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The Transformative Power of Voice in George Bernard Shaw's Pygmalion

by

Nicole L. Scimone

A Master's Thesis Submitted to the Faculty of

Montclair State University

In Partial Fulfillment of the Requirements

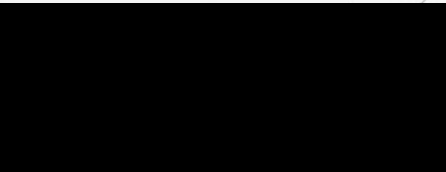
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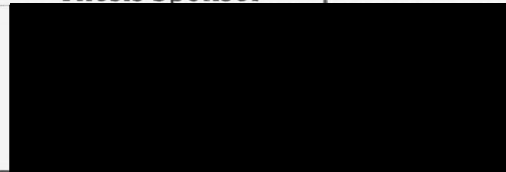
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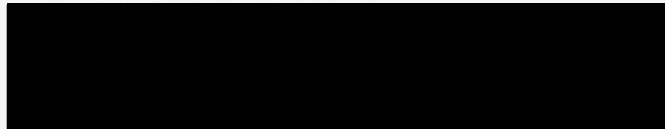
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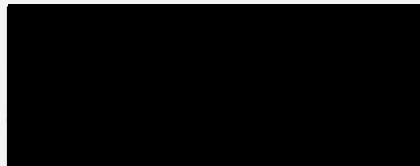
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THE TRANSFORMATIVE POWER OF VOICE IN
GEORGE BERNARD SHAW'S *PYGMALION*

Abstract

George Bernard Shaw's *Pygmalion* is first and foremost a play about voice, particularly about the voice of flower-girl-turned-lady Liza Doolittle. Though the voice is not Liza's true self, it is the way the Liza's identity can be expressed, and thus an important marker of identity transformations in the play. This work explores three different ways in which Shaw discusses voice in the play: as singing instruction, scientific methods for recording voice, and vocalizing automata and dolls.

First, the play is deeply influenced by Shaw's background in singing instruction from his childhood. Shaw learned voice study from his mother's beau, a singing teacher named Vandeleur Lee, whose treatise on voice informed Shaw's Irish nationalist sensibilities, his own writer's voice, and most importantly, his ideas about how voice could be systematically transformed. Like music, science provides ways to understand and discuss voice; through engineering feats such as phonograph recordings and laryngoscope inspections, scientists could analyze and observe the voice. *Pygmalion's* male lead Higgins embraces and even idolizes such scientific devices, which allow him at once to transform and control his subject. Furthermore, the use of this science in Edison's invention of the talking doll is a clear source for *Pygmalion*, in which the language of automata is specifically used. Shaw understood voice in terms of its

applications in singing instruction, engineering, and robotics, and presented each of these concepts in his play.

The transformations in *Pygmalion* are accomplished primarily through the science of voice study. Shaw knew how singing and voice training transformed his own family in its social connections and structure, and he metaphorically explores this in Liza's transformation from flower girl to lady. Voice had the ability not only to transform, but also to animate. As such, voice manipulation, through training and recording, was considered powerful in the nineteenth and twentieth centuries, particularly to Shaw, who dealt intimately with science as his hobby and music as his family's occupation. Voice meant identity, and voice analysis meant an ability to control and change the voice—an ability which Liza actively practices.

Shaw's portrayal of Liza as a "talking doll," is herein placed in its 1912 context by examining European and American interest in vocalizing dolls and automata. Shaw was knowledgeable about talking dolls and actively shaped *Pygmalion* as a narrative about automata. This kind of scholarship provides new opportunities for reading *Pygmalion*. Combining literary and historical approaches and exploring topics in the histories of both music and science, this work gives voice to some previously underdeveloped topics in Shavian studies.

THE TRANSFORMATIVE POWER OF VOICE IN
GEORGE BERNARD SHAW'S *PYGMALION*

A THESIS

Submitted in partial fulfillment of the requirements

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by

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Introduction

George Bernard Shaw's *Pygmalion* (1912) is first and foremost a play about voice. After Henry Higgins, a phonetics professor, claims that he can change Liza Doolittle, a flower girl, into a lady by changing her voice, he explains to his mother, "You have no idea how frightfully interesting it is to take a human being and change her into a quite different human being by creating a new speech for her" (Shaw, *Pygmalion*, *Google Books* 2.82).¹ This response raises all of the central questions that the play undertakes to explore. Can one person really transform another person? Can this transformation occur just by changing a person's vocal patterns? Should this act be "frightfully interesting," or does such an obsessive interest pose ethical problems? George Bernard Shaw draws on his own experience in vocal music and the science of voice recording to answer each question in his play. Of course, each answer seems only to open more questions. Even the ending of the play, changed numerous times both by Shaw and others, reminds readers that these questions are complex indeed.

Though Higgins is quite sure of his ability to change Liza's voice, it is not until he begins to listen to her that he realizes the true power of the voice to convey one's identity. In their final scene, Higgins and Liza debate whether identity and the voice are the same:

HIGGINS: I have learnt something from your idiotic notions: I confess that humbly and gratefully. And I have grown accustomed to your voice and appearance. I like them rather.

LIZA: Well you have both of them on your gramophone and in your book of photographs. When you feel lonely without me, you can turn the machine on. It's got no feelings to hurt.

HIGGINS: I can't turn your soul on. Leave me those feelings; and you can take away the voice and the face. They are not you. (Shaw, *Pygmalion*, Nook file 5.57)

Although Liza suggests that the voice records are enough to satisfy Higgins's loneliness, she knows that there is a difference. She is not her voice. At least, she is not the grooves in wax which record her voice's pitch, tone, and volume. Higgins too understands this, saying that the feelings are more "you" than her voice and face. However, without her voice, Higgins would never have been able to "have learnt" anything at all from Liza. Voice is central to establishing one's identity, even if voice is not synonymous with identity. Her speech, including both the way she vocalizes and the content of what she says, is what makes her different from the "scores of American millionairesses...the best looking women in the world" whom Higgins has taught before (Shaw, *Pygmalion*, Nook file 2.22). He affirms that the voice is not Liza's true self, but rather the way that Liza's identity can be expressed, and thus the vehicle by which people perform various selves.

This work explores three different ways in which Shaw discusses voice in *Pygmalion*. The play is deeply influenced by Shaw's background in singing instruction from his childhood. Shaw learned voice study from his mother's beau, a singing teacher

named Vandeleur Lee, whose treatise on voice provided a model for nationalist sensibilities within the Shaw household, informed Shaw's writer's voice, and most importantly, shaped Shaw's ideas about how voice could be systematically transformed. Like music, science provides ways to understand and discuss voice; through engineering feats such as phonograph recordings and laryngoscope inspections, scientists could analyze and observe the voice. *Pygmalion's* male lead Higgins embraces and even idolizes such scientific devices, which allow him at once to transform and control his subject. The third manifestation of voice in the play is through a developed discussion of automata. Edison's invention of the talking doll is a clear source for *Pygmalion*, in which the language of automata is specifically used. Shaw understood voice in terms of its applications in singing instruction, engineering, and robotics, and presented each of these concepts in his play.

This is significant because while Shavians have discussed accent and identity in Shaw's *Pygmalion*, little research has explored the larger issue of voice. Developing Liza's speech is a goal of nearly all of the play's characters. Higgins's mother, Mrs. Higgins, disapproves of Liza's small talk; Liza's father, Alfred Doolittle, recommends whipping to stop her backtalk; Mrs. Pearce, Higgins's housekeeper, wishes to prevent her from cursing; and, of course, Higgins and his fellow linguist Colonel Pickering aim to teach Liza a new language through phonetic science. While the content of Liza's speech is questioned by most characters, improving the voice itself is the focus for Liza, Higgins, and Pickering. The voice lessons Liza receives represent the *fin de siècle* training used by phoneticians and singing teachers. Because of his interest in phonetic science and his familiarity with singing teacher Vandeleur Lee, Shaw knew both worlds and clearly

refers to them in his play in order to develop his theme of the transformative power of the voice.

The transformations in *Pygmalion* are accomplished primarily through the science of voice study. Shaw knew how singing and voice training transformed his own family in its social connections, and he metaphorically explores this in Liza's transformation from flower girl to lady. Voice change became a priority not only to singing instructors in Dublin during Shaw's youth, but also to phoneticians in London during Shaw's early career as a writer. Phonetic science employed similar philosophies and practices to those involved in Lee's type of singing training, called The Method, which was studied by Shaw's family. Finally, as voice recording science progressed, voice became a new means of the animation of talking dolls and automata, both in science fiction and in the real world. Voice had the ability not only to transform, but also to animate, enabling those in control of the voice to create a human being. Voice manipulation, through training and recording, was thus seen as powerful in the nineteenth and twentieth centuries, particularly to Shaw, who dealt intimately with science as his hobby and music as his family's occupation.

Shaw's concept of voice, articulated in *Pygmalion* and apparent in his experience of living with musicians, holds immense power as a transformative force; voice can change one's social associations, professional alignments, and opportunities. As Liza insists, "I want to be a girl in a flower shop stead of selling at the corner of Tottenham Court Road.... I don't want to talk grammar. I want to talk like a lady" (Shaw, *Pygmalion*, Nook file 2.15-19). Liza believes that changes to her voice will allow her to blend into higher levels of society. The binaries Liza uses (flower shops/corners,

grammar/lady-like English) remind the audience that markers of poverty and wealth are worlds apart for Liza; it would indeed be a great transformation to master English speech and thus change one's social identity. Higgins speaks in similar binaries in this scene: "I shall make a duchess of this draggletailed guttersnipe" (Shaw, *Pygmalion*, Nook file 2.17). While of course this Shavian insult is highly imprecise, Higgins's language suggests a major transformation for Liza. Even when the results of the experiment disappoint Liza, who realizes that she has lost opportunity instead of gained it, Higgins remains assured of language's ability to transform Liza completely, from "a millstone round my neck" to "a consort battleship," and from a "silly girl" to one of the "three old bachelors" (Shaw, *Pygmalion*, Nook file 5.61). Language study is more than simply acquiring new sounds, but rather the means of transforming one's identity and role in society. In this scene, when Liza raises her voice to Higgins "defiantly," according to the stage directions (5.60), she is particularly able to transform herself.

Voice meant identity, and voice analysis meant an ability to control and change the voice. Phonetics provides Liza a means of actively shaping her own identity—of remodeling herself based on scientific principles. The relationship between Higgins and Liza becomes complicated by the implications of voice modification sciences. The play establishes early on that voice determines one's identity. Higgins identifies the people in the rainstorm not as coming from a certain place, but *being* a certain place: "Your mother's Epsom, unmistakably" (Shaw, *Pygmalion*, Nook file 1.10). In the opening scenes, more is revealed about Liza's character in her loud, vocal lamentations than in the explicit stage directions; in the directions, readers learn little more than the fact that Liza is small, somewhat pretty, and poor; however, through her cry "I'm a good girl, I am,"

readers can perceive Liza's need to defend herself and truly can begin to understand the effects poverty has had on her. If voice reveals one's identity, then changing a voice leads to transformation of the identity. Moreover, because science provides such an invasive, intensive method of changing one's voice, the process of transforming is complicated, especially as it relates to who has control over Liza's voice and the methods of the experiment.

Voice can also transform broad areas of study, such as language or science; hitherto, language study and science largely excluded any focus on the voice's physical functioning, but the development of ear-nose-and-throat specialties and phonetics books founded on medical dissection suggests that what it meant to study in these fields changed drastically at this time. The way scientists captured voices changed people's notions of reality and fiction about creating life, as demonstrated through volumes of science fiction works and many patents for vocalizing automata in Shaw's time. Shaw captures this interest in speaking automata in his play, and incorporates his own knowledge of phonetics, science, and music as three closely intertwined avenues to understanding transformation through voice. Shaw actively used imagery of technology and the state-of-the-art vocal Method teaching in order to show how a voice, and thus an identity, could be transformed.

Examining voice in *Pygmalion* lends itself well to multidisciplinary scholarship. Shaw seems like an ideal fit for such an approach, as his interests varied so greatly; everything from vegetarianism to poetry to evolution piqued his curiosity. *Pygmalion* particularly offers intriguing opportunities for study in several fields. Certainly, the field of art is specifically discussed because Ovid's 7th-century myth from *Metamorphoses*, to

which Shaw responds in his play, deals solely with the art of sculpture. However, Shaw, who seemed veritably interested in everything, includes many fields of study in his version of the play. References to architecture, interior design, drama and fashion all pervade the text, offering many art forms for analysis. In addition, Shaw drops references to linguistic sciences (known as phonetics or phonetic science) supporting those references with discussions about science in its theoretical sense and with imagery of specific instruments necessary for this type of study.

Though *Pygmalion* mentions music only in extremely passing references, it is clearly informed by Shaw's understanding of how the voice is taught. Some of those passing references are so deeply buried within the text that they have hardly garnered any critical attention at all. For example, while Pickering and Higgins explain the experiment to Mrs. Higgins, Pickering says that "she can play the piano quite beautifully" and that "We have taken her to classical concerts and to music...halls" all while Higgins is blasting about the Hottentot clicks Liza has quickly mastered (Shaw, *Pygmalion*, Nook file 3.40). Pickering's fascination with Liza's music ability seems quite crushed by Higgins, who, despite his praise for "Science and Literature and Classical Music," just uses his piano as a shelf for his laryngoscopes and chocolate dishes (Shaw, *Pygmalion*, Nook file 5.60). Shaw, as both a music critic and a personal fan of music, especially Wagnerian opera, makes a clear statement about music in his play which connects to his experience of watching his mother's voice lessons; a critical awareness of Shaw's references to music in the text provide an important new way of reading *Pygmalion*.

The idea that the Lee-Mrs. Shaw relationship inspired the Higgins-Liza rapport is not new, yet there is to date no scholarship on Vandeleur Lee, despite his rather colorful

character, and there have been no significant studies of Lee's connection to Shaw. Lee's voice training program, music column, and amateur music societies are mentioned by biographers, such as Michael Holroyd. The *Grove Music Dictionary* includes no article on Vandeleur Lee, but mentions him only briefly within an entry for Shaw: "George John Vandeleur Lee, notable in Dublin music as impresario, singing teacher and conductor, also lived with the [Shaw] family; from him Shaw derived his knowledge of singing techniques [and] an ambition to become an operatic baritone" (Anderson). This mention of Lee as tangential to Shaw is understandable, and is in a large part what this work will do as well. However, Lee's most important work, *The Human Voice*, has not yet been analyzed in music studies, historical studies, or literary studies. An examination of Lee's work in chapter one will reveal that indeed that the source remains a timely handbook for guiding teachers as well as a surprisingly lively read. *The Human Voice* seems a clear source text for *Pygmalion* because of its praise of the abilities of science to transform the voice and the person. In addition, Lee's book appears to be an influence on all of Shaw's work because of its engaging humorist's tone and its early feminist ideas. Most importantly, through *The Human Voice*, Lee demonstrates his definite Irish cultural nationalism, which makes him a key figure in any study of Irishness, involving Shaw or not.

This kind of multidisciplinary scholarship of *Pygmalion*, rooted in Shaw's early life and influences, is necessary and valuable. Because Shaw makes *Pygmalion*'s London setting such a clear and important part of the text, scholars of Irish Studies have struggled to place *Pygmalion* into the context of Irish literature. Connecting this play to Shaw's musical background would establish his Dublin childhood's influence on his

London writing career. Also, considering singing in this play allows interesting connections between the fields of Shaw studies and Joyce studies.

Chapter two establishes the use of science as part of Liza's process of transformation. Because of its carefully presented references, which are updated at each revision for timeliness, Shaw's *Pygmalion* is a narrative about science. Science is tightly intertwined with ideas of control, especially control of the female body, in this play. For example, excited to tell Mrs. Higgins of all that the duo of phoneticians has accomplished in Liza, Pickering says, "Every week—every day almost—there is some new change.... We keep records of every stage—dozens of gramophone disks and photographs" (Shaw, *Pygmalion*, Nook file 3.40). Liza knows that entering into this partnership means giving up some access to control over her body; after all, residing at Higgins's apartment on Wimpole Street begins with a terrifying first bath for Liza. Pickering's discussion of scientific observation and analysis of the body is particularly disturbing because he fails to see why it is so intrusive. Indeed, the specific equipment mentioned in the play, such as phonographs and laryngoscopes, is similarly problematic because it conveys, on the one hand, the innocent novelty of such innovations, and on the other, the probing analysis that transgresses boundaries of propriety and fairness. A New Historicist examination of perceptions of science during the *fin de siècle* period allows a more developed understanding of Liza's decision to engage into and remain in the linguistic experiment.

Chapter Three considers the significance of Liza's role as a "talking doll" in its 1912 context by examining European and American interest in dolls and automata which could mechanically vocalize. By connecting Shaw with his contemporary Thomas Edison, this chapter suggests that Shaw was knowledgeable about talking dolls and

actively shaped *Pygmalion* as a narrative about automata. Although scholars have examined Shaw's interest in science, connections between Shaw and Edison have not hitherto been explored. Still, this play is a response to the prevailing discourse about robots and automation in literature and in live demonstrations of such inventions. Liza is no doubt a human, but she is not consistently treated as such throughout the play. Higgins from the beginning dehumanizes her with insults equating her to nonhuman entities, even as he chides her, "Remember that you are a human being with a soul and the divine gift of articulate speech" (Shaw, *Pygmalion*, Nook file 1.11). Her state of liminal humanity places her in the context of the female automata of nineteenth-century science fiction and of the popular Edison talking dolls. Shaw extends these works' ideas by fleshing out what happens to even a human made to talk by external forces after the guiding hands have ceased to care for her. The first readers and audiences of *Pygmalion* would have been familiar with the outpouring of automaton fiction and the highly advertised talking dolls.

Multidisciplinary scholarship provides new opportunities for reading *Pygmalion*. Combining literary and historical approaches and exploring topics in the histories of both music and science, this work gives voice to some previously underdeveloped areas in Shavian studies. Shaw's implicit and explicit references to topics as varied as opera training, phonographs, and robotics make his *Pygmalion* as strangely fascinating as Liza's ostrich-feathered hat.

Chapter One: Singing Instruction and Musical Voice

Long before Higgins coached Liza to say “cup of tea,” or before Shaw corrected actresses’ diction in rehearsals, a young Shaw listened to his mother’s singing lessons in his Dublin childhood home. Bessie Shaw’s lessons were directed by Vandeleur Lee, a singing teacher and amateur conductor who achieved celebrity status in Dublin and later in London. Lee, Bessie’s beau, worked within and lived with the Shaw family for the greater part of Shaw’s childhood and teenage years, and had a profound impact on Shaw’s nationalism, ideas about music, and writing style. In effect, Lee’s music lessons created a foundation for Shaw’s ideas about voice. It is these lessons, and this relationship between teacher and pupil, that Shaw uses as a basis for *Pygmalion*.

Lee’s understanding of voice was at once personal, social, political, and physical. Liza cultivates and embodies these multiple senses of the term in the play. In order to understand why Shaw regarded the voice as so significant, Shaw’s early encounters with voice as a transformative power must be explored. The roots of this understanding of voice can be found in records of amateur music performances involving Shaw’s mother and Lee as well as in scientific analyses published by Lee about the voice’s physical and metaphorical functions.

