of Music Theory/Composition and Voice at California State University, Stanislaus.

Meredith Monk (b. 1942)

Meredith Monk is not considered a product of classical training per se, “nor is she a frighteningly accomplished modernist-mimic in the manner of Cathy Berberian.”\textsuperscript{105} The American composer, singer, dancer and choreographer Meredith Monk pioneered EVTs in the tradition of folk music. Using her unique vocal effects to express deep-seated

\textsuperscript{105} Phil Johnson, ”Stretch Your Ears: Meredith Monk,” the newspaper The Independent, 6 December 2002. Online access to The Independent is available at http://www.independent.co.uk/arts-entertainment/music/features/stretch-your-ears-meredith-monk-610106.html
emotions and ideas, Monk has successfully enthralled eclectic, avant-garde audiences worldwide.

Born in New York and educated in music, dance, and theater at Sarah Lawrence College (BA, 1964), Monk graduated and returned to the performance art and avant-garde musical scene of New York. Since 1965, the experimental time of pioneering effects for her voice, Monk’s exceptional EVT have grown to include a plethora of sounds that call upon “glottal stops, Amerindian-style vibrato, nasal singing, nonsense syllables and child-like vocal tones, sounds featured in Balkan singing, Tibetan chanting and other non-Western traditions.”


I taught Dolmen Music to six singers at Houston Grand Opera, and they said, “You want to hear all the places that we've been taught to cover up. We've been taught to smooth over everything, and that's exactly what you want to hear in our voices!”

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The categorization of Monk’s work is difficult. Although some of her early influences included Surrealism, her work also contains minimalistic tendencies. However, she rejects the title of “minimalist” because it does not connect to the “emotionality” of her music. She defies classification stating, "I've always fought against being categorized. I think everything feeds everything else." Her vocal work and its “minimalist pulses” resonate across the blurred boundaries of late twentieth-century vocal music into the world of popular music, most notably through the well-established pop singer Björk (b. 1965). Although Monk’s work may be viewed from a cross disciplinary perspective, her unique vocal effects highlight her importance as a prominent figure in vocal music of the second half of the twentieth century; she was honored with the MacArthur Foundation Genius Award in 1995.

Extended Vocal Techniques

One can only imagine the experiences of late sixteenth and early seventeenth century singers as they tackled the “new music” of the day. With Caccini’s Le nuove musiche, the documentation for the need of a singer to develop an expressive palette was recorded, and the trill became a standard vocal ornament required for authentic Baroque performance practices. The trill itself however, was not often written into the score, but left up to the singer to add. The evolution of existing instruments, the creation of new

110 Icelandic pop star Björk has become internationally known for her unique vocal work.
instruments and the development of specific genres leading up to and throughout the common practice era (Bach to Brahms) provided many new compositional forms and techniques to composers. Once these opportunities appeared as exhausted, however, composers took the occasion to experiment not only with sound, but also, with notation. While the modernism of the twentieth-century shattered previously accepted standards of sound and notation, the development of EVT's shifted the musical perspective from the singer to the voice as an instrument. In the United States, where its musical identity was defined by experimentalism, EVT's flourished through singers such as Cathy Berberian, Jan DeGaetani, Bethany Beardslee and groups such as the Extended Vocal Techniques Ensemble. However, with current composers and performance artists such as Joan La Barbara and Meredith Monk, the use of EVT's has blurred the boundaries between “classical” and “popular.” In spite of the challenges of classification, notation for EVT's continues to be an individualized art.
CHAPTER V

CONCLUSION: A HISTORY UNFURLED

Since the time of the Florentine Camerata and Caccini’s efforts to redirect the singer’s voice towards a more declamatory vocal style in *Le nuove musiche*, vocal literature evolved throughout each of the musical periods of history. Cultural, societal and political events furthered the development of specific genres and conventions, while composers, performers and pedagogues shaped the sound of the voice through the compositions of their contemporaries and those of their musical ancestry. However, according to Luigi Russolo, “With the invention of the modern machines, noise was born.”

In his Futurist Manifesto of 1913, Russolo expressed to his contemporary “My Dear Balilla Pratella, great futurist composer,” the evolution of music and the introduction of noise:

Life in ancient times was silent... The first musical sounds...were a new astonishing, miraculous discovery.... The art of music at first sought and achieved purity and sweetness of sound; later, it blended diverse sounds, but always with the intent to caress the ear with suave harmonies. Today, growing ever more complicated, it seeks those combinations of sounds that fall most dissonantly, strangely, and harshly upon the ear. We thus approach nearer and nearer to the MUSIC OF NOISE.

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112 Opening salutation from the manifesto.
The great inventions and the industrialization of the turn of the twentieth century influenced not only life, as its participants knew it, but also music as its participants heard it. The invention of the phonograph, and the telephone allowed for the capturing of the human voice, permanently separating it from its body of origination and foreshadowing future innovations. The evolution of machines reduced the stresses of life in one sense, but served as a catalyst for greed in another bringing about world clashes that impacted every expressive representational form of art. Artists of all disciplines were scattered throughout the world’s territories, while mankind’s artistic expressions revealed the impressions of the constant undercurrents of violence leaving the worlds of literature, visual arts and music permanently changed. The twentieth century proved to be a period of rapid change embracing the exploitation of nature, man and his abilities.