Shaw, though familiar with phonetics as a subject of study, was most familiar with vocal training in the form of singing lessons through his mother and sisters' lessons. Lee was named George John Lee, and later, as he gained fame in his musical career, he assumed the first name Vandeleur. Shaw wrote: "He taught her to sing; and she sang for him; copied orchestral parts for him; scored songs & for him (she had learnt thoroughbass from old Logier); led the chorus for him; appeared in operas he got up" (*Bernard Shaw: Collected Letters* 499). The fact that she was not only his student but also a sort of factotum and manager, and even a composer and arranger in her own right, makes her power clear. Relatively few records of her specific performances exist because she was an amateur and a manager more often than a performer, but records of Vandeleur Lee ("Miscellaneous Concerts" 449) and a Mrs. Shaw ("Artists and Musical Instruments" 494) do appear in *The Musical Times* in the 1880s and 1890s. Later, Shaw's sisters also took lessons from Lee, and music permeated the Shaws' lives.

Lee invented a singing instruction program which he and the Shaw family called "The Method," not to be confused with Stanislavsky's Method Acting. Lee's Method depends on singing instruction based on lifelong study of vocal anatomy and singing techniques which support healthy vocal anatomy. In 1875, he published *The Human Voice*, a text which examines the history of singing in Ireland, and provides a practical and theoretical examination of singing instruction, even touching upon such topics as proper diet for singers and whether singers should smoke. Key tenets of this method are still taught today, but Lee's name is not usually associated with these techniques.

The musical relationship between Vandeleur Lee and Bessie Shaw expanded to the unusual family situation which is often noted in Shaw studies. Vandeleur Lee lived

with the family, and later, when he left for London, he was quickly followed by Bessie Shaw and her daughters. Shaw told a friend later that the family's living arrangement in Ireland was a "joint household—a sort of blameless ménage à trois" (*Bernard Shaw: Collected Letters* 499). The chastity of the relationship was often questioned; Shaw's friend Beatrice Webb said, "it [is] quite clear to me that he was the child of G. J. V. Lee" (qtd. in Holroyd 29), and Shaw's biographer Michael Holroyd suggests that Shaw actively constructed a chaste image of his mother "to disinfect the relationship from all sexual implication" (Holroyd 31). While Shaw always asserted that his mother's relationship with Lee was not sexual, the symbolic associations of music and sexuality were tightly intertwined for Shaw. For example, Shaw said that his mother and Lee were "married" to the Method. Later, when Lee's ambitions and greed grew, he proposed, in Act V-Liza Doolittle style, to teach any girl to sing in twelve lessons; Bessie Shaw considered this proof that he was unfaithful to the Method and never spoke to him again (Holroyd 59). The Method became a sort of vow for the two of them; they worked within its guidelines and in so doing were faithful both to the practice of the Method and to each other.

The break between the Shaw women and Lee was also affected by Lee's unwelcome advances toward Lucy Shaw, both personally in the form of a romantic attachment and professionally in an attempt to secure Lucy as a singer for Lee's new ensemble, the Troubadours. Lucy did not like taking Lee's direction and refused to study with him any longer (Holroyd 31). There is certainly a note of Liza Doolittle here; refusing to be bullied, Lucy Shaw removes herself from association with her former teacher and instead advances her own career and seeks romance elsewhere.

Shaw's mother, who later became a singing mistress at a school for girls in London, was actively involved in singing instruction in Dublin and London. It is partially on these Irish roots that Shaw bases Higgins's very "English" lessons to Liza. It is a play that includes no references to music, yet the presence of the difficult yet mesmerizing voice analyst and teacher and the student willing to do anything to transform her situation immediately evokes the real-life story of Vandeleur Lee and Liza Doolittle's namesake, Elizabeth Shaw.

Though London was the British center of late Victorian professional music, Dublin boasted a thriving professional and amateur singing and playing culture. International singers like Mademoiselle Adelina Patti and others who performed at concert halls were well known to the Irish singers in Shaw's time. In fact, Shaw recalls that Lee at one point catered to singing students who wanted to "sing like Patti," and Lee directly mentions Patti in *The Human Voice*. Such references to celebrity singers demonstrate that Dubliners were not without connections to the music scene. James Joyce's 1914 short story "The Dead" illustrates this popularity for international singers by including references to Therese Tietjens, Italo Campanini, Zelia Trebelli, Enrico Caruso, and others. Although Aunt Kate in "The Dead" recalls one English tenor, many of the stars mentioned by the Morkans' party guests are from the Continent, but toured Dublin opera houses (Joyce 507).

Professional and amateur performers populated nineteenth-century Dublin stages. Some even redefined the idea of vocal performance. For example, Adelaide Detchon sang and imitated bird warbles to much critical praise; such a performance truly brought to Dubliners' attention the power of the voice to imitate nature and simultaneously to

defy and transform nature. The Dublin Arts and Humanities Council's Holloway Collection of concert programs shows 11 different appearances of Detchon in the Antient Concert Hall in the nineteenth century; she may have also had others ("Holloway Collection--Antient Concert Rooms"). Young Shaw may have heard Detchon at one of these performances, but Lee or his mother would have heard of her, and Shaw or one of his family members may have read the reviews in the newspapers. The prospect or vision of Detchon shifting from ladylike song to bird calls, completely changing herself in the process, must have been intriguing to young Shaw. Detchon also established her career by transforming her voice from human to nightingale call. It is perhaps in part from this inspiration that Shaw conceived the idea of Liza Doolittle, who can make herself a flower shop lady, a teacher, or a duchess by changing her voice. Certainly, Irish actress Mrs. Patrick Campbell, Shaw's love interest and the woman for whom Shaw wrote the part of Liza, is another source. Her ability to cast off her Irish accent and take the London stage is a clear source for *Pygmalion*. However, the presence of other types of voice artists on the Dublin and London stages is a reminder that Shaw was influenced by multiple sources about the idea of transformative voice.

Certainly, many of the performers in the Dublin music scene were more traditional. In addition to Vandeleur Lee's Amateur Musical Society and his later Amateur Musical, Operatic, and Dramatic Society, several artists made opera, aria, and art song commonly known among Dubliners and Londoners. Although Feis Ceoil, an annual Irish music contest, would not come into existence until 1897 (Farrell 16), there was an intense interest in singing throughout the late nineteenth century. Attending opera was an extremely popular pastime for elite and working class alike; there were seats in

the pit of opera houses for elite guests, but people in the upper balconies waited in line for hours for tickets and then would sing the music from that opera *a cappella* until the show started (Hodgart and Bauerle 24). One can imagine today audiences in a rock concert singing the band's hits before the show begins, but it is startling to consider that grand opera had the same effect on working class audiences. These audiences are recalled by old Mr. Browne in "The Dead": "the gallery boys would sometimes in their enthusiasm unyoke the horses from the carriage of some great prima donna and pull her themselves through the streets to her hotel" (Joyce 508). Indeed, the stars from the opera stage were treated as celebrities on an international level because most opera stars would tour Europe and sometimes America. As a result, singers of international repute such as prima donna Adelina Patti, Euphrosyne Parepa-Rosa (called "The Incomparable" by fans and critics), Jean de Reszke, Carl Rosa, Giovanni Mario, and Therese Tietjens were household names in Dublin (Hodgart and Bauerle). Shaw heard several of these musicians during his youth, and later as a music critic ghostwriting Vandeleur Lee's column in *The Pall Mall Gazette*, he commented on their performances. In addition to these international stars of performance, conducting, and composition, Ireland itself had a rich native tradition of songwriting. Although few Irish operas are remembered today in contrast with the canon of works by Mozart, Wagner, and Verdi, there were about 280 operas written by Irish musicians in and around the nineteenth century, about 30 of which deal specifically with Irish nationhood and Irish people (Klein 34-35). Opera was a regular part of Dublin life, and certainly of Bernard Shaw's.

Because of the intense interest in music as well as changing voice technology, voice study in Dublin and in Europe at large peaked in the mid-to-late nineteenth century.

Bel canto singing remained popular, but newer, more scientific approaches to singing were developing. Manuel Garcia, a prominent baritone and singing teacher in Spain, led Europe's interest in a more scientific voice study. Garcia's father, himself a voice teacher, taught in a traditional style, with repeated drills and harsh discipline (Radomski 26). However, Manuel Garcia realized after a career in military medicine that a more scientific approach to voice pedagogy was needed. Those who had been familiar with his father's work also acknowledged the value of this new style of voice pedagogy; one speaker at Garcia's father's funeral said: "But he has given us his son Manuel, worthy heir of his talents as a teacher, and who possesses in depth the precious secrets of his doctrine" (Radomski 27). Those secrets were revealed to him as he sneaked home bull and chicken throats for dissection during his time at work in a military hospital. In 1848, Garcia invented the laryngoscope with a hand mirror and a dental mirror, used the device to view his own glottis and uvula while emitting different notes, and in 1855, reported his findings to the Royal Society of London. Despite the fact that other scientists have reported similar inventions at this time, Garcia was the first to use the laryngoscope for voice study (Radomski 28), opening the field of voice study to scientists searching for answers previously only hypothesized by singing masters.

Vandeleur Lee's examination of the voice was very much like Garcia's. He too practiced dissection of animals, though Lee added human cadavers to his collection of specimens. Lee's Lee, like Garcia, believed in observation of the voice rather than disciplined repetition of scales without understanding. Lee only included passing references to Garcia in his *The Human Voice*, but it is clear that he knew of his work and was participating in his tradition. For example, he calls the laryngoscope "that splendid

aid to science, which originated with a Singing Master (Garcia)” (Lee iii). Garcia and Lee agreed in the principle that voice study should be anatomically based, but their practical pedagogies differed. Garcia advocated as the foundation of singing the “attack of the glottis” (*coup de la glotte*), whereas Lee believed that a more open, relaxed position of the glottis was needed. Indeed, Shaw must have sided with Lee, because years later, Shaw attended a demonstration of Garcia’s technique, and as Garcia scholar Theresa Radomski notes, Shaw criticized Garcia’s methods, arguing, “You can no more sing on physiological principles than you can fence on anatomical principles, paint on optical principles, or compose on acoustical principles” (qtd. in Radomski 30). Clearly, Shaw disagreed with Garcia’s findings after conducting his own observations.

The specific ways in which Lee and Garcia blended music and science also reflected their competitiveness and ongoing debate. Whereas Lee felt it very important that his pupils have a working knowledge of voice anatomy, Garcia refrained from sharing his findings directly with pupils. One of his students, Sir Charles Santley, recalled:

Manuel Garcia is held up as the pioneer of scientific teachers of singing. He was—but he taught singing, not surgery! I was a pupil of his in 1858 and a friend of his while he lived, and in all the conversations I had with him, I never heard him say a word about larynx, or pharynx, glottis or any other organ used in the production and emission of the voice. He was perfectly acquainted with their functions, but he used his knowledge for his own direction; not to make a parade of it before his pupils, as he knew

it would only serve to mystify them, and would serve no purpose in acquiring a knowledge of the art of singing. (qtd. in Radomski 35).

Though both men bridged the fields of science and music, Garcia clearly thought the novice musicians under his tutelage unable to comprehend the anatomy he understood. This makes sense given his elite background as the son and student of the founder of a famous singing school. Lee's far less glamorous background relates to his more egalitarian educational philosophy. For him, any student of singing, male or female, should be familiar with the reasons why the voice works as it does. He claimed, for example, in the preface to his *The Human Voice*, that it was his object to "place before the public...an explanation of the organs of the voice" (ii); his aim is not to present the information only to Royal Academies and research journals, but to deliver the information into the hands of singing students directly.

Vandeleur Lee's method of vocal instruction, which he named simply "The Method" is today mostly unknown. Simple searches for The Method yield a multitude of articles on Stanislavsky's acting theories, which to a degree may have caused Lee's name for his theories to have less impact in the field of performance art. Even in its day, there were few writings about The Method, despite one reviewer's claim that it "was for some time previously well known in Ireland [and] has been much discussed during the just closed season in London" ("The Human Voice," *The Spectator* 1041). Vandeleur Lee primarily taught amateur singers and published little compared to his contemporaries. In addition, Lee's method is perhaps little known today because much of his energy was engaged in competition with other vocal instructors, such as his archenemy Robert Prescott Stewart, who said Lee "traded successfully on the vanity of amateur singers" (in

Holroyd 48). It is possible that the dismissive attitude Lee took to his contemporaries' vocal instruction and conducting styles has led to a general dismissal of his work. It is also possible that Lee never secured a successor to his method; "To Bessie, Lee had been 'the sole apostle of The Method'" (Holroyd 59). Besides Bessie Shaw, Lee retained only Shaw as a second promoter of his Method; Shaw, according to biographer Michael Holroyd, did work on a revised edition of Lee's *The Voice* that was never published, and Lee asked Shaw to write a circular advertising the fact that Lee could cure "clergyman's sore throat" (Shaw, *London Music* 28). Neither were others publishing about The Method at the time, as Shaw claims that the term "The Method" was one which was informally coined "within the family" (Shaw, *London Music* 18). Without the support of colleagues outside the Shaw household who could continue Lee's work, the Method could not grow into the twentieth century, despite the fact that this text is so well aligned with modern singing practices. It is a method without a history for vocal students.

It seems especially likely that Lee's own compromises for the sake of his career is a reason for The Method's disappearance. After a few years in London, Lee advertised that he could teach "fashionable ladies" to sing in twelve lessons; this was completely in opposition to the tenets of the Method, which entailed a lifelong study of music and intensive work over the course of two years (Holroyd 59). However, ostensibly to attract a new clientele, Vandeleur Lee neglected his own Method, thus causing his own credibility and any scholarship on his Method to dwindle. It certainly caused a break in his family circle, because after Lee was "unfaithful" to The Method, the Shaw women broke their association with him. However, more importantly for Lee's legacy, this shift

to a more commercially marketable approach left a complete vacancy in terms of Lee scholarship or the growth of the Method as a viable program for vocal instruction.

Regardless of the current lack of Method scholarship, Lee's concepts in *The Human Voice* do appear to be sound practices of vocal instruction. Bessie Shaw's own anecdotal experience seems to support the Method's success; as Shaw recalls, "the method...had made her a singer and preserved the purity of her voice in defiance of time" (qtd. in Holroyd 59). This is merely anecdotal evidence of the Method's effectiveness, but similar techniques of anatomy-based instruction are still staples of the modern singing curriculum. For example, William Vennard's *Singing: The Mechanism and Technic* from 1967, a foundational twentieth-century text of scientific voice pedagogy, presents similar techniques of breathing (18) and posture (19), and these ideas are corroborated in the more recent 1986 edition of D. Ralph Appelman's *The Science of Vocal Pedagogy* (11) and the 1998 *Vocal Health and Pedagogy* by Robert Thayer Sataloff (148). In fact, Sataloff, who is both a trained singer and a physician, edits two major singing journals, *Journal of Voice* and *Journal of Singing*, and edits the medical publication, the *Ear, Nose and Throat Journal* ("Robert T. Sataloff"). His work in the field today is an example of the kind of hybrid voice instruction Lee proposed and participated in. Similarly, in the preface to her *Dynamics of the Singing Voice*, Meribeth Bunch establishes her purpose for writing: "The singing and medical professions complain that they cannot communicate with one another.... The aim [of this book] is to bridge the gap in communication and to foster understanding and collaboration between artists, teachers, therapists and doctors" (ix). This statement sounds quite similar to Lee's own purpose for writing the book, suggesting that although Lee's desire for a more scientific voice

study have remained a clear objective in the field, this field has struggled to establish itself, perhaps because of Lee's absence from the canon of scholarship on singing instruction.

Lee's approach was certainly a scientific one. According to Shaw many years later, the text he published, *The Human Voice*, was actually drafted by "a doctor of little consequence" who was specifically hired for the purpose of assisting in the writing of Lee's book (Shaw, *London Music* 22); according to Michael Holroyd, the doctor was probably Malachi J. Kilgarriff, Lee's neighbor (45). This secret co-authorship yielded the book's clinical tone. Yet it was not only this doctor's influence but rather Lee's method itself which was scientific. According to Shaw, Lee wanted to discover the source of the voice:

In his search for the *bel canto*, he had gone to all the teachers—within reach. They told him that there was a voice in the head, a voice in the throat, and a voice in the chest. He dissected birds, and, with the connivance of medical friends, human subjects, in his search for these three organs. He then told the teachers authoritatively that the three voices were fabulous, and that the voice was produced by a single instrument called the larynx. They replied that musical art had nothing to do with anatomy, and that for a musician to practice dissection was unheard of and disgusting. (Shaw, *London Music* 17)

Lee's process, as here described by Shaw, follows the model of the scientific method precisely. He begins with a question, gathers information, and seeks to investigate the then-standing hypothesis of the three voice sources. He then experiments and replicates

his experiments with animal and human subjects. Finally, he publishes his findings by sharing the information with the same teachers he first asked so others could further replicate or develop his findings. Indeed, without ever studying science formally, Lee is the very picture of an experimental scientist in his approach to voice analysis. Such a scientific approach is reminiscent of Higgins's scientific precision in vocal analysis. In *Pygmalion*, Shaw depicted Higgins's experimental approach to voice analysis in the same terms as Lee's, thirty years earlier. Of course, Higgins differs from Lee because he appears somewhat ridiculous in his determination to make even sentimental issues into cold experiments and data. However, though Higgins is satirized, Shaw characterizes Higgins as clearly knowledgeable about the process of experimentation.

More significantly, the passage above reveals the professional relationships that developed as a result of Lee's dabbling in the science of voice. He encountered resentment and resistance from other voice teachers, not only for dispelling their ideas about sound production, but for mixing the study of the art of music with the science of biology. Shaw recalled in a 1905 letter, "Lee had trained himself to teach singing by repudiating the traditions of the local professors, who all loathed him" (qtd. in *Bernard Shaw: Collected Letters* 500). Such intense feelings suggest that the attempt to align voice study with the sciences threatened the field of singing instruction significantly. In fact, Stewart called Lee an "imposter" and prided himself in driving Lee out of Dublin's music scene later in his career; he claimed that "I did in my time one good work in Dublin. I unmasked one arrant imposter [Lee] and drove him away" (qtd. in Holroyd 48). While Lee's move to London had more to do with the ability to make more money with a

new demographic, the idea that Stewart wanted to drive Lee out suggests the intensity of the feuds Lee's revolutionary ideas created.

Henry Higgins seems gruff in his manners toward his students and dismissive about his colleagues' accomplishments, but the animosity between Lee and his colleagues seems to far exceed Higgins's negativity. Still, the idea of competing voice teachers clearly informs the relationship between Higgins and Nepommuck in Shaw's revised version of *Pygmalion*. Just as Stewart and Lee bitterly competed over Dublin audiences, fame, and, most importantly, singing students, Higgins and Nepommuck, his former student, also seem rivals in the play. Higgins scoffs at Nepommuck at first, suggesting that they are not nearly competitors. It is Liza later, who, in threatening to work under his tutelage, places the two men into direct conflict with each other. In response, Higgins denounces Nepommuck in language which directly echoes Stewart's denunciation of Lee: "What! That imposter! that humbug! that toadying ignoramus! Teach him my methods! my discoveries!" (Shaw, *Pygmalion*, *Google Books* 5.131). Stewart's criticism of Lee seems to be recalled in this angry rivalry between Higgins and Nepommuck.

Lee's practice of anatomical dissection was well publicized; reviews touted its research and innovative approach. One review of Lee's book claims that it is a "treatise on [Lee's] method and on its justification by the anatomical construction of the human throat" ("The Human Voice," *The Spectator* 1041). Even the presumably impartial book reviewer, in this one-sentence summary of the purpose of Lee's book, claimed that dissection was the foundational source of Lee's approach. Lee's book depends not only on its presentation of his method, but more importantly on The Method's justification through evidence and diagrams.

The dissection Lee conducted is especially telling, considering Lee's academic pretensions. Although Lee was an amateur, he signed his book, as well as advertisements and circulars for the book, as Vandeleur Lee, Professor of Singing ("The Human Voice," *The Spectator* 1041). The reviewer in *The Spectator* noted, "The book is illustrated by diagrams, which render the author's meaning intelligible to the least scientific reader, and it puts the mechanism and physical meaning of singing in a light which will probably be as novel to most of its readers, and also as interesting, as it was to us" ("The Human Voice," *The Spectator* 1041). This review immediately reminds the prospective buyer that Lee's book will deal with the "mechanism and physical meaning of singing" rather than musical theory in the abstract. Interestingly, the promise of diagrams designed to make the scientific subject clear to a reader unschooled in science demonstrates that this text serves the purpose of an interdisciplinary bridge between art and medicine. The sketches of bronchi and tongues must have shocked many aspiring prima donnas whose education to this point, like Mrs. Shaw's, was limited to learning "enough" French, playing piano "the wrong way," and sitting up straight "like a lady" (Shaw, *London Music* 14).

Lee acknowledged that some would charge him with being pretentious for publishing a scientific study of the voice. Lee begins his monograph: "It might be deemed presumptuous in one outside 'the Pale,' to offer an opinion on the Anatomy and Physiology of the human vocal organs; but it must be borne in mind, that the present is emphatically a day of inquiry, and that nothing is now taken for granted because established, nor deemed right because antiquated" (i). The scientific exploration of the day, Lee proposes, is justification for his presumption in analyzing the voice in a

scientific manner. His three-fold repetition of his reason—day of inquiry, nothing taken for granted because it has been established, and nothing deemed right because it is antiquated—emphasizes that Lee sees this moment as an opportunity to create a new theory. Lee’s professed humility is short-lived; though he here acknowledges his presumptuousness, he later shows his medical knowledge and unabashedly shatters the “established” and “antiquated” theories of the day with alacrity. Despite the fact that such an exploration of anatomy is “indelicate” (ii), Lee writes, “Imbued with that spirit, and with that object in view, it is proposed to place before the public, such an explanation of the organs of the voice, and their ACTIONS IN THE PRODUCTION OF SOUND, as is deemed most consistent with ascertained facts, and in accordance with the views of some of our greatest philosophers, both in the musical and medical worlds” (ii, emphasis in original). He does not hesitate to engage with the “greatest philosophers” to trumpet (in uppercase) his message of physiological sound production.

Lee’s book contains many references to other scientists as support for his claims. For example, far ahead of his time, Lee cautioned smokers that “tobacco is a poisonous weed...injurious to healthy structures” and “nicotine [is] an empyreumatic oil of a most destructive character” (122). He based his statements on the work of Dr. Geoghegan, a contemporary Dublin physician who had studied diseases of the throat caused by tobacco smoking. In addition, he refers to scientists “Lavoisier, LaPlace, Hassenfratz, Lagrange, Vogel, Home, Grande, Scudamore, and Huxley” (104) and cites several diagrams from Dr. Mapother’s *Manual of Physiology*. In fact, the book opens with a plate from Mapother’s anatomy book and a quotation about music by writer Alexander Pope. Such a juxtaposition of science and art is at the very heart of Lee’s philosophy about music; it

is not forbidden for a music teacher to dissect and analyze, and it is in fact imperative for these two fields to unite to progress in either.

To integrate science into voice study, Lee begins with an explanation, in plain terms, of the function of each of the organs involved in sound production, from tongue to lungs. He explains at length the function of more specialized organs such as the larynx, pharynx, and diaphragm, challenging previous descriptions in favor of ideas based on dissection. He discredits the three prevailing theories of voice production at the time (that voice was like a wind instrument, a reed instrument, and a string instrument), especially “the most favored” theory at the time, the string-instrument theory, which he calls “the most absurd and objectionable” (Lee 39). Instead, he proffers the new “flute theory,” which he says is founded on observations from the laryngoscope, rather than conjecture. He argues that singers who are taught to sing by incorrect methods are harmed physiologically, and that “to such persons singing is a labor that produces fatigue, uneasiness, or perhaps fatal disorder in the throat, and a distaste, rather than a love for the vocal art” (Lee 74). His aim in the book is to create transform the field of vocal training to encourages both better vocal health and an improved artistic effect.

In large part, Lee’s book perpetuates the prevailing worry of professionals: that students would self-educate using readily available books rather than pursue professional education. Lee emphasizes that although his writing is thorough, “no amount of book instruction could take the place of the teacher for such purposes” (89). Henry Sweet, a contemporary phonetician to whom Shaw refers in his introduction of *Pygmalion* as a basis for his character of Higgins and an inspiration of the issues in the play (Shaw, *Pygmalion*, *Google Books* 4), expresses such concerns in his writings. For example, he

argues, “The proper way of studying phonetics is, of course to go through a course under a competent teacher for phonetics can no more be acquired by mere reading than music can” (Sweet 11). However, with the aid of a teacher, these professors find that voices can be transformed. Lee writes, “Art ... enables the teacher to make up in a great measure for the shortcomings of nature; and, except in cases of great or hopeless deformity, he can so direct the will of the pupil to the placing and sustaining of parts in certain positions, as very often wholly to overcome, or skillfully conceal the want in the vocal instrument” (88). Lee, a salesman even in his informational text, makes it clear that with professional instruction, rather than simply with reading, voice change can be effected.

Shaw also cautions against self-directed education in *Pygmalion*. The ultimate paragraph of his introduction to *Pygmalion*, entitled “A Professor of Phonetics,” contains the following clarification:

Finally, and for the encouragement of people troubled with accents that cut them off from all high employment, I may add that the change wrought by Professor Higgins in the flower girl is neither impossible nor uncommon. The modern concierge's daughter who fulfils her ambition by playing the Queen of Spain in *Ruy Blas* at the Théâtre Français is only one of many thousands of men and women who have sloughed off their native dialects and acquired a new tongue. But the thing has to be done scientifically, or the last state of the aspirant may be worse than the first.

(7)

Shaw's desire to at once provide hope and also caution shows a clear sense of foreboding about ill-advised attempts to change one's language. His emphasis on scientific change

seems to contradict self-teaching, following the guidelines in books like Sweet's without the feedback and deliberate exactness of a professional teacher. This same concern is evident within the pages of *Pygmalion* as well. When Higgins insists that it was his instruction rather than her learning which made her successful, Shaw makes the point that transformation of voice can only occur with the support of a qualified teacher (Shaw, *Pygmalion*, Nook file 4.43). In the sequel, Liza gives up her determination to teach phonetics because of Higgins's insistence that she is not qualified truly teach, and that she would be deceiving people if she proclaimed herself a phonetics professor (Shaw, *Pygmalion*, Nook file 66). Higgins reveals real concerns about instability within academia. The fear that students will learn with unqualified teachers permeates *Pygmalion*, and has its roots in the fears expressed by two of Shaw's sources: Lee and Sweet.

In many ways, the teaching relationship between Lee and Bessie Shaw was a model for Higgins's relationship with Liza. Lee was described as a Svengali figure by Shaw (Holroyd 60), and Higgins has certainly the same hypnotic influence over his pupil at times. During the Act II speech, Higgins tempts Liza to remain at Wimpole Street, saying, "Think of chocolates, and taxis, and gold, and diamonds.... And you shall marry an officer in the Guards, with a beautiful moustache: the son of a marquis, who will disinherit him for marrying you, but will relent when he sees your beauty and goodness" (Shaw, *Pygmalion*, Nook file 2.20). Higgins's long, complex sentence structure and climactic increase of intensity suggests a mesmeric effect, and Pickering must intercede to demand a fair explanation of the situation to Liza so she may decide while not under

Higgins's trance. If Lee indeed had a hypnotic effect on his students, he would have sounded much like Higgins in this exchange.

Even Higgins's attempt at an objective speech turns Svengali-like once again. For example in this one sentence, Higgins mixes clear scientific language with a mesmeric tone: "If the King finds out you're not a lady, you will be taken by the police to the Tower of London, where your head will be cut off as a warning to other presumptuous flower girls" (Shaw, *Pygmalion*, Nook file 2.20). He uses the if-then statements of traditional logic. Similarly, instead of providing only the outcome (as in the previous promise, where Higgins tells Liza that she will, by vague means, acquire a mustachioed husband, chocolates, and riches), here Higgins describes, in meticulous detail, the entire process: discovery, arrest, travel to the Tower, decapitation. The sentence even specifies by whom Liza will be taken (the police) and for what reason (a warning against class-crossing by language study). Such meticulous care to describe the machinery and process establishes Higgins as a scientist through his language.

This is reminiscent of Vandeleur Lee's tone as voice instructor. In *The Voice*, Lee similarly describes the process and product clearly but hypnotically in tone and calculating in nature:

But, unfortunately, artificial food forms too large an item in the daily bill of fare. Highly seasoned dishes and stimulating drinks are sought after and indulged in to an extent scarcely credible; and what is worst of all is those who so indulge *cannot*, or *will not* see the evil. They will not be persuaded that soup can be taken without dry sherry—fish eaten without its accompaniment of Sauterne—or roast beef without mustard or

horseradish. They cannot conceive dessert gone through without libations of port, claret, or perhaps stronger materials; and the consequence is, a mode of life altogether at variance with natural laws. (Lee 110)

The hyperbolic scope of the sentence is startlingly similar to Higgins' previous sentence. A life at variance with natural laws is in some ways just as shocking a consequence of poor diet as a beheading is a consequence of poor speech. The anaphora (they will not/they cannot) parallels the anaphora of the if-then sentences in Higgins' own warning speech. Such repetition allows the speakers' arguments to build in suspense as well as hypnotize the listener to a degree. Suddenly their arguments, though rather ridiculous in nature, appear clear, and backed up with all kinds of quasi-logical justifications.

It is also notable that just as Lee's tone sounds like Higgins's speech, it also bears remarkable resemblance to Shavian writing. For example, Lee writes, "Nothing is more ruinous than the abominable and absurd custom of stays-wearing and tight-lacing" (106). While posture is a natural topic of discussion for a voice teacher, the hyperbole of Lee's expression is laughable. Neither political corruption nor military destruction, but rather *corsets*, are the ruin of humanity. This statement, reminiscent of women's liberation sentiments about clothing, show a proto-Shavian attitude towards women's rights in addition to the absurd exaggeration typical of Shaw's comedies. Manuel Garcia, Lee's forerunner in scientific analysis of voice, apparently also despised this custom, as he is reported to have dismissed a young lady from an audition, saying, "Thank you, Miss Etherington; will you please go home at once, take off that dress, rip off those stays, and let your waist out to at least twenty-five inches! When you have done so you may come back and sing for me, and I will tell you whether you have any voice" (36). Again, the

difference between Lee and Garcia is extremely clear; Garcia's tone is demanding and authoritative, even abusive, much like his famous father's. Lee, in contrast, is funny in his exaggeration, and accuses no one in particular, but rather the custom as a whole. It makes sense that Shawian comedies of manners, which satirize traditions, customs, and societies, draw from Lee's writing.

Later, Lee deprecates singers' use of tobacco, and after expressing relief that Irish women have never taken up smoking cigarettes like "Spanish signoras" (122), he compares smokers to those who continuously breathe "sewerage effluvia" (123). Indeed, Lee is a scientist, yet he presents his information with the engaging voice of a humorist; it is easy to see why Shaw and his friends sometimes questioned whether indeed Lee was his biological father (Peters 139). Certainly, whether or not Lee actually fathered Shaw, Lee definitely influenced Shaw's sense of humor, language, and ideas about the importance of music. Like Shaw, Lee revealed himself in this comment to be a progressive thinker about gender and an engaging writer unafraid of discussing taboo topics. Just as Shaw, in one revision of *Pygmalion*, boldly steps into the bathroom by depicting Liza's first encounter with a bath brush, Lee too embraces taboo phrases and topics in order to convey his messages with poignancy and humor.

Lee is also significant to literary study because he contextualizes himself in a movement that supported nationalistic ideas. He explains that "At the period of the dark ages, [when] Europe was stuck in barbarism...Ireland contained refinements and intellectual attainments far in advance of the age" (Lee 16). He specifically refers to the lilting airs and the keening tradition as upholding the musical artistry of Europe while other civilizations crumbled. He then specifically blames England for the devastation of

music in Ireland: “It was however our misfortune perhaps to be linked by force to a ‘proud invader,’ whose tendencies were altogether selfish and commercial...material gain” (18). He adds: “Without national music of their own, they could have no sympathy with that of others; and we are for that reason better able to understand the attempts of [Queen] Elizabeth to crush out music in Ireland, and the success of Cromwell in suppressing it in England” (Lee 18). Aside from the word “perhaps,” carefully qualifying such belligerent ideas, Lee’s passage is unapologetic and provoking. The use of quotation marks around “proud invader” set off the passage as someone else’s remarks and adds a layer of sarcasm. Lee also accuses only two people—Elizabeth and Cromwell—for destroying Irish music; this metonym allows all of the blame assigned to the English government to focus all the more intensely upon these two figureheads. In addition, Lee’s use of active, strong verbs “crush out” and “suppressing” attribute blame even more clearly. Perhaps the boldest accusation is that the reason for England’s attempts to destroy Irish music was jealousy over the fact that England’s people were not creative enough to invent musical traditions of their own. This leaves Ireland in a superior position from which to “better understand” England’s petty need to crush the music of others.

The first book reviews of Lee’s work paid special attention to the book’s national importance. They often quoted the passage above, but also made note of the fact that the printing itself was completely Irish, from its paper to its binding. “It is altogether ‘National’ in its production, claimed one *Irish Times* book review which was excerpted and printed in the back of Lee’s book (in Lee 131). If Manuel Garcia invented the laryngoscope and began making voice study more scientific on an international level,

then Lee took those ideas and made them truly Irish. Studying the voices of singers in his own city, he refined Garcia's theories, and when publishing his book, through his content and the printing itself, Lee asserted the Irishness of proper singing. In so doing, he placed his singing guide within the cultural context of Revival nationalism.

The same Revival music culture was immortalized by Shaw's contemporary James Joyce. While Shaw's *Pygmalion* does not mention music explicitly, the interest in voice as social power does appear clearly within its pages; similarly, both Lee's *The Human Voice* and Joyce's concert stories deal with this theme. Lee and Joyce both consider the nationalism involved in Irish singing circles. Joyce particularly explores this field in two of his 1914 *Dubliners* stories, "The Dead" and "A Mother." Kathleen in "A Mother" is part of the language movement and from that grows her involvement in the national music movement. These movements were closely intertwined both in that story and in nineteenth-century Dublin. Songbooks of Irish music such as Thomas Moore's *Irish Melodies* and others were frequently sung and adapted. Joyce, interested in music himself, explored the amateur and semi-professional Irish music scene in his "Dublin music stories" in *Dubliners*, and Shaw works in response to and in conjunction with Joyce's new genre. Discussing Shaw and Joyce as participants in the genre of music-related Irish literature is not new; Harry White, a scholar in Irish music studies, notes, "What is striking in Joyce and Shaw...is that an intimate engagement with the genre of opera itself, whether nostalgic or formative, produces a literature self-consciously regulated by musical considerations. It is a literature...adulterated by music" (20). Although Joyce, in works such as *Dubliners* and *Ulysses*, actively and obviously drops references to music, White posits that Shaw also uses ideas of music in his writing

structurally and linguistically rather than directly naming lines or singers' names, as Joyce did. However, both were struck by the cultural desire for an Irish song culture which accurately represented Ireland and connected to European musical tradition without overpowering Irish ideas (White 18). Thus, Joyce and Shaw constitute a shift in understanding about music's role in establishing a sense of nationhood (White 20); their literature dealing with music in Ireland explores larger cultural issues related to Irishness and social norms, especially gender and power.

The practice and performance of music were located in the three important centers displayed in Joyce's *Dubliners* music stories: the church, as in "The Dead"; the concert hall, as featured in "A Mother"; and the home, as in both stories. Mrs. Kearney's management of the concert takes place, for example, largely over the silver biscuit-barrel in her parlor, and Aunt Julia, banned from singing in church choirs by changing regulations against women singers, can only sing at her Christmas party in her home. Aunt Julia's case is comparable to Bessie Shaw's situation; as a Protestant woman, Mrs. Shaw could not perform with Catholic Church choirs, regardless of the gender regulations that prohibited Aunt Julia. Also, as Lee's factotum and manager, Bessie Shaw in many ways is a perfect Mrs. Kearney: frustrated with disappointing men, as Shaw wrote to biographer Archibald Henderson (*Bernard Shaw: Collected Letters* 484), she instead threw her talents into capably arranging musical programmes from her artistic salon of sorts. Of course, a key difference is that Bessie Shaw herself was a singer, unlike Mrs. Kearney. Mrs. Kearney struggles to balance the silence imposed upon her by her society with her own sense of voice (Miller 363). Bessie Shaw dealt with that struggle by managing her own and her daughters' musical careers. While Kathleen

Kearney herself remains mostly silent, and Mrs. Kearney's attempts to voice her concerns in her patriarchal society are thwarted by an angrily resistant Dublin music world, Joyce scholar Jane Miller points out that Joyce, in this concert story, celebrates the way Mrs. Kearney "[attempts] to avoid the paralysis that the other characters succumb to" (355). Musical voice allows women to express their identities and ideas in both the historical Dublin music world as well as its fictional representations in the Irish concert story genre in which Joyce writes.

The voice is more obviously conveyed in "The Dead" because while Kathleen Kearney is an accompanist, Aunt Julia and the guest baritone Mr. Bartlett D'Arcy are singers. It is song that awakens Gretta's slumbering memory of Michael Furey, her first love, who sang "Lass of Aughrim" to her. In many ways, the fact that Kathleen Kearney does not sing parallels her lack of personal voice and authority over her own life. She accompanies her mother's shrill voice rather than producing song of her own. Thus, in "A Mother," voice carries power not only of physical sound but moreover of personal, social, and economic independence. If Kathleen had a voice of her own, the story could have been titled "Kathleen" or "A Musician." However, Joyce emphasizes the power of voice by robbing Kathleen of hers. Kathleen was silenced, but Bessie Shaw was able to assert her independence through singing, particularly in vocal instruction and vocal performance. The wife of the inept and alcoholic George Carr Shaw (Holroyd 23), Bessie Shaw used her voice and her connection with her singing teacher to reject her role as homemaker in the Shaw household, and instead to create a name and career for herself. Bessie Shaw is a fulfilled Kathleen Kearney-Mrs. Kearney combination. By both managing and performing, Bessie Shaw empowered herself with a personal and social

voice. Similarly, Liza in Act V suggests that instead of remaining a demonstration of Higgins's techniques—a guttersnipe performing as a duchess—she will become a voice teacher. This plan, which she argues will yield the necessary economic support for her marriage to the inept Freddy Hill, reminds readers of the need to not only produce voice but also to be in control of one's voice.

Shaw created structural and plot parallels between his *Pygmalion* and Joyce's "The Dead" and "A Mother" in ways that establish his story within Joyce's concert story genre and bring ideas of musical voice to mind for his audiences. Both concert stories in *Dubliners* and *Pygmalion* end with confused post-performance emotions; as a result of their transformative vocal and musical performances, characters are pushed towards new understandings of themselves and each other, and as a result, they experience mixed feelings of excitement and disappointment. For example, Mrs. Kearney's animated vehemence, Gabriel's lust for his wife, and Gretta's vivid memory of Michael Furey are all agitated responses that later shift to Kathleen's disappointment about her career, Gabriel's disappointment that he cannot measure up to his wife's ex, and Gretta's lapse into sleep thinking about the difference between her mythologized first love and her current husband.