No single discipline endured more transitions than the others, as each reflected the life and times of its creators in its unique way. What was common between art, literature and music, however, was the entity of the human voice as a tool of exploitation in many of the “isms” of the century. Cubism assisted in the distortion of the natural voice, while Futurism dehumanized the voice. Dadaism destroyed traditional vocal practices through literature and exploited the human voice as an instrument of sound. Surrealism brought to fruition the voice of the subconscious and juxtaposed it with that of reality. Electronic music and musique concrète continued the capturing of the human voice in real time, but the magnetic tape on which it existed allowed for further destruction of what some
believed to be the “soul” of an individual. Further exploitation of the technologies of electronic music introduced minimalism, through which early experimentations with the human voice occurred. While the blossoming of EVT's was not solely an American development, the United States served as the host for experimentation worldwide. Although the first century of the United States musical history contained American composers looking to Europe to stabilize its identity, from the middle of the twentieth century forward Europeans looked to America to see what was next to come.

EVT's were a twentieth century product of the constant need to explore, exploit and experiment. In tracing the development of the category of EVT's, it became obvious that while the United States was commonly viewed as the home of music experimentalism, one could not rightfully state that it was the center of development for EVT's. Schoenberg, although later becoming an American citizen, produced a foundation on which EVT's could work and his contemporary Ives utilized the voice in innovative ways. However, it was the influence of the Italian futurists that would later tear the voice apart, and the Dadaists in Switzerland that exploited the sounds of the voice. The Italian Luciano Berio gave EVT's a psychological playground through which they could logically exist, while French sound engineer and composer Pierre Schaeffer (1910-1995) provided the materials through which composers such as Stockhausen, Babbitt, Glass, and others could create. However, what is distinctly American about EVT's are the American performers through which sounds were created.

113 The human voice during early decades was thought to be representative of the soul. Therefore, it was unfathomable to many that the phonograph and telephone could allow the transfer of the soul from place to place without the body.
The virtuosic voice of Cathy Berberian served as inspiration for a number of international composers, as did the voice of Jan DeGaetani and Bethany Beardslee. Joan La Barbara, a pioneer of a number of EVTs, opened the world of classical voice to further sonic possibilities while Deborah Kavasch and the Extended Vocal Techniques Ensemble of the Center for Musical Experimentation brought the classification formally into the labs and classrooms of higher education. Although a new century has begun, it is clear that EVTs cannot be called a product of the past. The music of Meredith Monk, a performer also known as a pioneer of EVTs, allows EVTs to pass seamlessly through the worlds of classical, popular and folk music and continues to influence artists in all three classifications of music, both amateur and professional alike, including Icelandic recording star Björk. As Kyle Gann commented, “America is not an empty vessel into which the musics of other societies may be poured but a culture with its own genius, innovations, and traditions, now long since capable of influencing other cultures as they have influenced us.”

During the time of Anhalt’s publication *Alternative Voices*, the writer confirmed, “Composition for the voice seems to command continuing strong interest among composers with a wide variety of aesthetic orientations, and this has resulted in a steady succession of new works.” Many of the new works have intrigued composers such as Michael Edward Edgerton (b. 1961) who, through EVTs, explores the science of the voice. It is therefore essential that future musicologists undertake the responsibility of

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further critical exploration of EVT's in the United States and abroad, for the classification remains an active part of today’s global culture.
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Die in der Sprechstimme durch Noten angegebene Melodie ist (bis auf einzelne besonders bezeichnete Ausnahmen) nicht zum Singen bestimmt. Der Ausführende hat die Aufgabe, sie unter gutern Berücksichtigung der vorgezeichneten Tonhöhen in eine Sprechmelodie umzuwandeln. Das geschieht, indem er

I. den Rhythmus haarscharf so einhält, als ob er sänge, d. h. mit nicht mehr Freiheit, als er sich bei einer Gesangsmelodie gestatten dürfte;

II. sich des Unterschiedes zwischen Gesangston und Sprechton genau bewußt wird: der Gesangston hält die Tonhöhe unabänderlich fest, der Sprechton gibt sie zwar an, verläßt sie aber durch Fallen oder Steigen sofort wieder. Der Ausführende muß sich aber sehr davor hüten, in eine *singende* Sprechweise zu verfallen. Das ist absolut nicht gemeint. Es wird zwar keineswegs ein realistisch-natürliches Sprechen angestrebt. Im Gegenteil, der Unterschied zwischen gewöhnlichem und einem Sprechen, das in einer musikalischen Form mitwirkt, soll deutlich werden. Aber es darf auch nie an Gesang erinnern.

Im übrigen sei über die Ausführung folgendes gesagt:

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I. Keeping the rhythm in such a hair sharp way, as if he would sing, i.e. with no more liberty, than he might permit himself with a singing melody.

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The following is in all other respects said about the execution:

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