These emotions are perfectly paralleled in the narrative structure of Shaw's *Pygmalion*. In essence, *Pygmalion* is a concert story like Joyce's "The Dead" and "A Mother" because its climax is a vocal performance at the Ambassador's Garden Party, which is followed by mixed excitement and disappointment. After Liza's vocal performance, Pickering and Higgins exult in self-congratulation, while Liza feels rejected and disappointed. Her performance at the party is followed by unexpected emotions;

Liza does exceed Higgins's expectations, but rather than cement her place within her circle of Wimpole Street 'Old Bachelors,' her success drives her away in frustration. As a result, Higgins too has to consider his feelings in a complex way; in the final act, Higgins at once is disappointed that Liza will not remain in his flat, arrogant about his own voice-giving ability, and yet aware that his own need for Liza will not be met if he continues to act as though her voice were his. Higgins's excitement and pride cannot continue after Liza makes one more vocal performance—this time her ultimatum for a friendly relationship if she is to stay involved in Higgins's life. This final expression of voice is met with scoffing, much like the committee's "she's a nice lady" response to Mrs. Kearney (Joyce 363); however, in both works, the audience and readers remain on the side of the lady speaking up, despite the narrow-minded male scoffers who seem to get the last word. Joyce and Shaw remind their audiences that whether or not contemporaries laugh, vocal performances have the power to change characters' lives, a fact that each knew personally through their own and their acquaintances' experiences in the early twentieth-century Dublin and London music worlds.

Voice in *Pygmalion* has its roots in Shaw's childhood and formative years. His understanding of the power of voice comes from the power voice held for Vandeleur Lee, for Bessie Shaw, and for all musicians and music teachers in the nineteenth century. For Vandeleur Lee, scientific analysis of the voice made a sensation of an otherwise unimportant amateur, and his egalitarian distribution of these theories transformed music study forever. Also, Lee's engaging and dramatic writer's voice, so clear in *The Human Voice*, influenced Shaw's own writer's voice significantly and provided a model for the character of Henry Higgins in *Pygmalion*. The nineteenth-century amateur and

professional music scenes in which Bessie Shaw and Vandeleur Lee worked were thriving and diverse; Bessie Shaw's singing career introduced Shaw to this diverse world as well as shaped his ideas about the ability of ordinary people to transform their lives through vocal performances. Although Shaw's play *Pygmalion* does not normally lend itself to an analysis of its music as do the works of James Joyce, Shaw's plot and structure participate in the genre of the music story. Thus, *Pygmalion* functions as a bridge between past and present, and between reality and fiction. It may be true that *Pygmalion*, through its many twentieth- and twenty-first-century adaptations remains in the public eye far more than the little known *The Human Voice*; however, the ideas and language of Lee's text has shaped music theory, Shaw's writing style, and the concept of voice Shaw establishes in *Pygmalion*.

Chapter Two: Scientific Concepts and Instruments of Voice Study

Just as singing instruction had the power to transform middle class ladies into amateur musicians, managers, and composers, science had the power to transform female characters in *Pygmalion*. Phonetic science is the primary means of transformation, shown by Liza's shift from flower girl to princess. Clara's and Liza's career changes show practical transformations effected by interest and involvement in science. Characters in the play and audience members have various educational backgrounds, so, for example, Liza becomes the butt of many jokes as she encounters new and, to her, terrifying symbols of changing scientific technology, jokes that only work because the audience, like Higgins and Shaw, knows about science. Thus, Shaw engages in scientific conversations with the audience through his characters and situations. Language and images related to phonetics and voice recording technology throughout *Pygmalion* emphasize the changes in his female characters' lives; they also highlight the transformations occurring in the world at large. A full understanding of the cultural contexts for Shaw's references to voice science provides readers with new insights into characters who used these concepts, techniques, and devices to change their lives and the lives of others.

Shaw, raised in a family devoted to the art of music, was surprisingly knowledgeable about and interested in science. Despite the fact that *Pygmalion* is

ostensibly about voice, Shaw's themes and references suggest that perhaps this is an unlikely work of science fiction. Reading and performing *Pygmalion* as a science fiction play may seem a stretch to those whose ideas of the play are dominated by the ostrich-feather hat or cups of tea; however, Shaw carefully laid references to scientific ideas and new technologies throughout the play, including phonograph wax cylinders, phonetic science, and laryngoscopes. The number of references to new scientific terms and technologies supports the idea that Shaw was indeed deliberately constructing a narrative about science. In addition, Shaw's own interest in and experience with scientific technologies and theories supports this interpretation.

Pygmalion does not neatly fit into the science fiction genre, but reading it in the context of this genre does prove useful. There is no time travel; robots do not take over the planet. However, science fiction is more than these particular devices. It is rather defined by the use of scientific ideas and technologies to discuss societal fears or problems, and then suggest solutions for positive change. In *Pygmalion*, the problems are limitations in London society based on class, education and gender. In order to free herself from those limitations, Liza chooses to submit to phonetic science lessons and vocal inspection and recording via technology. Through the comprehensive education program which depends on voice science, Higgins and Shaw reveal that science both solves some problems and creates new ones. As Mrs. Pearce persists in asking, "What's to become of her?" (Shaw, *Pygmalion*, Nook file 2.19). Although Liza is transformed by scientific principles, the same science unleashes a new kind of monster on London society: a self-sufficient woman who can transform herself through work and study. As Mrs. Higgins points out, "Don't you realize that when Eliza walked into Wimpole Street,

something walked in with her?... A problem.... You two infinitely stupid male creatures: the problem of what is to be done afterwards” (3.39-40). This problem is not confined to the reputations of the Wimpole Street residents. Instead, when the problem of social boundaries is solved for Eliza, new problems of social stability arise. Although her own ability to sustain her independence is questioned by Higgins, her very presence reminds readers and audiences that some societal boundaries have been crossed due to voice science.

In order to establish how *Pygmalion* engages with ideas about science, and particularly the science of voice, we must first examine Shaw’s broader involvement in this field. Shaw often engaged in debates about evolution, for example, both in person and in his correspondence with science fiction author H.G. Wells (*Bernard Shaw: Letters* 348). Shaw was also revolted by vivisection (though not dissection) and was involved in what he called “the humanitarian campaign against vivisection” (*Bernard Shaw: Letters* 558), and he advised author Elizabeth Robins against even mentioning vivisection in her novels, calling vivisection “the King of Terrors” (*Bernard Shaw: Letters* 78). He discussed vivisection, nutrition, evolution, and other science topics in his 1900 essay “The Conflict between Science and Common Sense,” all with his characteristic humor and tempered skepticism. He also found medicine and people’s reactions to physicians’ advice fascinating. He once wrote to Wells, “these doctors all think that science is knowledge, instead of being the very opposite of knowledge: to wit, speculation” (*Bernard Shaw: Letters* 246). He was also interested in physics, chemistry and engineering.

In particular, he showed a sustained interest in voice recording. For example, he corresponded with Chichester Bell, a physician who traveled to Germany to study chemistry and physics and later taught these concepts to Shaw² (Holroyd 52). Chichester Bell came from a family interested in both engineering and phonetic study; Bell was the cousin of telephone inventor Graham Bell; nephew of Melville Bell, the inventor of Visible Speech, a phonetic alphabet; and the son of Alexander Bell, who wrote *The Standard Elocutionist*, and whom Shaw called “by far the most majestic...man that ever lived on this or any planet” (*Bernard Shaw: Letters* 504-505). Shaw’s admiration for the Bell family and its contributions to scientific voice study and science at large is notable. The fact that Chichester Bell taught Shaw what he knew about chemistry and physics shows that Shaw had more than a dabbling interest in science; he was educated, albeit informally, by professional scientists who formally studied in Germany, the physical science mecca. Shaw later worked for a telephone company, explaining telephone equipment and processes to laymen. Shaw recalled Bell’s influence on his career with the Edison Telephone Company: “As I was interested in physics and had read Tyndall and Helmholtz, besides having learnt something in Ireland through a fortunate friendship with a cousin of Mr. Graham Bell who was also a chemist and physicist, I was, I believe, the only person in the entire establishment who knew the current scientific explanation of telephony” (Shaw, Preface to *The Irrational Knot*). Though this position only lasted a brief time, Shaw’s work shows that he understood scientific concepts, especially those concepts related to the voice.

That Shaw was interested in science does not necessarily establish that science must be important in *Pygmalion*. However, reading this play in relation to the science

fiction tradition is not new. Several scholars since the 1980s have explored how this play intersects with science fiction literature and technology writing of its time. In so doing, these scholars suggest that *Pygmalion*, like Shaw's personal letters and statements, shows an active engagement with the world of science. In particular, *Pygmalion* demonstrates the importance of science's ability to change individuals and societies, and what happens to them after the scientific transformations are complete. By connecting the play with Mary Shelley's *Frankenstein*, some critics have noted the use of science and the role of the scientist in Shaw's *Pygmalion*. For example, Arthur Ganz, in *George Bernard Shaw*, draws on an idea originally presented by Eric Bentley, suggesting that Higgins is a creator of a "monster" that "may rebel" (Ganz 105), referring to Shelley's creature from *Frankenstein*; he further suggests that Higgins is "a comic version of the mad scientist" (105). Because Shelley's novel considers the responsibility of the scientist to his society, Ganz's essay suggests that Higgins's role also becomes complicated. Does Higgins, as a scientist of speech, have a responsibility to "care" about what happens to Eliza after the experiment, as Victor Frankenstein has a responsibility to care for his creature's future? Shaw's interest in the ethics of science, evident in his repugnance towards vivisection, suggests that in *Pygmalion*, he was exploring some of the same ethical questions about a scientist's responsibility toward his experiments as Shelley's novel raises. The very fact that Higgins refers to the bet as an "experiment" and that Eliza refers to Higgins's act of toying with her life as "experiment[ing] on her" suggest that indeed Higgins is meant to be a mad scientist à la Victor Frankenstein, devoted to his science so much that he neglects to see the effects of his experiments and his duty towards them until it is too late.

In addition to contextualizing *Pygmalion* as science fiction, some scholars have discussed the role contemporary technology plays in the play. Nicholas Williams suggests that *Pygmalion* reflects Shaw's views on the dangers of technology in response to WWI. Williams argues that *Pygmalion* expresses Shaw's perspective on who should have access to the technology, explaining, "Shaw himself seems to be arguing for broader, more democratic control over technology" (147). He posits that *Pygmalion* should be read as a 1914 text: "On the eve of [the first world war] *Pygmalion* provides, in the form of a cautionary tale, a very timely critique of the possible consequence of new technology on society" (Williams 159). He also argues that "the play begins to look, in a very contemporary way, at what happens when language and culture are transferred to immigrant second-language learners, who then become the new citizens of advanced technological societies" (Williams 158). Williams's "Shaw Reinterpreted" suggests that technology is simultaneously threatening and necessary. The essay does not, however, fully address the ways in which technology is employed within the play or provide any specific reference to the kinds of technology or its real prominence during the 1910s. It is in the area of voice study that technological apparatuses are at their most prominent and powerful, yet these technologies in the play have not specifically been explored.

Though the conversation regarding *Pygmalion* as a work of science fiction has begun, it is far from complete. Noting that *Pygmalion* is like *Frankenstein* or that it contains technological references to WWI only serve to put the play into a moral context which examines how far science should be able to interfere in natural life. Shaw instead invites his readers and audience to walk with science, not fear it. Certainly, by using science to transform voice, people will change, and social classes will change. Shaw,

however, is rather thrilled by the idea; as Higgins tells a post-transformation Liza, “I like you like this” (Shaw, *Pygmalion*, Nook file 5. 61), and Shaw embraces the changes in Liza as well as the ripple-effect changes in Higgins and the Hill family. Science fiction’s message is more than fearing that science gone awry can destroy the planet; rather, it means considering the power of scientific principles and practice to change social norms. Considering *Pygmalion* in the science fiction tradition should be a thorough examination of where scientific tools, techniques, ideas, and associations appear, and what they represent to the characters, audience, and author. When fully examined, *Pygmalion* does clearly fit into the science fiction canon, and suggests that science holds immense transformative power but is linked to larger cultural constructs, such as class, gender, and nationhood.

Science’s connotations to Higgins and Liza differ vastly. To Higgins, science, like philosophy and fine art, is a noble pursuit. Sarcastically, he shouts, “Oh, it’s a fine life, the life of the gutter. It’s real: it’s warm: it’s violent: you can feel it through the thickest skin: you can taste it and smell it without any training or any work. Not like Science and Literature and Classical Music and Philosophy and Art” (Shaw, *Pygmalion*, Nook file 5. 60). His respect for science seems laudable in its articulation, yet when Higgins extols the virtues of science, he disappoints his audience, which wants him to instead extol Liza’s merits and marry her. Here, Higgins sounds particularly out of touch with reality; he does not mention the grueling work required for scientific research, nor the thankless efforts of researchers who go decades without a major discovery. He also glosses over the fact that for many in the audience, science would have been far too dirty

to couple with Beethoven, Shakespeare, and Aristotle. To Higgins, science is pure and theoretical.

Liza, however, sees science in a much more practical light thanks to her background in Lisson Grove. Science as Liza would know it would be restricted to the lawful anatomical inspection of suspected prostitutes, and thus to her, scientific instruments are imminently threatening. The sexual danger of London was first famously described by W. T. Stead's "The Maiden Tribute of Modern Babylon: The Report of our Secret Commission," first published in *The Pall Mall Gazette* on July 6, 1885. This article is frequently cited as a source of inspiration for *Pygmalion*. This piece of sensational journalism was well known to Shaw, who wrote for *The Pall Mall Gazette* at the same time and commented directly on the article (Marshik 321). "The Maiden Tribute of Modern Babylon" is revealing in its language and storytelling, which seems to have inspired not only the plot of *Pygmalion*, especially in the first and second acts, as well as the political message or critique in the text. Likewise, the allusion to classical myth in order to reveal something about contemporary society appears in both Stead's article and Shaw's play, so *Pygmalion's* very title is in direct conversation with Stead's piece; Shaw uses Stead's terms in order to complicate Stead's ideas.

According to "Modern Babylon," if a man purchased a virgin (he does so for 5 pounds for investigative purposes), she would be inspected to ensure that the procuress was not cheating him. Such tools of inspection could also be used for inspecting girls suspected of being prostitutes. It is no wonder that when Liza believes Higgins is a copper's nark, she protests vehemently that she is indeed "a good girl" and is only selling flowers (Shaw, *Pygmalion*, Nook file1.9). While one could argue that Liza was only

innocently defending her character, it is unlikely that she could be completely ignorant of this practice.³ Later in the play, when she insists that she does not want a romantic relationship with Higgins, she says, "I've seen more of some things than you, for all your learning. Girls like me can drag gentlemen down to make love to them easy enough" (Shaw, *Pygmalion*, Nook file 5.59). Liza appears to know the sexual dangers and sexual practices of the London slums and would probably know of the inspection instruments used by both procuresses and police. Her vague "seen some things" allows audiences to conjecture about her awareness, though of course Shaw does not clarify further.

Following this conjecture, we must consider how Liza's probable knowledge of sexual crime and regulated inspections intersects with her understanding of science as she sees it during the play. How terrifying, for example, must be the instruments of science that greet Liza as she enters the Higgins residence. In addition to the expected furnishings of a middle class home, such as a grand piano and a "comfortable leather-covered easy-chair," is a frightening assortment of phonetics equipment:

In this corner stands a flat writing-table, on which are a phonograph, a laryngoscope, a row of tiny organ pipes with a bellows, a set of lamp chimneys for singing flames with burners attached to a gas plug in the wall by an indiarubber tube, several tuning forks of different sizes, a life-size image of half a human head, showing in section the vocal organs, and a box containing a supply of wax cylinders for the phonograph. (Shaw, *Pygmalion*, Nook file 2.13)

The laryngoscope, particularly, would be reminiscent of the inspection instruments and the larger sexual dangers from which Liza is possibly escaping; this suggests to the reader

how brave Liza is to submit to the professor's experiments despite her conceptual associations with the laryngoscope so boldly displayed. More generally, all of these instruments conjure some frightening associations for Liza, and viewed through her eyes, the display holds a special significance.

Gabriel Pascal's 1938 film *Pygmalion*, for which Shaw wrote the Oscar-winning screenplay, includes additional scenes and specific shots that emphasize the terror of these vocal analysis tools. For example, as a cinematic transition between Liza's daydreams of a new life in her mirror at home and the Wimpole Street world she will soon enter, several close-up shots of Higgins's equipment display the singing flames, cross-section models of the throat and head, and a phonograph horn hanging from the ceiling and approximately 2–3 feet in diameter. The horn hovers prominently between Higgins and Pickering during their first conversation, and then, when Higgins captures Pickering's voice using a hidden microphone, he replays it on the giant horn, which takes up the entire screen. One can imagine the horn's impression on audiences on a full theater screen; it is precisely this overwhelming impression that Shaw constructs for his audiences and readers in both the film and play versions.

When Higgins begins teaching, right after the bet is made, he tells her to sit down, and he says: "It's almost irresistible; she's so deliciously low..." and the horn is again prominently featured in the shot; Higgins and the horn stand undefeatable, proud. The bet-arrangement scene concludes with a close up shot on Higgins zooming in from the scope of the whole room to focusing from his arms to head. Behind him is the horn, also in focus in the close-up, with the voices blaring from its mouth. Here, Higgins seems a veritable "the tower of strength," the same phrase he uses to describe Liza in Act V. In

many ways, though, the horn seems even more powerful than even Higgins; it is unshaken even in the film's transformed last scene, when Higgins hopes Liza will return. The horn has power over even Higgins in that scene, making him cover his eyes with his hands and mope in remorse.

The horn holds power over both Pickering and Liza in a similar fashion at various points in the film. Pickering's voice was captured in secret by Higgins through a recording device hidden inside a statuette of a caricatured laughing Asian man, whose tongue protrudes every time its head bobbles. As Pickering realizes his voice has been recorded, he realizes, for a moment, that he too has been made to submit to the force of Higgins and his vocal analysis. He does, in fact, express discomfort at being the subject of Higgins's lessons. The later introduction of Liza as Higgins's new test subject displaces Higgins's power away from Pickering. However, perhaps Pickering's ample sympathy for Liza stems from his ability to recall what it was like to be under Higgins's hold through voice recording.

In a later scene documenting Liza's lessons and transformation, a montage of scenes appears which highlights the devices and techniques of vocal training. Shots synchronized with fast, intimidating music, display a spinning phonograph, vowel charts, the phonograph with its horn, the singing flames, the vowel charts again, a stack of records labeled "Eliza," and the laughing Asian statuette. The statuette seems especially cruel now as it becomes the focus of the screen; it is laughing at its victim as it captures it in "listening," and all the while nods as if to say, "Of course I can do this to you!" Now it is clear why a few minutes earlier, Doolittle, sitting in close proximity to the statuette, places his hand on his cheek in a way that blocks his view of the doll—or rather blocks

its view of Doolittle. The hidden microphone-statuettes' mockery seems the very cruelest kind of sound-voyeurism, a concept discussed by John M. Picker in *Victorian Soundscapes*. He argues that just as Victorians used the gaze to force others into their power, they also used close listening as a means of asserting authority over others (Picker 6). The cinematic medium reminds viewers that they are listening to and gazing at the actors on the screen, but then turns this power dichotomy on its head. The close-up seems to make the statuette laugh at us, and all of a sudden, we experience the terror the device causes.

The statuette, of course, works in tandem with the phonograph. The hidden microphone and the phonograph horn are both devices, as Picker points out, of close listening developed by the Victorians (Picker 10). It is clear that Liza is fully in submission to this process in the montage shot of phonograph records bearing her name. (It is notable that Shaw updates the technology in his film; in the original play version, there are wax cylinders for recording, but in the 1938 film version by Gabriel Pascal, round vinyl records replace the obsolete cylinders. Shaw seems to strive to be thoroughly up-to-date in his description of scientific innovation.) First, only a few "Eliza" records appear. Then, a few more in each shot, until a giant stack about two feet tall comprises the wobbly tower. Each record has the same label: Eliza. It is as though she herself were captured within the record sleeves, and stacked upon the floor for her teacher to either pick up or step on.

Though the 1938 film is masterful in its interpretation and presentation of the scientific devices in the play, it is the play itself which first proposes the terror of the scientific instruments. It is not that Shaw and his fellow playwrights used the film

medium to suddenly integrate elements of science. Instead, Shaw used elements he carefully integrated into the play and then transformed them so they would achieve as great an effect on cinematic audiences. The play's original props—phonograph, laryngoscope, pipes, bellows, singing flames, tubes, tuning forks, and a life-size cross-section model head—all carry the same weight in Shaw's original play.

The fact that the cross-section of a head is actually life-sized is especially threatening because it blurs the line between what is real or human and what is a model or doll. This could very well be another flower girl's head. It could even be Liza's own head, and Higgins indeed threatens her that if she is ill behaved, she will be "taken by the police to the Tower of London, where [her] head will be cut off as a warning to other presumptuous flower girls" (2.20). The specific reference to decapitation, as Higgins stands in the very room with the life-size head model, could be a vibrantly shocking visual threat to Liza. Higgins specifically uses the phrase "your head will be cut off" rather than "you will be decapitated" or "executed"; this choice is meant to first and foremost, as he says, explain his plan plainly and fairly" to Liza at Mrs. Pearce's demand (2.21), and also to specifically draw on the visual imagery in the room (the head model) to persuade Liza to perceive his orders as commands and threats. Although I have not encountered a production in which this occurs, one can imagine productions of *Pygmalion* in which Higgins delivers this formidable speech with one hand leaning upon the terrifying statuette.

The phonograph is particularly important among Professor Higgins's instruments because it receives the most attention from the characters during the play. While the model of the human head never is mentioned again, the words phonograph and

gramophone are mentioned seven times. Also, characters make frequent references to recording, wax cylinders, and listening to recordings, all supporting the predominance of this item among the phonetic instruments, as well as the phonograph's importance to the play's plot and conflicts. In the endings of the 1938 Gabriel Pascal film and of *My Fair Lady*, the phonograph even resolves the romantic conflict between Liza and Higgins. Shaw wrote so adamantly in his sequel about the impossibility of a Higgins-Liza marriage, and abhorred attempts to romanticize his plot. Why, then, were writers convinced that if something could make the two reunite, it would be the phonograph? And why such a cold, eerie device, rather than some more sentimental object? For example, according to Shaw scholar Derek McGovern's comparative analysis of the 1916, 1939, and 1941 revisions of the play, Shaw experimented with Liza's ring, which is removed coldly and dashed into the hearth after the post-garden party argument. In one version, Liza then picks up the ring fondly and places it back on her finger; in another, she picks it up and then flings it angrily on the dessert dish; and in yet another, she does not go back for the ring at all (McGovern 18). If the couple needs a prop to unite them and help surmount the romantic tension and conflicting ideals, the ring Higgins had bought Liza easily could have made a sentimental, clichéd yet satisfying ending. Similarly, other conventional markers of love permeate the play and could have been used for this purpose: the empty bird cage for which Liza sends could be filled with a pet bird provided by Higgins (as inspired by Ovid's myth), or the chocolates could finally be presented to Liza rather than being popped into her mouth by the controlling Higgins. The phonograph hardly seems romantic at all, but is nonetheless the vehicle for the romantic reunion. Of course, Shaw disapproved of the romantic union of Higgins and

Liza, and each of his endings is powerful and interesting in its own right, but if a romantic ending had to be used, the phonograph ending is quite logical because the device had played such a memorable and prominent role in the play itself. The fact that screenwriters and scriptwriters thought the phonograph a fitting vehicle suggests the object's importance to the play as a whole.

The phonograph is extremely powerful because of the way its symbolic associations bridge the scientific and the sentimental. It is a scientific tool and used by Higgins and other phoneticians to analyze human speech. Phonographs were key to the development of the universal alphabet or Visible English attempts by many phoneticians at the time. Without these recording devices, examination of the human voice was far less rigorous. With phonographs, different phoneticians could listen to the same passage to determine whether they agree on the sound patterns, or the same passage could be listened to by the same phonetician over time so he could assess his own consistency in interpretation. Without this device, any sounds analyzed would depend only on the skill of the one phonetician present to correctly hear, analyze, and record in writing the first time. As Higgins discusses his thirty vowel sounds with Pickering, it becomes clear that such advanced phonetic science would not be possible without this device.

Advertisements of the time remind modern viewers how much of a new technology home phonographs were. In the 1890s when Shaw began thinking of *Pygmalion*, the phonograph was new altogether, and in the early 1910s when *Pygmalion* debuted in England, the phonographs were undergoing refinements and updates which improved their quality. The technology thus always seemed "new" (much as modern updates of Apple products make the same device seem constantly new and

technologically up to date). One 1900 advertisement for the Home Grand Graphophone by the Columbia Phonograph Company, for example, states that it “embodies the recent marvelous improvements in talking machines due to discoveries made in our laboratory” (“Home grand graphophone”; see Fig. 1). This ad consciously draws on scientific imagery by using the words discoveries and laboratory. Despite the fact that this device is called the *home* grand graphophone, and thus does have sentimental attachments inherent in its name, the ad emphasizes the scientific novelty.

Although the phonograph is utterly scientific in its nature, it also possessed sentimental and romantic associations for contemporary audiences. These associations were derived from phonographs’ use as home entertainment for families and couples as well as from the advertisements that encouraged these uses and associations. One such advertisement from 1909, “A Useful Ally,” offers a free advertising booklet to “every woman” and explains that the booklet “presents the home side of the phonograph” (See Fig. 2). The ad itself presents two images: a matronly woman listening intently to the phonograph while a young couple dances cozily behind her. The presence of the sweet, chubby matron makes the phonograph seem quite wholesome, but the embrace of the couple is extremely close, suggesting a level of intimacy. Both wholesome family time and romantic rendezvous were associated with the phonograph. The ad’s caption is particularly witty and suggestive, as the phonograph could be seen as an ally for the couple or the matron. The matron, eager to keep an eye on the couple she is chaperoning, would be happiest keeping them at home under supervision, and the couple eager to nestle without the matron’s scrutiny, may find the phonograph an ally in occupying the old lady, offering them a few moments of privacy. This advertisement here shows how

this technological device also holds the romantic and sexual meaning for Shaw's original audiences.

Another advertisement from the time similarly displays the phonograph in conjunction with sexuality, pushing far beyond the previous advertisement's couple's intimacy. This 1908 advertisement by Guernsey Moore depicts a geisha girl in her dressing gown listening to phonograph cylinders (See Fig. 3). Both shoulders are revealed, with the kimono draped casually low at her back. The girl sits on the floor, her bare forearms resting clasped together in her lap. In her hands is, of course, an Edison Phonograph Cylinder. The woman's face is sensual and staring off just over and to the side of someone facing the ad; she is entranced by the music she is hearing and the phonograph cylinders which are scattered about her legs and lap. One phonograph cylinder is in the machine, and its canister stands up, open beside the girl, with its cap beside it. The state of undress of the geisha girl, the repeated canister imagery, and even the circular patterns on the woman's dress reveal a sexualized nature of the phonograph. Surprisingly, the text below the rather suggestive artwork is quite bland; it only reveals that there have been new changes to the phonograph and that these new models are on demonstration at the nearest Edison store. However, despite this sobering writing below, the startling imagery of the geisha girl makes clear that the associations of phonograph records with both romance (as in the "Home grand graphophone" Ad) and with sexuality (as in the Moore Geisha Girl ad).

It then is not so surprising that the phonograph could be the object that unites and reunites the couple of Liza and Higgins in the film and musical version. It is also not surprising that this object, so seemingly sterile and cold, conjures sentimental, romantic,

and sexual associations for the characters. Despite Shaw's ardor in defending his original ending and the impossibility of a Liza-Higgins marriage, the presence of the phonograph complicates the scene. It presents a double-marker of the two contrasting ideas of sex and science, and Liza has to determine carefully which of the meanings Higgins intends when she first encounters the phonograph in his drawing room laboratory.

Vocal health and medicine were presented in a dually sentimental and clinical fashion in contemporary literature and culture. In an 1874 nonfiction article in Charles Dickens's literary magazine *All the Year Round*, an anonymous reporter described the interior of the Central London Ear and Throat Hospital as well as progress in vocal studies due to instrumentation such as the laryngoscope. This article's title, "An Inside View," itself emphasizes the importance of the laryngoscope. The title reminds readers that an inside view of the throat could not occur until the invention of the laryngoscope. It also unites the content of the article with the artistic medium of investigative journalism; just as the laryngoscope is meant to examine the depths of the throat, journalists such as this anonymous author aimed to probe below the surface and gain an inside view of a situation. This new medium of investigative journalism was used by undercover slummers who used their feigned identities to gain an inside view for better reporting on poverty and urban morality,⁴ and the author here aligns himself with this tradition by exploring hospitals, except here with the aim of extolling the mercy of such clinics and explaining the processes of vocal inspection.

"An Inside View" is notable in its marriage of science and art in theme, linked by the laryngoscope. The first half of the article describes the new understandings of how voices sing; it brings into conversation different schools of thought in the debate of how

the singing instrument operated, even mentioning Vandeleur Lee's ideas about voice production. Interestingly, the author does not decide which of the schools of thought is correct, but Lee is the only voice instructor mentioned by name, suggesting his fame and credibility.

After the section on music, "An Inside View" shifts decidedly to the scientific methods practiced by the Central London Ear and Throat Hospital. The scientific section of the article discusses the process of larynx check-ups and surgeries. However, even within this second half, the author drifts to sentimental imagery by conjuring examples of the poor patients who sacrifice their day's wages to visit the life-saving doctors, or the self-sacrificing physicians who remain after hours to accommodate those poor patients for whom a day's wages could not be spared. This imagery seems more akin to the kind of language used by Shaw's Major Barbara than a real investigative reporter, but nonetheless it appears. Of course, it is not in the *Times of London* or even *Pall Mall Gazette*, but rather a literary magazine that would likely feature such a romantic piece. This combination of a scientific topic (the inner workings of vocal organs, and even a step by step description of vocal surgery) with sentimental commentary and focus suggests that indeed these two topics do overlap. Shaw, who would have been aware of Charles Dickens's magazine and its content, draws on similar dual significance of the voice as both scientific and sentimental.

Higgins's home is filled with such double markers of science and sentiment or romance; in fact, the most overwhelming impression of the scientific equipment in the room is that it is nearly all phallic in structure. The wax cylinders, pipe organs, indiarubber tube, tuning forks, lamp chimneys, and laryngoscope all suggest male

sexuality. To Liza, these strange instruments, all phallic in nature, must make the Wimpole Street flat seem like one of the brothels she likely has heard about from news articles such as Stead's "The Maiden Tribute of Modern Babylon." She is then doubly courageous for entering into this partnership, especially as she was so concerned by implications of sexual impropriety in the street a night prior.

Indeed, it can be argued that the phallic associations of the phonetics instruments are a mere coincidence. Music and sound are created by vibrations, which are generally attained via strings, tubes, pipes and rods, all of which are by their own nature phallic. Nevertheless, Shaw's methods of introducing these items makes it clear that he means to overwhelm the reader. The sentence structure of the stage direction itself supports this symbolic interpretation; by using a "laundry-list" sentence structure, Shaw emphasizes each item on the list and forces the reader to draw connections among the items. The laundry list of items is uncharacteristic of other setting descriptions in the play. In the stage directions describing Liza's flat and Mrs. Higgins's parlor, sentences tend to be complex rather than compound. These stage direction patterns, which are more typical of Shaw's writing, suggest his authorial voice as he commenting on the items in the home: "In the middle of the room there is a big ottoman; and this, with the carpet, the Morris wall-papers, and Morris chintz window curtains and brocade covers of the ottoman and its cushions, supply all the ornament, and are much too handsome to be hidden by odds and ends of useless things" (3.31). Although Shaw here provides a description of many items in the home, this differs from the list provided in the description of Higgins's phonetics tools.⁵ In the Act III list, the frequent use of dependent clauses and prepositional phrases creates a story-telling format, with Shaw in charge of describing

and commenting on the value of the items described. The description ends in a commentary that encompasses the entire second half of the sentence, which creates an authorial presence. This differs from the Act II list, in which the focus is not on the author but rather on the perspective of the character of Liza, a first-time visitor to the intimidating Wimpole Street room. In the Act II passage, Shaw's voice conjures a barrage of visual imagery and associated concepts, without his direction about how to interpret the content. Certainly, this interpretation may not be what Shaw intended, but equally certain is the fact that Shaw's laundry list creates an overwhelming effect from which the reader is left reeling. Shaw wants the reader to feel as Liza feels, confronted with a barrage of items both unfamiliar precisely but with startling symbolic associations. The laryngoscope in particular resembles tools for gynecological inspection, and thus, sitting at its place in the middle of the room, must remind Liza of the implications of cross-class sexual relationships.

Laryngoscopes, while of course being used by physicians of the throat for treating various diseases, were also used commonly by phoneticians. Such phoneticians had made a science of speech study and were interested in the way the voice is produced in various languages. Henry Sweet, an English phonetician whom Shaw mentions in his introduction of *Pygmalion*, published many phonetics guides. In fact, Sweet, in his *Handbook of the English Language*, argues that "until within the last few years phonetics was hardly recognized as a science in this country.... The investigation of the mechanism of the glottis in producing speech-sounds received a great impulse from the use of the laryngoscope" (7). For Sweet, the ability to classify phonetics as a science depends very specifically not only on observation, analysis, and communication, but also and most

importantly on the scientific technologies which allow anatomical observation. Indeed, he calls phonetics “phonetic science” within his book (11), stressing its scientific principles that are explored most fully through use of scientific equipment such as the laryngoscope.

The question remains: what does it suggest about Higgins that he keeps himself surrounded by these scientific implements of phonetic study? Mrs. Pearce would probably argue that it indicates Higgins’s unmannerly obsession with work. Just as Higgins has no time or care to wipe his hands on napkins instead of his robe, or to dress before breakfast, Higgins’s constant usage of his work equipment would necessitate their inclusion in the drawing-room, despite its impropriety. Unlike his mother, who hosts at-home days, Higgins does not maintain a home comfortable for guests, and thus may leave his laryngoscope out. Alternately, Mrs. Higgins would probably argue that Higgins’s decision to keep his phonetics equipment in the drawing room suggests a childish obstinacy not to clean up his toys. His laryngoscope and other equipment are only, to Mrs. Higgins, an extension of the games in which he and Pickering play with a “live doll” in the form of Liza (Shaw, *Pygmalion*, Nook file 2.39). Like jingling keys or grinding teeth, playing with toys is simply a childish habit of Higgins’s that she simply could not break him of during his residence in her home, and now that he is in his own abode in Wimpole Street, his toys will forever be on display for ease of use, despite Higgins’s age.

However, Higgins’s laryngoscopes may also serve other purposes. In addition to simply being conveniently at hand, his laboratory equipment, placed plainly in view in the drawing-room, immediately defines his character as a professional phonetician. Higgins uses the laryngoscope and other phonetic tools to make clear to any entering his

home that he is a scientist. He makes his disdain for careless English speech clear, insulting both Liza's speech and the public education system which produced it. He only appreciates speech as a science. As Henry Sweet said, "The proper way of studying phonetics is, of course, to go through a regular course under a competent teacher" (11). The scientific tools serve as visual markers to assert that he is one of those competent teachers.

Higgins must use his home as a sign of his profession and scientific prowess for several reasons. First and foremost, it is necessary to portray himself as a man of science before the various people who visit his home to be recorded on phonograph cylinders. Higgins does not allow his professional and personal life to cross, affirming that he is "immune" to the beautiful millionairess students who come to his home for speech lessons. The intimidating, cold, and clinical setting helps him avoid personal attachments with his clients. In addition, the scientific tools permit him to assert his professional status, which is necessary because phoneticians needed to defend their roles as scientists. Sweet's statement above that reading his handbook alone could not make anyone proficient in phonetics, but rather that teachers are required, shows that at least some people considered it possible to teach themselves phonetics.⁶ Liza's humorous assertion that she would pay Higgins less for English lessons than her friend pays for French lessons because English is her own language actually supports Sweet's trepidation that upstarts will attempt to learn phonetics without teachers. If Liza feels that phonetics teaching requires less skill than other content, then others too may have doubted the scholarship of phoneticians. Even Mrs. Higgins, whose esteem Higgins values deeply, suggests that phonetic science is child's play rather than a legitimate science. When

Higgins asks her to assist him in testing Liza's speech at her at-home day, she responds, "No use, dear. I'm sorry; but I can't get round your vowels; and though I like to get pretty postcards in your patent shorthand, I always have to read the copies in ordinary writing you so thoughtfully send me" (32). Mrs. Higgins considers her son's work as nothing more than an amusing translation exercise, like using a decoder ring to discover a secret phrase in a cereal box; his science is not the life-saving work that would be both understandable to her and permissible to her friends. Thus, Higgins all the more has to validate his own field, wearing it on his sleeve, or as the case may be, in his drawing room.

The laryngoscope itself became a sort of icon for phoneticians. In fact, in 1896, the journal *The Laryngoscope*, was established for phonetic studies. This journal is key because it features articles on topics of both the anatomy of speech as well as educational practices and cultural references. No one in the field of Shavian studies has, to my knowledge, cited this journal, but it is clearly a valuable cultural document in conversation with Shaw's ideas. Henry Higgins, perhaps, would have been a subscriber to, or perhaps even, a contributing author for, such a journal. It provides evidence that the scientific ideas of the time were not presented in isolation but rather were also in some cases being discussed by educators and the public at large. In fact, in her 1919 *Laryngoscope* article "Negligent Speech," Mary K. Scripture discusses her perspectives on the need for phonetic education. She refers to George Bernard Shaw's *Pygmalion* as an example of the need for such educational programs. The literary and scientific, then, were connected at the time. Like Higgins, scientists of phonetic study were not isolated in their laboratories without the influence of "Shakespeare and Milton and the Bible," as

Higgins exclaims. Literary and scientific associations of the laryngoscope intersected at Shaw's play.

Science is so crucial to the play because it emphasizes the themes developed by Shaw in the characterization and dialogue. This is a play centered on transformation: the ability of characters, especially women, to learn new concepts and skills and thus reinvent themselves and find new possibilities for success. This new identity comes with a new voice, a metaphorical empowerment to speak up and against male authority. It is the direct influence of scientific interests, practices, and theories that allows these characters to transform. In particular, Liza and Clara use science in varying ways to develop new voices and transform themselves.

If the sequel is taken into consideration, then science holds a transformative power for Clara, as well. She depends upon various sciences to transform herself socially and personally. In the sequel, Shaw introduces a twist of fate for Clara, the hitherto snobbish, irritating daughter of the once-rich Eynsford Hill family. Once she stops complaining and seeks to align herself with scientific understandings via Wellsian literature, she finds a place within London society. Instead of seeking to marry writers, as Shaw recounts, she instead actually reads H. G. Wells's work, and in so doing, discovers other women who are reading Wells's science fiction. Just as Wells's novels present ideas of societal change, Clara's views of society and role within it change as she aligns herself with Wellsians. She ultimately attains a job from a fellow Wells fan, and though she breaks the Eynsford-Hill social norms, she transforms herself into a productive member of society and saves the financial fate of the family by paving the

way for Freddy and Liza to go into business. By being able to talk about Wells, science in effect transforms Clara's speech as much as it does Liza's.

Even before the sequel, Clara is eager to transform herself, but without science (albeit science fiction), she has no means of transformation. In the at-home day tea, Clara's voice is deemed in need of improvement. Mrs. Eynsford Hill, Clara's mother, laments Clara's brash way of speaking in slang: I do hope you wont begin using that expression, Clara. I have got accustomed to you talking about men as rotters, and calling everybody filthy and beastly; though I do think it horrible and unladylike" (Shaw, *Pygmalion*, Nook file 2.37). She is also eager to use what Higgins calls "the new small talk" to elevate her social standing, despite the fact that of course, this is all Higgins's joke. If she had actually submitted to the same phonetic science techniques as Liza, she would have been able to effectively change her voice and status; without the lessons, she depends upon some other science.

Ultimately, the question of whether scientific voice study truly transforms Liza depends on the version of the play one deems the final word. In the 1916 sequel it is clear that although Liza does not establish a separate and independent life for herself, she does accomplish her dream of working in a store (and in fact owning one), which was a possibility only open to her by her improved speech as well as by her new partnership and friendship with Higgins and Pickering, as well as by her marriage to Freddy. In the 1938 film and the 1964 film *My Fair Lady*, she asserts that she is transformed by reclaiming her voice from the phonograph. No longer captured inside phonograph record sleeves, Liza actively takes back her voice from the recording which had hitherto seemed to replace her. When she finishes the line begun by the recording, "I washed my/me face

and hands before I came/come, I did,”⁷ she is refusing to allow anyone or anything to have control of her voice, including Higgins and including the phonograph. Thus, she has transformed her voice through phonetic science and uses her new power of voice in her favor—here to reunite with Higgins on more equal terms. In the play, it is clear that Liza’s plan to teach phonetics has transformed her fully; she not only can use her new skills, but she knows how to fully and publicly voice her messages. When she debates with Higgins about future options for financial stability, she suggests using a newspaper ad to publicize her ability to transform others by phonetics instruction. Instead of fearing a society who may arrest her for soliciting, Liza invites public attention with a newspaper ad and a business. Thanks to phonetic science, she has a voice that is understood and valued by middle and upper class people, and she aims to use it.

Science related to voice is thus an essential issue in the play. Phonetic science literally transforms Liza’s social standing, just as Clara’s interest in science fiction transforms her. The science of voice recording appears prominently in the play, in the stage directions and dialogue of the text as well as visually in the filmed performances of *Pygmalion* and *My Fair Lady*. Phonetic instruments, such as laryngoscopes, microphones, and phonographs, hold great significance; they remind readers of the historical context, in which these instruments both made possible the scientification of the field of voice study and allowed voice scientists to hold power over the subjects whose voices they captured. Phonetic instruments such as the laryngoscope and phonograph also historically and in the play blur the lines between scientific/clinical and romantic/sexual, paralleling Higgins’s and Liza’s relationship. Shaw invites his readers and audience to consider the science of voice study through the stage directions,

characterization, and themes. Special attention to the concept of scientific voice study allows readers to decipher Shaw's deeper discussions of the themes of transformation and power.

Chapter Three: Talking Dolls and Animation

MRS. HIGGINS. You certainly are a pretty pair of babies, playing with your live doll.

HIGGINS. Playing! The hardest job I ever tackled: make no mistake about that, mother. But you have no idea how frightfully interesting it is to take a human being and change her into a quite different human being by creating a new speech for her.

--(Shaw, *Pygmalion*, Nook file 2.39)

Higgins's treatment of Liza as a performing doll makes him quite laughable to contemporary readers and his mother alike. A big child in every way, Higgins uses Liza as a toy by teaching her specific lines and manners. He insists to his mother that he is not playing, but that this is just a "frightfully interesting" job which depends on his ability to transform Liza with "new speech" (Shaw, *Pygmalion*, Nook file 2.39). The larger issue is that Higgins believes that the voice has the power to animate and transform a person "into a quite different human being." While it is child's play to a degree, the doll concept actually fits into *fin de siècle* ideas about voice. Voice recording technologies of the late nineteenth and early twentieth centuries fostered developments in many industries, including music, entertainment, phonetics, and medicine. However, phonographs also changed people's ideas about what it means to be alive. If inventors could give a wax cylinder a voice, then what would stop them from creating a whole human? After all, by the late nineteenth century, inventors had created lifelike dolls and automata which blurred the lines between the inanimate and the animate. Animation is also transformative; by animating a doll, an inventor transforms it from lifeless to living. Liza

transforms herself with her newfound voice just as Bessie Shaw transformed herself with her singing career; in both cases, dedicated and complex teacher figures help this transformation to occur by focusing on how best to use and master control of the voice, knowing that the voice held economic, artistic, and social power. Because of the nineteenth-century innovations in voice recording, automata which could learn to talk and perform became just as surprising, and yet just as possible, as uneducated middle class Irish women or Cockney flower girls who could learn to talk and perform. *Pygmalion* is situated within a history of animation stories, but Shaw's references to and knowledge of mechanical talking dolls makes it clear that his version of the myth is quite different; including the technology references to a practical talking doll advances the genre of automata fiction into the 20th century.

Ovid's Pygmalion myth is a simple transformation tale, bringing human life out of art. Ovid's Galatea has no voice, and her ability to respond to Pygmalion's love is limited to a nonverbal blush. Shaw's Galatea figure, Liza, talks back. However, Liza's speech is both a statement and the act that confirms her ability to participate fully in English society. Unlike Galatea, Liza has always been human, despite the fact that Higgins repeatedly attempts to dehumanize her by calling her a "draggled-tailed guttersnipe" (Shaw, *Pygmalion*, Nook file 1.17) and a "cabbage leaf" (Shaw, *Pygmalion*, Nook file 5.53). Her ability to think, question, and rebel are apparent from the beginning of the play; she considers it wrong that Freddy knocked her flowers down and walked away, questions Mrs. Eynsford-Hill's parenting, and argues against potential accusations that she has done something wrong by speaking to Colonel Pickering. Liza's is not and cannot be a story of animation; however, the concept of the animated doll does make this

a story of transformation. Like Galatea and automata, Liza becomes something new, but Liza does so by a combination of external and internal forces. She transforms herself as much as Higgins transforms her.

Shaw's *Pygmalion* is part of a transformation myth tradition that spans several genres. Ovid's original myth begins the tradition, but in the nineteenth century, shifts in technology and increased interest in the ideas of what makes a human led to an explosion of animation fiction. In 1818, Mary Shelley published *Frankenstein*, which explored the themes of animation through scientific means, literally assembling a person part by part. E.T.A. Hoffmann's 1816 "The Nutcracker and the Mouse King" and his 1817 "Der Sandmann" had revitalized nineteenth-century audiences' interest in animation stories, and led to remakes and similar stories, such as the ballets *The Nutcracker* of 1892 and *Coppélia* of 1876, based on the two Hoffman stories, respectively (*New York City Ballet*). The myth inspired W.S. Gilbert (of Gilbert and Sullivan fame) to write his 1870 play *Pygmalion and Galatea*, and in 1868, William Morris explored this topic in his epic poem *The Earthly Paradise*. Other works followed, such as E.E. Kellett's 1901 short story "The Lady Automaton" (Klass 75) and Villiers de l'Isle-Adam's 1886 *The Eve of the Future* (Wood xix) to reveal a Victorian fascination with animating females. *The Eve of the Future* even features Inventor Thomas Edison as a character, who puts great care into his creation (Wood 140).

Along with the genre of animation fiction came the genre of literary theory and scholarship discussing and analyzing these tales. Literary scholars have also considered the Pygmalion story's representations of automation and transformation. Jane O'Sullivan's "Virtual Metamorphoses: Cosmetic and Cybernetic Revisions of

Pygmalion's 'Living Doll'" views the Pygmalion-Galatea story in conjunction with science fiction films in which male scientists build or refashion idealized female bodies.

She suggests,

science fiction films largely depict their male scientists' life-giving and life-transforming processes of metamorphosis as driven by an unchecked combination of scientific irresponsibility and masculine arrogance. In a sense, they function as cautionary tales as women are seen as readily replaceable, and the punishment meted out to these men of science by the seemingly malleable or "yielding surface" of their creations is often severe. (150)

She compares the fetishized Galatea of Ovid's myth with female "living dolls" of *Blade Runner* (1982), *The Stepford Wives* (1975, 2004), *Bride of Frankenstein* (1935), and *Metropolis* (1927). O'Sullivan's argument is based on the idea that Ovid's Pygmalion myth appears in 20th century films, especially science fiction films. Shaw's *Pygmalion* (1914) could be included among these examples, as it clearly bridges the gap between the pure myth's idea of transforming the female body by divine power alone and science fiction's transformation of the female body by science alone. In *Pygmalion*, Higgins's "divine fire" and practical scientific ingenuity are both at work in transforming Liza. In this way, O'Sullivan, who does refer to three different cinematic versions of Shaw's play (*Pygmalion and Galatea*, 1911; *The Modern Pygmalion and Galatea*, 1911; *My Fair Lady*, 1964), ignores Shaw's *Pygmalion*, in textual form and in the Gabriel Pascal film (1938), both of which are critical steps in understanding the shift in power from mystically divine to scientific man-made.

The same idea of Galatea as a cyborg body—compromised in its humanity and complicated in its value as a sexual partner—is explored in Norah Campbell’s “Future Sex: Cyborg Bodies and the Politics of Meaning.” The concept of the female cyborg body stems from Donna Haraway’s *A Cyborg Manifesto* (465). Campbell’s essay is in dialogue with some of O’Sullivan’s ideas, but remains more closely aligned with Haraway’s literary theory than O’Sullivan’s, which applies theory to specific films. In many ways, Liza functions as a cyborg character; described in language that is both human and inhuman at different points in the play, Liza is able to cross the boundaries of class, gender roles, and other barriers. The cyborg concept applies to *Pygmalion* because the play can be defined as a work of science fiction; in this genre, scientific tools and techniques of scientific study are used to address a societal problem in a mystic or unrealistic way, which then calls into question what the viewer or reader had considered stable and normal, and perhaps, calls them to make a change in the world. In the world of *Pygmalion*, Higgins’s laboratory becomes the center of change for the London slums, and for examining exactly what makes a normal or acceptable woman and man.

The short story “The Lady Automaton” assists in bridging the gap between nineteenth-century works of animation and transformation to Shaw’s *Pygmalion*. In “The Sandman” and *Coppélia*, a mechanical doll becomes uncannily humanlike and claims the heart of an unsuspecting lover. Similarly, “The Lady Automaton,” by E. E. Kellett, first published in *Pearson’s Magazine*, follows the story of a mechanical doll who claims not one but two suitors’ hearts, and promises to marry both on the same day. Philip Klass’s 1982 essay “‘The Lady Automaton’ by E. E. Kellett: A *Pygmalion* Source?” is the foundation of reading *Pygmalion* as an example of science fiction. Here, Klass suggests

that the story may have inspired, either consciously or subconsciously, Shaw's *Pygmalion*. Klass argues, "*Pygmalion*, it happens, relates to the best kind of science fiction: its science is involved with large social issues and affects human beings in important new ways" (81). Klass posits that Shaw is indeed a force within the science fiction genre, as "Many writers who write science fiction read him; and many writers who influenced writers of science fiction read him" (81). Furthermore, Klass explores the following questions: "How interested was Shaw in science fiction (not yet named as such), and how often did he attempt it only to discover again that his interest in immediate social questions was stronger than his interest in scientific possibility?" (81). Klass's work is thus a valuable theoretical foundation for the study of Shaw not merely as a satirist but as a science fiction writer. In addition, Klass's discussion of specific details, such as Higgins's "preoccupation with the phonograph," helps to support this claim (75). However, an analysis of the story itself suggests that indeed whether Shaw had read "The Lady Automaton" or not, similar ideas, situations, and ethical questions about the ability of science to animate influenced both works.

What sets "The Lady Automaton" apart from the previous animation works and what seems to influence Shaw most is its social commentary as well as the obvious progress in this version of Galatea. Not only does the Lady Automaton, called Amelia Brooke, smile, sing, dance, and even bleed, but she converses independently; she can also respond to questions and speak about topics raised by other people. In other words, she engages in what Higgins would call "small talk." Interestingly, just as Higgins first teaches Liza to speak about the "weather and everybody's health," Amelia's first statements to the first person narrator are about those very topics, though she later

demonstrates an ability to answer questions and respond to prompts about international politics as well.

Liza and Amelia of course are no closer in character than are Liza and Galatea. Amelia has no aspirations of her own, and ultimately dies, bringing her creator's life to an end with hers because the two had been so intimately tied. Such melodramatic tragedy savors more of the operas Shaw would have reviewed than the comedies he wrote. Also, Amelia and Liza are motivated by different forces; for example, Amelia kisses and flirts because she plays the coquette role assigned to her by her inventor, whereas Liza's kisses with Freddy are practical and self-serving in nature. The stage direction reads that Liza, "hungry for comfort," kisses Freddy; unlike Amelia, who kisses upon command or prompt, Liza acts upon her own feelings. Higgins's dehumanizing insults, such as "cabbage leaf" and "bilious pigeon," make it seem as though Liza is less than human and thus able to be animated by Higgins's lessons. However, although this play falls into the catalogue of animation myths reaching back to Ovid, it is actually a transformation myth because Liza has been a human all along. Liza "has feelings the same as" her benefactors' even before she is a lady. Higgins claims that "there isn't an idea in her head [he hasn't] put there," but it is clear that she does have her own ideas from the very beginning. In fact, Liza's humanity is why she is in many ways less frustrating than the submissive Lady Automaton of Kellett's story.

Liza's story also differs because Higgins actively uses technology to effect his transformation of Liza. Because Liza is already human, there is not a clear way for him to animate her with either magic or simple gears, as do the toymakers and sculptors of the other animation tales popular in classical and nineteenth-century literature. It is not

convincing enough to simply have Liza come into a room dressed beautifully, and despite the fact that Freddy does seem to fall in love with Liza at first sight, one can hardly imagine him as bewitched as Franz in the ballet, dancing below a silent doll in raptures. Freddy finds her small talk endearing, and herein lies the difference: if, as Mrs. Higgins suggests, Liza is a “live doll” for Higgins and Pickering to “play with,” then she is the newest sort of doll: a talking doll. Higgins and Pickering’s discussion of the experiment with Mrs. Higgins establishes the phoneticists’ ideas of voice animation:

HIGGINS. As if I ever stop thinking about the girl and her confounded vowels and consonants. I'm worn out, thinking about her, and watching her lips and her teeth and her tongue, not to mention her soul, which is the quaintest of the lot.

MRS. HIGGINS. You certainly are a pretty pair of babies, playing with your live doll.

HIGGINS. Playing! The hardest job I ever tackled: make no mistake about that, mother. But you have no idea how frightfully interesting it is to take a human being and change her into a quite different human being by creating a new speech for her. It's filling up the deepest gulf that separates class from class and soul from soul.

PICKERING [drawing his chair closer to Mrs. Higgins and bending over to her eagerly] Yes: it's enormously interesting. I assure you, Mrs. Higgins, we take Eliza very seriously. Every week—every day almost—there is some new change. [Closer again] We keep records of every stage—dozens of gramophone disks and photographs—

HIGGINS [assailing her at the other ear] Yes, by George: it's the most absorbing experiment I ever tackled. She regularly fills our lives up; doesn't she, Pick?

PICKERING. We're always talking Eliza.

HIGGINS. Teaching Eliza.

PICKERING. Dressing Eliza.

MRS. HIGGINS. What!

HIGGINS. Inventing new Elizas. (Shaw, *Pygmalion*, Nook file 2.39)

They both assure Mrs. Higgins that this is not play; in fact, Pickering insists that they “take Eliza very seriously.” However, it becomes clear that their experiment does mimic doll-playing when they excitedly exclaim their pleasure in “dressing Eliza” and, more notably “talking Eliza.” Pickering could simply have dropped the preposition and meant that they talk *about* Eliza, but the transitive verbs in all of the other examples indicate that he meant that they *make Liza talk*, as a little girl may make a doll talk in a game of make-believe. Higgins accurately recognizes the transformative power of this play-talk when talks about making “a new speech” and thus “inventing” a new identity for Liza. As an inventor, Higgins obsesses over his new toy.

Talking dolls, however, were not merely an object of fiction, nor were they commonplace household items as they are today. Instead, the talking doll was a novel invention while Shaw was considering and planning this play, and was refined during the years of the play’s publication. Talking dolls were first developed by Edison in 1888 (“Dolls that Really Talk”). The dolls themselves were hard figures, 22 inches in height, with the conventional dresses and curly hair seen in other dolls (Wood 123). However, this doll had a lot of extra equipment (Edison’s Talking Doll, See Fig. 4). The dolls came with a tiny grooved ring upon which nursery rhymes or children’s songs could be recorded. A miniature phonograph was loaded into the four-pound doll (Wood 123). Certainly the button-size devices for today’s talking dolls are much sleeker, but this 1.5 pound phonograph would of course be much smaller than the phonograph models for parlor usage, which weighed about 75 pounds. The phonograph dolls were also a fraction of the price of a real phonograph; the dolls cost \$10 (Wood 123) while phonographs cost

\$75–80. According to Edison, the dolls “can talk, and sing, and laugh, and cry, and, in fact, make any sound that a real living child could” (“Dolls that Really Talk”). These dolls were the next innovation in the progression of technology in the animation myths of the nineteenth century. No longer was a “lady automaton” a fictional concept, but now thousands of little automaton ladies were being manufactured and actively promoted in America and Europe.

Edison’s own impression of his “dollphone,” as he called the invention, was surprisingly Pygmalion-like. According to an 1888 reporter’s interview with Edison, “‘I have only lately succeeded in bringing this toy to a state of perfection,’ said the inventor, as he lovingly stroked the curly pate of one of his little talkers” (“Dolls that Really Talk”). The reporter’s use of the epithet, “the inventor” reminds readers of the particular relationship between a man and his creations, and calling the doll “one of his little talkers” simplifies the doll’s role to only emphasize her speaking function. The inventor’s tender caresses are reminiscent of the original Pygmalion myth:

He lifts up both his hands to feel the work, and wonders if it can be ivory, because it seems to him more truly flesh.-- his mind refusing to conceive of it as ivory, he kisses it and feels his kisses are returned. And speaking love, caresses it with loving hands that seem to make an impress, on the parts they touch, so real that he fears he then may bruise her by his eager pressing. (Ovid 10.260-269)

This caressing is completely absent in Shaw’s *Pygmalion*, though Mrs. Higgins conjures this imagery directly when she chastises the phoneticians for ignoring Liza after the ambassador’s garden party. She scolds the phoneticists: “You didn’t thank her, or pet

her, or admire her” (Shaw, *Pygmalion*, *Google Books* 5.115). Mrs. Higgins’s affirmation of the convention of creators loving, admiring, and sweetly treating their inventions suggests that the Pygmalion myth was not only seen in contemporary literary interpretations, such as *Coppélia* and “The Sandman,” but was also a part of real-life experience. Edison was playing the part of Pygmalion to his own creation, and Higgins is called upon to do the same by his mother.

In her 2002 book *Edison’s Eve: A Magical History for the Quest for Mechanical Life*, Gaby Wood describes the relationship between Edison and his dolls as highly complex. Edison, who always called his phonograph invention “my baby,” apparently spent a great deal of energy on “perfect[ing]” his dolls (Wood 123). Before the dolls’ manufacture, Edison commissioned A. B. Dick to tour Europe to search for the ideal doll parts for over one year, visiting France, England, Germany, Austria, Italy and Russia (Wood 149). In this time, Dick researched doll trends (hairstyles, clothing, weight) and priced doll body parts. Wood likens Edison’s creation of the dolls to the creation of the ideal woman, fashioning her out of the best parts, chosen piece by piece.⁸ A letter from Dick to Edison indicates, for example, that he has instructed one Paris dollmaker “to send you several sizes of *bodies* only which you can experiment with if you so desire” (qtd. in Wood 152). The idea of Edison experimenting on girls harkens the language Eliza uses to describe the “experiment” conducted at Wimpole Street. In Edison’s case, not only is man the sole creator of new “life,” so to speak, but he is also her designer, judging what looks and sounds beautiful by taking doll’s facial features modeled on girls and, worse, via synecdoche, directly taking the voices of young women and capturing them in the grooves of his phonograph rings.

Contemporary descriptions of the doll factory's female voice recorders are frightening indeed. According to *Scientific American* Editor Albert Hopkins's 1890 account, eighteen young girls recorded nursery rhymes and songs in cubicles in one room (qtd. in Wood 121). Nursery rhymes, associated with the intimate bond of one mamma to one or two babies, or at most one nanny or teacher to several children, here is transformed into a baby-soothing machine, cranking out the sounds in repetition. The entire nursery experience is simulated in a factory; there are no children here to benefit from the rhymes.⁹ Hopkins described the eighteen voice actresses' effect, saying: "The jangle produced by a number of girls simultaneously repeating 'Mary had a little lamb,' 'Jack and Jill,' 'Little Bo Peep' and other interesting stories is beyond description. These sounds united with the sounds of the phonographs themselves when reproducing the stories make a veritable pandemonium" (qtd. in Wood 121). The din seems to conjure the image more of a female prison cell block clamoring in protest than a nursery, with women sitting in individual cubicles repeating their lines captured on a 1½ inch ring of metal for ears they will never meet.

One problem with the dolls is that some of the recordings did not sound natural; this is again reminiscent of some of the same conflicts Liza faces in her journey to be a convincing talking doll. Edison played a reporter a reel of a man's voice projecting from the girl doll, and the reporter described it as "in a hoarse, husky, deep tone, the doll growled out these words," and called the recording "more amusing than natural." This phrase nearly exactly recalls the exclamation Freddy makes that Liza's small talk is "ripping"; by performing as Higgins's talking doll, she does not sound like a natural woman but rather like a wind-up doll performing to amuse. Even the way she is treated

by Pickering and Higgins suggests that her speech entertains rather than engages; for example, they are eager to bring Liza to the theatre not because of her wit or ability to appreciate drama, but rather because they like the way she repeats the phrases and accents she hears. Just like a dollphone which repeats verbatim and with precision the recorded sound, Higgins and Pickering marvel and laugh at Liza's performances as a talking doll in this way.

No evidence exists of Shaw's knowledge of the dolls, nor is Shaw, a childless bachelor at the time of the dolls' creation, likely to have purchased one of the limited-edition dolls at their first manufacture. However, there is ample evidence that Shaw would have known of the dolls considering their marketing in London and Shaw's personal affiliations. In 1879, Shaw was living in London, and, after wavering between refusing clerk jobs and no longer being able to be supported by his mother, took a job with the Edison Telephone Company. He wrote to Arnold White, an Edison manager, claiming, "I know how to wait for success in literature, but I do not know how to live on air in the interim" (qtd. in Holroyd 67). Shaw worked for the Edison Company for over one year, persuading East End Londoners to allow telephone equipment and poles to be installed on their property (Holroyd 67). While this position would suggest that Shaw remained in a business role in Edison's company, he affirmed in a later essay that he was actually rather technical. He said that he demonstrated the telephone and explained its machinery to potential customers, and claimed, "I often discharged his duties for him in a manner which, I am persuaded, laid the foundation of Mr. Edison's London reputation" (Shaw, *The Irrational Knot*). Just as Vandeleur Lee conveyed science to non-scientists in his singing guidelines, Shaw professionally explained scientific concepts to non-scientist

telephone consumers. In doing so, he expanded the international Edison legacy in England.

Shaw's involvement in the Edison Telephone Company makes it especially likely that he would have known about Edison's talking dolls. Despite the fact that Shaw's career with the Edison company ended eight years before the dolls' appearance on the market, Shaw quite probably retained an interest in the company. His reason for leaving the Edison company was to pursue his literary ambition, rather than frustration or contempt for the job, unlike the feelings he experienced in reaction to other odd jobs in his young life (Holroyd 55). Thus his attitude towards Edison's company likely remained positive over the years. In the 1905 preface to his 1880 novel *The Irrational Knot*, he speaks of his experience as inspiring his second novel, the protagonist of which is an American electrical engineer. While he does gently laugh at his American coworkers, who considered "Mr. Edison as the greatest man of all time in every possible department of science, art and philosophy," Shaw's tone is certainly not disdainful. In fact, Shaw is likely to have kept up with the Edison Company's latest innovations given his personal involvement in the company 25 years earlier. The very fact that Shaw wrote this preface 25 years after he quit and yet still remembers it vividly suggests that Edison's company made a lasting impression on Shaw—an impression which would likely keep the company in Shaw's consciousness as he wrote *Pygmalion*.

Even without Shaw's particular connection to the company, Edison advertised extensively in London through his English agents, and thus Shaw probably saw these advertisements. In fact, many of the circulars the company ran boast both London and New York contact addresses; Edison concentrated his marketing in U.S. and England.

Col. Gouraud, Edison's colorful agent in Europe, known for eccentrically collecting and displaying Civil War artifacts and weapons at parties, was extremely well known in London (Picker 116), and was deputized to conduct demonstrations of Edison's machines and work with European inventors both in England (Gouraud) and on the Continent (Picker 116-117). The *Pall Mall Budget*, a magazine related to the *Pall Mall Gazette*, for which Shaw wrote, ran a cartoon about the phonograph's power which reads alarmingly like a science fiction dystopia. The cartoon, "The Possibilities of the Phonograph—By an Imaginative Artist," portrayed the horrifying potential uses of the phonograph, including a woman rejecting unwanted advances via phonograph recording (qtd. in Picker 121; See Fig. 6). This 1888 cartoon shows that contemporary Londoners knew of Edison's invention, were fearful of (and thus interested in) his invention, and were openly talking about it; it also suggests that Shaw would have been familiar with the discourse of anxiety about the social power of mechanically reproduced human voices.

A final piece of evidence suggesting Shaw's familiarity not only with the actual talking dolls produced by Edison but also with the nineteenth-century experiments leading up to such a doll is in a hint dropped in Shaw's revisions to his play in 1941. *Pygmalion*'s adaptation into a film required a scene at the Ambassador's Garden Party and therefore the new character Nepommuck, a haughty Hungarian phonetician who uses the techniques taught to him by Higgins to bribe and blackmail diplomats in need of translations at premier social events. In the Gabriel Pascal film, the character's name is Karpathy, but when Shaw added the scene as an optional scene in his play in 1941, the character was named Nepommuck. Certainly, the inspiration for the name could be from Nepomuk, a city in the Pilsen region of the contemporary Czech Republic. (In 1941, the

city was in Nazi German territory, but before and after the war, the city was located in Czechoslovakia, and before then, had passed hands among Austria and Hungary in various treaties.) Was the name of this particular town on Shaw's mind when he was writing? It is possible. However, more likely, considering the content of the play, is that the character's name is an allusion to Johann *Nepomuk* Maelzel, the German inventor of the metronome and several music automata.

Maelzel was the first to patent a talking doll in 1824. His model differed significantly from Edison's; Maelzel's operated on bellows attached to tubing that emptied into a mouth-like widened space, and valves adjusted to make the machine say *maman* and *papa*. He never marketed the product or developed a doll of his own into which to insert his seemingly unwieldy device, but the apparatus was featured inside a world-renowned automaton known as the Automatic Chess Player or The Turk; Maelzel could make the Turk say "*échec*" when it won a chess match (Wood 73). The automatic chess player is mentioned in Kellett's "The Lady Automaton" and would have been a commonly known device, having toured America and Europe extensively throughout the 19th century.

The name Nepommuck would not do for the very properly English character Higgins, but Shaw's use of this inventor's middle name for his deceitful Hungarian voice manipulator is completely fitting. It is even more appropriate given Maelzel's penchant for deceit; after all, the Turk was only partially an automaton, and the actual chess moves were devised by a human sitting inside its cabinet upon which the game was played. Just as Nepomuk Maelzel's Turk possessed a carefully guarded secret, Shaw's Nepommuck depends on his secret knowledge to remain in prominence and power. He confides in

Higgins, “This Greek diplomatist pretends he cannot speak nor understand English. He cannot deceive me. He is a son of a Clerkenwell watchmaker. He speaks English so villainously that he dare not utter a word of it without betraying his origin. I help him to pretend; but I make him pay through the nose. I make them all pay. Ha ha!” (Shaw, *Pygmalion*, Google Books 3.88). Nepommuck “helps” another to “pretend,” claiming a passive role, and calls the Clerkenwell Greek’s mutilation of the English language to be villainous, despite the fact that Nepommuck’s sinister laugh and declaration of his blackmail clearly would make him the villain. Nonetheless, Nepommuck never appears a true villain, but rather a contemptuously pitiful sort of man, clinging to fame by appearing the sycophant to dignitaries who only notice him because of his unusual beard. He has no theories of his own, but rather spits out Higgins’s lessons; he appears to be an individual but is merely a false automaton, copying Higgins’s previous moves, as the Turk repeated his director’s moves. Thus, Nepommuck could never be a real threat, and to Higgins, he is “a fool. As a phonetician, no good whatever” (Shaw, *Pygmalion*, Google Books 3.89). Nepommuck is merely a novelty and an illusion, much like The Turk, and serves to amuse those who, like Higgins, who can determine the secret of his lack of intellect, and serves to entrance the rest. Our Nepommuck is deceitful, yet forgivably so, like his Turk-displaying namesake.

If Nepommuck is never a truly convincing transformer, Higgins’s work is substantially more credible, as Liza is able to pass into royalty securely at the garden party and into middle class social life by marriage. Liza’s existence as a talking doll in middle class society is satisfactorily convincing in transformation. Indeed, just as Amelia convinces enough people to secure two wedding proposals, Liza too has two partnership

choices: Freddy's marriage proposal (accompanied by her taking employment) or Higgins's proposal of the three-happy-bachelor situation at Wimpole Street (in which she foregoes sexuality for economic and intellectual comfort). Both paths would secure her financially and would provide the "friendly like" companionship she desired, though remaining with Higgins would be more tempestuous. However, she chooses to remain in society outside Wimpole Street, away from her animators, and instead in a life of her own. According to Shaw's sequel, with abundant help from Higgins and Pickering, Liza is ultimately able to make ends meet as a greengrocer and florist. Her independence is limited; Liza is able to successfully "pass" into mainstream society. To her Wimpole Street friends and her husband's family, Liza's true identity is known, but she is able to interact with customers without her background posing an obstacle. This talking doll is human enough to function without the fear of discovery which permeates Kellett's "The Lady Automaton," and she is in no danger to lose her lover to a real girl, as in *Coppélia*.

What makes her transformation more secure than those of the dolls and statues which preceded Liza in the literary canon is that Liza always had a voice. Kellett's Amelia acquires a voice through robotic means, but her responses are programmable in response to different stimuli. Liza's voice is more than mimicry, however. For Shaw, voice transformation is not the same as voice installation. Liza has to unlearn her ill-taught ABCs from grammar school and her old opinions on hygiene, but her opinions on choosing a mate remain hers and not Higgins's. Liza remains like a dollphone; some of her cylinders are self-recorded repetitions of her old patterns, while other cylinders are recorded by Higgins to replay at his will. It is this dual function as both recording device and playback device which echoes the Victorian and Edwardian functions of the

phonograph. John M. Picker, in his *Victorian Soundscapes*, reminds readers that while modern literature such as Virginia Woolf's *Between the Acts* presents the phonograph as a listening machine only, in Victorian and Edwardian England, phonographs were intended for both recording one's own voice and listening to others' voices. Liza embodies this function. We know she has recorded her own voice in the course of Higgins's lessons, and that she has heard the proper pronunciations of English words from others, and probably from Higgins's model records. If voice is to be equated with opinions and identity, the same mixture of reflection of input opinions and output of self-generated opinions is present in Liza's speech.

Though Liza is a talking doll of sorts, she also is a part of the very societal practice which objectifies her. In a scene condemned by some Shaw critics as sentimentalizing the play with movie-type characterization transitions, Liza at the end of Act I considers her relative wealth in her dingy flat. Among the possessions are of course include the typical slum requirements: unmade bed, drippy wallpaper—anything which middle class patrons who would go slumming for entertainment might expect to see (Koven). However, in addition to these pieces displaying Liza's poverty are pictures of actors and fashion models ripped out of magazines. Her choice in décor indicates an interest in performers and mannequin-like models who are dressed up like dolls. While we are meant to feel sorry for Liza when she becomes objectified as Higgins's live doll, we must also recall that Liza is part of a society which objectifies human bodies; she too creates doll-like images out of real people by plastering faces and dresses on her walls so she may gaze at them. In her examination of Victorian women's relationships *Between Women*, Sharon Marcus argues that "Dolls and fashion plates were impossibly distant but

also sensually satisfying, tantalizingly unattainable objects of fascination but also miniature objects within easy control” (115). Marcus argues that the outpouring of fashion plates and children’s doll fiction in the Victorian Era “portrayed rituals replete with the voyeurism, objectification, and domination that have been mistakenly declared the sole property of heterosexual men” (115). As Liza decorates her room with fashion pictures, it becomes clear that Liza is part of a world which eroticizes women’s bodies and participates in the process.

Liza’s role as a talking doll created by the science of phonetics is made especially apparent in Act III of a lesser known edition of the play. At the end of the Ambassador’s Garden Party, Liza, exhausted, tells Higgins and Pickering, “The people all stare so at me. An old lady has just told me that I speak exactly like Queen Victoria. I am sorry if I have lost your bet. I have done my best: but nothing can make me the same as these people” (Shaw, *Pygmalion*, *Google Books*; 3.91-92). The gaze fixed upon Liza by the party guests makes her physically and emotionally weaker. Under their gaze, she feels markedly different from them, not “the same as these people.” Perhaps it is because she realizes that at the garden party, she is simply an automaton on display, like Amelia in “The Lady Automaton” or the Chess-Playing Turk of Victorian-Era fame. She speaks in a voice that is “exactly like Queen Victoria,” as if Queen Victoria herself had recorded the phonograph ring and inserted it into Liza’s back.

In fact, Miss J. T. Spalding, a chief Edison shareholder, suggested to Edison after her visit with Queen Victoria, “I noticed the Queen of England, desired her appreciation of your efforts in the world, expressed to you; when the dolls get *very* perfect, wouldn’t it be a pleasant thing to send one to her direct, with some few happy words addressed to

her—that perhaps I could think of for the occasion?” (Spalding, emphasis in original).

Whether Queen Victoria ever received such a doll is unknown, and unlikely, considering that the dolls never did “get *very* perfect” as the diplomatic Miss Spalding would say.

However, one could imagine a Queen Victoria speaking to a little doll, recording her voice to create a miniature of herself—a miniature which Liza embodies in her transformation from flower girl to royalty.

Edison’s talking dolls and contemporary works of literature were not the only inspiration for Shaw’s “live doll” (Shaw, *Pygmalion*, Nook file 2.39). In fact, in his seminal work of singing instruction, *The Voice*, Vandeleur Lee expresses that some singers act like automata when they perform vocally. Lee criticized the practice of teaching young girls to sing as miniature ladies, arguing,

It is absurd to suppose that a child of five or ten years of age is capable of appreciating a poetical or musical sentiment. Yet, without this appreciation, and the consequent power of reciprocation, how flat and uninteresting are the finest words or the most exquisite theme? To learn to sing without feeling and understanding, for any length of time, is to beget a habit of doing so; and when we remember how difficult, nay how impossible it is to remove habits contracted in youth, the danger of producing automaton vocalists—persons singing without a particle of expression—becomes apparent, and the evil of premature teaching explained. (Lee 118)

“Feeling and understanding,” two hallmarks of the human experience, appear at the crux of robots’ ability to pass as human in science fiction. Indeed, they are central issues for

Liza, who aims to establish her ability to feel and understand as an independent person. Shaw, who read and edited Lee's texts, would have known Lee's fear about the "danger of producing automaton vocalists." It is clear that *Pygmalion* is rooted in this cultural fear which plagued so many nineteenth-century Irish minds, and particularly the minds of Shaw's immediate family, whose business it was to create transformations of ordinary, untrained amateurs into authentic-sounding singers.

In his own personal life too was reflected Shaw's desire to create a woman out of vocal programming. Shaw's romantic affair with Irish actress Mrs. Patrick Campbell was another source for the relationship between Higgins and Liza. He said that the idea of a Cockney-accented girl straining to change her social position came from Stella Campbell's own attempts to eschew her Irish origin as she pronounced her lines on the London stage in a faux English accent (Greene xiii). His role as her writer allowed him to create lines that directly controlled her voice and allowed him to manipulate which identity she would assume. When the play was first read to her, she "heard Shaw's amazingly awful cries of 'Nah-ow' and even 'Ah-ah-ah-ow-ow-ow-ow!'; recognized his clever mimicry of her own voice; and realized that this part of Eliza was meant for her" (Holroyd 485). His lines, which range from inarticulate screeches to refined "How do you do's" allow Shaw to make Campbell his automaton. Higgins uses this same technique within the fictional Wimpole Street world by teaching Liza robotic-sounding lines. For example, Liza's line "The shallow depression in the west of these islands is likely to move slowly in an easterly direction. There are no indications of any great change in the barometrical situation" (Shaw, *Pygmalion*, Nook file 3.36) becomes even more robotic sounding in the later musical version with "the rain in Spain falls mainly in

the plain” (Lerner). To borrow a contemporary robotics term, we could argue that Higgins and Shaw are attempting to program these automaton-like women.

Liza of course works within the parameters of her programmers’ rules to retain her identity. When she aims to simply repeat lines taught to her by Higgins, she sounds like an automaton. However, when she stays on the topics of health and weather but tells the story of her alcoholic aunt being killed under the guise of influenza for her hat, she demonstrates that the attempt to create an automaton will never be completely successful. Like Bessie Shaw’s rejection of Vandeleur Lee, like Mrs. Pat’s willful manner of changing Shaw’s direction, and like Edison’s dolls’ failure to transform the toy market despite Edison’s best efforts, Liza affirms her ability to refuse Higgins’s programming.

By the end of the play, Liza seems so much more human than Higgins, who restrains his emotions until he seems no more than an unfeeling automaton himself. This malleable sense of humanity is at the very core of Shaw’s work. Reading and viewing the many transformation works of his time, and learning of the invention of the talking doll, Shaw was influenced by contemporary ideas about animation and transformation. Shaw moved beyond the silent female robots of previous literature and embraced the real-life technology that was sweeping England and the world. His *Pygmalion* marked the advent of a new kind of science fiction: one without aliens and literal robots, but one which explored the ways in which technological debates and issues interacted with social and moral problems in unexpected ways. Just as if we found a duchess in Covent Garden, readers and viewers may find more than they expect in this tale of the talking doll.

Epilogue

Beginning his 1916 sequel to the play, Shaw claimed, “Now, the history of Eliza Doolittle, though called a romance because of the transfiguration it records seems exceedingly improbable, is common enough. Such transfigurations have been achieved by hundreds of resolutely ambitious young women since Nell Gwynne set them example by playing queens and fascinating kinds in the theatre in which she began by selling oranges” (Shaw, *Pygmalion*, Nook file 62). Placing Liza in the tradition of Gwynne, a fruit-vendor turned actress turned royal mistress, reminds readers of the sharp contrast between Liza’s life before and after her interaction with Higgins. Certainly the “transfiguration” Shaw refers to is not so common that it does not excite interest, but Shaw claims that Liza is not a fictional woman only; she is based on many real women who were able to transform their identities. Interestingly, both Liza and Gwynne effected their transfigurations by engaging in vocal performances and accent coaching. Like Gwynne and Liza, Shaw’s mother Bessie would have qualified as one of those “resolutely ambitious young women” who developed her voice in order to transform her life. Shaw is talking about remarkable women, but women, he says, that are “common enough” to be found in the real world he occupied, even in his own home in the form of

his mother Bessie, who eschewed the role of the doting wife to an alcoholic husband and instead developed a valuable skill-set for her own professional identity. Voice becomes centrally important; without the power to speak up, speak out, and perform speech, these women would not be able to change their lots. And without precise training, this transformation could not occur.

To this point, there has been a void in Shaw studies that deal with his role as an expert in science. For example, no scholarship has been done on his early novel, *The Irrational Knot*, which deals directly with his experience at the Edison Telephone Company. *Pygmalion* provides many opportunities for discussions about the sciences of engineering and animation. The fact that scientific ideas and devices in this play constitute a significant pattern suggests that many other Shavian dramas can be studied in this way. Doing so would create a greater understanding of the historical context and into Shaw's own enthusiastic interest in science debates. In addition, comparisons between the biographies of Edison and Shaw would be interesting outgrowths of this research; *Pygmalion*, through the talking doll and phonograph, particularly uses and discusses two of Edison's favorite inventions. Examinations of other Edisonian inventions within the texts may shed new light on Shaw's ideas. Also, a comparison of these two eccentric, larger-than-life personalities may enrich biographical traditions for both Edison and Shaw.

This kind of scholarship would also unite Shavian studies with science fiction studies. Shaw's close rapport with H.G. Wells and his interest in Wells' scientific romances suggest that Shaw in many ways was also considering idealized futures and the ways that sciences could transform and improve individual lives. Although some

scholars have already begun to work in this field, most Shaw plays are not being examined for connections to the history of science or science fiction. Just as science here is useful in considering the theme of transformation, scientific allusions may bring to light other themes in the Shaw canon.

Also, the links to Vandeleur Lee open new opportunities for scholars in music studies. There is a wealth of material written by and about Shaw's interest in music and his works while a music critic, including Dan H. Laurence's *Shaw's Music: the Complete Musical Criticism* and Eric Bentley's *Shaw on Music*. However, this thesis suggests that more could be done to connect Shaw's ideas about music to the characters in his plays. Such studies would link him more firmly to Joyce in Irish studies; though Joyce more explicitly states his ideas about music, both writers appear to be informed by Irish singing traditions, and possibly engaging mutually with each other directly in discussing music in their works.

Knowing that Lee was so strongly engaged in cultural nationalism also provides Irish studies scholars with new areas of research in pre-Revival nationalistic thinking in Ireland. Shaw, whose attitudes about Ireland have been considered extremely complicated, was clearly exposed to nationalism in his youth. Lee had a profound influence on Shaw's thinking in many other ways, giving him an appreciation for opera and modeling the intriguing personality which Shaw adopted in adulthood. It seems logical that Lee's ideas about Ireland's nationhood were also imprinted on young Shaw. For Lee, London was a natural next step in his career, and yet also the extinguisher of Ireland's authenticity. Like Larry Doyle of Shaw's play *John Bull's Other Island*, Shaw's and Lee's lives in London were a financial necessity not indicative of any dislike

of Ireland. Even though *Pygmalion* is set in England, the play's ideas are so firmly based on Irish music studies that Shaw's Irishness is everywhere manifest.

Irish literary studies in particular need to engage with multidisciplinary studies because Ireland's cultural nationalism depends so clearly on the movements of the Revival in various fields. Just as studies of topics as diverse as Ireland's language movement, the Gaelic Athletic Association, and Irish education reform have all revealed sentiments of Irish nationhood in the social context of the period, so too can multidisciplinary studies reveal connections between concurrent movements which worked together in establishing an Irish nation. For instance, in the fictional example of Joyce's "A Mother," characters are involved in both language movement and Irish music, and historically, Patrick Pearse's boys' school merged language instruction, politics, and boys' sports (Trotter). In *Pygmalion*, many fields are discussed, including phonetics, engineering, education, and voice study. Other Shaw works similarly engage in multiple fields at once, reflecting Shaw's own diverse interests. Perhaps examining how multiple disciplines overlap in Shaw's work will allow some new insights into Irish history's interwoven cultural movements, and will help scholars to establish a fuller Irish historical narrative.

Notes

1. Within this work, two different editions of *Pygmalion* are interchangeably cited. The *Google Books* version is an edition published in 1916, with its copyright renewed in 1944; this version represents a cinematic rendering, which includes scenes based on the screenplay for the 1938 film version of *Pygmalion*. The Nook edition, an EPUB document, represents Shaw's first version of the play in 1912. Because Shaw continuously revised his works, both texts are considered definitive editions, and thus both will be used in this analysis. For a full discussion of Shaw's revisions of *Pygmalion*, see Derek McGovern's "From Stage Play to Hybrid: Shaw's Three Editions of *Pygmalion*."
2. Voice study in singing and phonetic science intersect surprisingly here, for Bell also was the person who introduced Shaw to composer Richard Wagner (Holroyd 52).
3. Judith Walkowitz discusses urban prostitution and related crimes of Victorian London as they relate to Liza's situation in *City of Dreadful Delight: Narratives of Sexual Danger in Late Victorian London*.
4. See Seth Koven's *Slumming* for an examination of the social practice of and reasons for slumming, in which upper class Londoners would take excursions into London slums to look at, experience, document and sometimes volunteer for the impoverished residents of the slums. Koven connects the practice with the concept of voyeurism, and, like Picker in *Victorian Soundscapes*, reminds readers that voyeuristic practices allowed imbalances of power.
5. See page 52 for the complete list of phonetic recording and examination tools in Higgins's apartment.

6. This echoes, of course, Vandeleur Lee's fear that singing pupils would refuse to pay for singing teachers if they could read manuals like his and teach themselves. See chapter 1.
7. Liza's grammar in the quoted sentence depends on the cinematic version examined. In the 1938 Gabriel Pascal film, Liza retains her new accent; in the 1964 film version of *My Fair Lady*, she reverts to her former accent to repeat the phrase exactly as she had said it in Act II.
8. The dolls were clearly marketed as automata; illustrations circulated in news publications emphasize the bodies' mechanical nature. See Fig. 5.
9. Even once the dolls were produced, children often were eliminated from the equation; after all, it is supposed that children were not the primary audience for these dolls due to their weight and expense (Wood 123). However, this is complicated. For example, according to one Ohio newspaper from 1890 which cites a "London journal" as its source, the first Edison dolls in Europe were sold to the Queen of Holland, who wanted them for her three children ("Edison's Phonographic Doll" 7).

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Appendix

..THE HOME GRAND GRAPHOPHONE..

Most Wonderful . . .
of Talking Machines



THE HOME GRAND GRAPHOPHONE

**MUSIC IN FULL MEASURE
THE REAL VOICE, ROUND AND RESONANT**

All the volume and all the tone-qualities of the original preserved. The music of the future will be heard in every home through a "Grand" Graphophone.

One who has never heard a Graphophone of the "Grand" type does not know the full delights of the talking machine.

The "Home Grand" Graphophone embodies the recent marvelous improvements in talking machines due to discoveries made in our laboratory. Its reproductions are as loud as the original and as satisfying and delightful.

The "Home Grand" represents the highest point reached in the talking-machine art. The splendid volume, smoothness and marvelously natural effects of its reproductions make this large-cylindrical Graphophone incomparably the most wonderful and the most delightful talking machine made.

Price of the "Home Grand" Graphophone. - \$100.

Grand Records. - - - \$1.50 each.

Graphophones using the standard small records from \$5 up.

These Graphophones are the up-to-date talking machines. Their reproductions are unequalled for smoothness, melody, brilliancy and every pleasing quality.

THE TOY GRAPHOPHONE A Wonder Toy for Children

Reproduces from small disk records juvenile rhymes, Mother Goose melodies, and music children love.

Price of Toy Graphophone (including five disk records) - \$3.00.

Music dealers find quick profits in handling Graphophones and supplies. Write to any of our offices for discounts to the trade.

COLUMBIA PHONOGRAPH CO. DEP'T. M.

NEW YORK, 143 & 145 Broadway.

Retail Branch: 1155, 1157, 1159 Broadway.

PHILADELPHIA, 1032 Chestnut Street.

BALTIMORE, 110 E. Baltimore Street.

PARIS, FRANCE, 34 Boulevard des Italiens.

SAN FRANCISCO, 125 Geary Street.

ST. LOUIS, 729-722 Olive Street.

CHICAGO, 211 State Street.

WASHINGTON, 919 Pennsylvania Ave.

BUFFALO, 313 Main Street.

BERLIN, GERMANY, 55 Kronenstrasse.

Figure 1. Columbia Phonograph's The Home Grand Graphophone Advertisement, courtesy of the *American Cylinder Record Project*, revealing the both sentimental and technological attributes of the phonograph in the popular imagination in the early 20th century.



We want to place our book on Home Entertainment in the Hands of every woman

THE BOOK presents the home side of The Edison Phonograph. This is its strongest side because it is there that it accomplishes most.

The great competitor of the home is outside entertainment. Outside entertainment of the right sort is a good thing at times, but home entertainment of the right sort is always a good thing.

There is nothing in the way of entertainment more satisfying, more wholesome, more educational and more fascinating than that which the Edison Phonograph affords.

The book applies this entertainment to the home, treating the subject under such heads as:

*Keeping the Children Amused,
The Edison Phonograph as an Educator,
Making Records at Home,
The Edison Phonograph as an Aid to the Hostess
and many others.*

You will feel repaid for requesting the book because of its illustrations alone. There are many of these done by such well known artists as Guernsey Moore, Rose Cecil O'Neill, J. J. Gould, James Montgomery Flagg and others.

There is no charge whatever for the book; just a request to us will bring it. If, having read it, you wish to hear the Edison Phonograph, the Edison dealer in your town or city will be pleased to demonstrate its abilities and explain its merits.

Write for the book to



National Phonograph Co., 73 Lakeside Ave., Orange, N. J.

Figure 2. A 1909 advertisement for the Edison phonograph as a home entertainment appliance (A Useful Ally).



The EDISON PHONOGRAPH

Is equally delightful in entertaining a crowd of friends or in helping you pass a few hours by yourself. It renders a plaintive ballad or a lively waltz, a comic song or a rousing march, an instrumental-solo or a funny story with a clearness and fidelity that is remarkable and almost beyond belief. Put it to the test. Go to the nearest Edison store and hear the new Edison model with the big horn. Let the dealer play for you some of the new Records for March, which include seven records by Harry Lauder. Out February 25th.



Thomas A. Edison

Ask your dealer or write to us for the new catalogue of Edison Phonographs; The Phonogram, describing each Record in detail; the Supplemental Catalogue, listing the new March Records, and the Complete Catalogue, listing all Edison Records now in existence.

RECORDS IN ALL FOREIGN LANGUAGES.

National Phonograph Company, 11 Lakeside Avenue, Orange, N. J.

Figure 3. Guernsey Moore's geisha girl advertisement for Edison phonographs, depicting the sexual symbolism of the phonograph



Figure 4. Photograph of Edison's talking doll without its dress, accompanied by the miniature phonograph, left, and the pre-recorded phonograph ring, at right (Edison's Talking Doll).

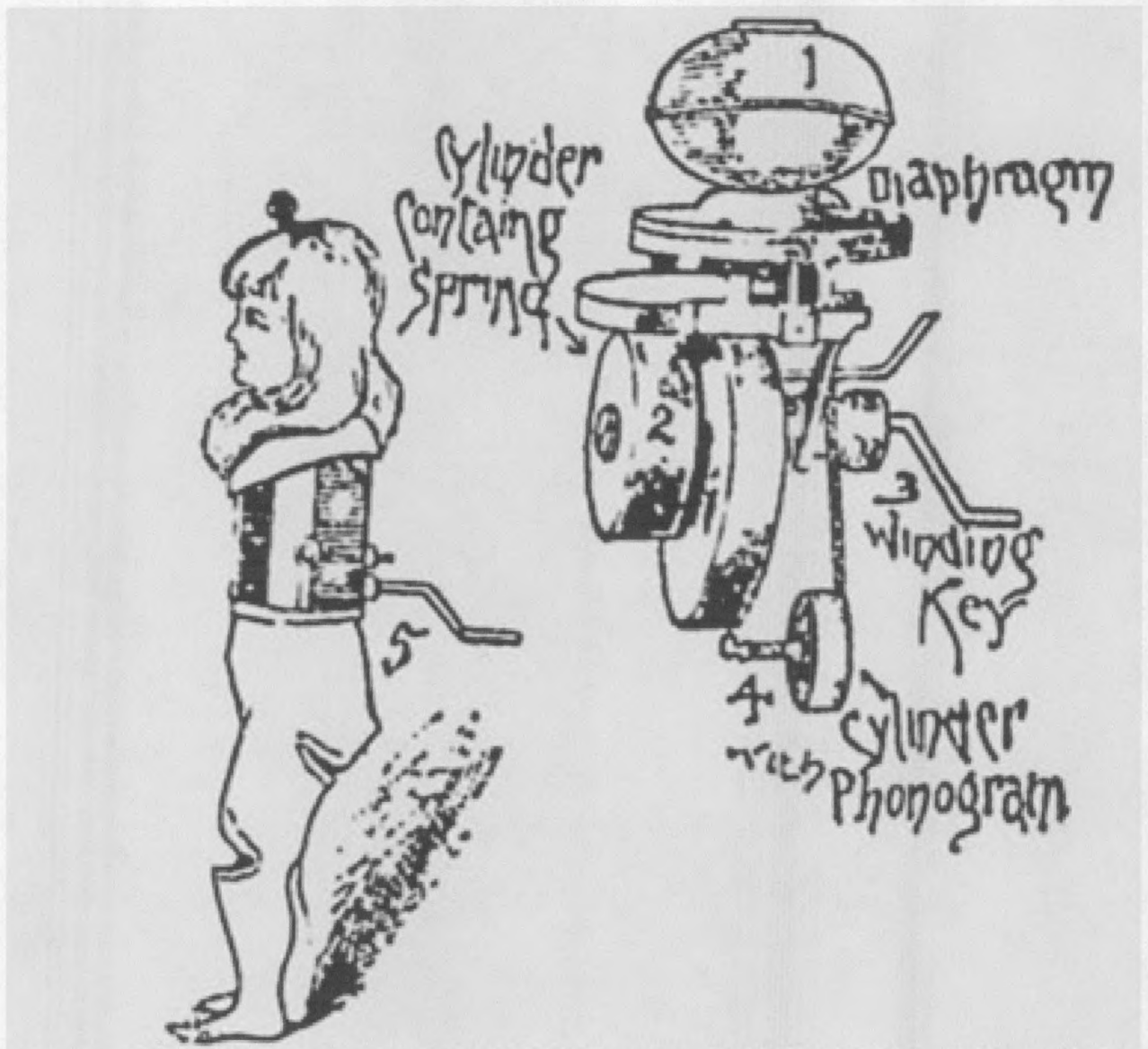
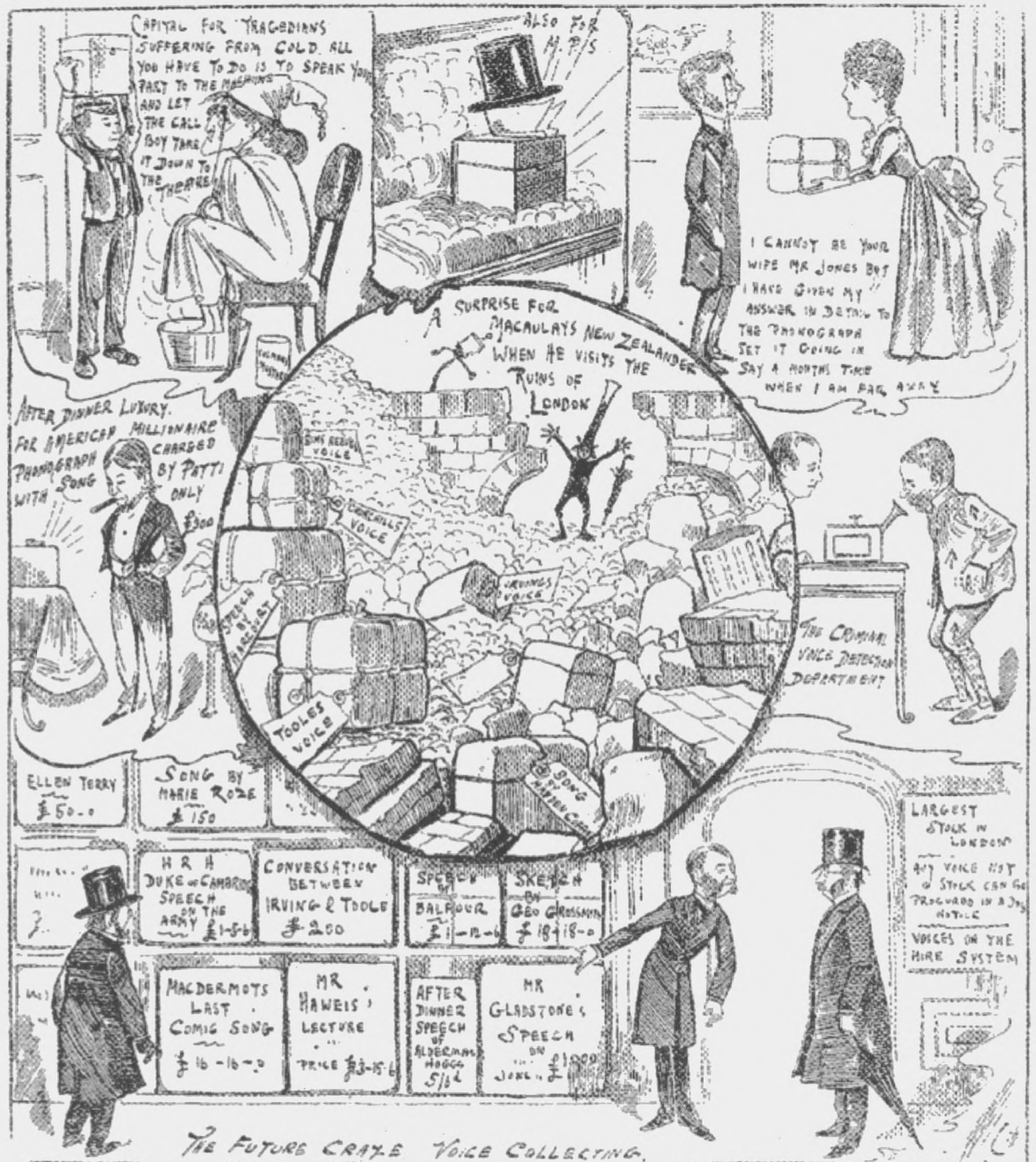


Figure 5. Diagram of the Edison talking doll from *The Sidney Journal* in 1890. The diagram emphasizes her mechanical nature rather than her human qualities by stripping her of her arms and revealing only the machinery in her torso.



THE FUTURE CRAYE VOICE COLLECTING.
 THE POSSIBILITIES OF THE PHONOGRAPH.—BY AN IMAGINATIVE ARTIST.

Figure 6. “The Possibilities of the Phonograph—By an Imaginative Artist,” a cartoon from the *Pall Mall Budget* from 1888 and reproduced in John M. Picker’s *Victorian Soundscapes*, reveals anxieties about possibilities that the phonograph would be used for criminal justice, would hinder the arts, would limit face-to-face interactions, and would emphasize class binaries.