Teaching Transgender Singers

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Abstract

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The goal of this paper is to provide an accessible resource for voice teachers teaching transgender singers. In order to best serve the students, teachers must be aware of obstacles facing transgender singers, including gender dysphoria and discrimination, legal and social obstacles, and the physical changes associated with hormone replacement therapy. For example, when teaching transgender male singers, it is important to consider the physical changes that occur with the initiation of testosterone, including the lowering of the vocal pitch. Other necessary considerations include navigating the voice during the transition process as well as establishing appropriate registration and resonance strategies after the vocal transition is complete. In contrast, when teaching transgender women singers, it is important to realize that the voice will not experience any permanent changes due to hormone replacement therapy. In order to achieve a more feminine sound in speech, transgender women will likely utilize forward resonance, which can result in vocal fatigue and tension in the vocal

mechanism if not guided to do so with vocal health in mind. Necessary considerations include encouraging release in the vocal mechanism and establishing registration and resonance strategies, especially in the higher register. Choice of repertoire for both transgender men and transgender women should prioritize the singer's comfort level and current vocal ability.

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Introduction

An area of voice pedagogy that requires much attention is that of teaching transgender singers. As more transgender people are able to live as their authentic gender[1], voice teachers will be teaching more transgender students. However, vocal pedagogy is in its infancy with regard to addressing the needs of transgender singers. Much of the information currently available to voice teachers is either anecdotal or is comprised of personal experiences from transgender singers who also teach voice. While these perspectives are valuable, it will be helpful to be able to combine the available resources with fact-based, scientifically sound information about the transition process, hormones, surgeries, and voice pedagogy. I aim to provide scientifically informed material so that voice teachers who might not otherwise have access to relevant information can have access to resources that will allow them to be the best teachers possible for their transgender students.

Most voice teachers are not medical doctors, therapists, or speech-language pathologists. In the area of gender transition, the professional network of medical doctors, therapists, and speech language pathologists is essential to the success of the transitioning individual. Voice teachers who have the students' best interests in mind must defer to the expertise of and possibly work together with these other professionals in any area that is not under the direct umbrella of singing.

[1] In this paper, "authentic gender" refers to the gender congruent with the individual's sense of self.

One possible temptation to work outside of the singing voice area will be in regard to the speaking voice. As voice professionals, teachers of singing are connected to and knowledgeable about the speaking voice, but speaking and singing are not the same. Speech-language pathologists are an important part of any voice team—even with cisgender students—and are an invaluable resource for voice teachers. While it may be tempting to help a transitioning student with their speaking voice, as a voice teacher it is best to defer to the student's speech therapist for speaking advice.

In this paper, I discuss hormones and surgeries in order to give voice teachers a foundational understanding of the physical changes their students are or will be undertaking. I emphasize, though, that this information is meant to enrich the knowledge base of the teacher and is not intended to serve as medical advice. Doctors who work with transgender individuals are the medical experts, and teachers should rely on doctors regarding medical advice for transitioning students.

In addition, most voice teachers are not therapists. Voice lessons can be emotional experiences—most voice teachers have had a student cry during voice lessons, often because of some personal difficulty seemingly unrelated to the lesson. Because voice lessons can be a vulnerable and emotional space for students, teachers must be constantly aware of that line where advice moves from that offered by a supportive mentor to an area that should be reserved for a psychological therapist. This is no different with transgender students, except that the stakes can be higher. The following chapter will address gender

dysphoria and the fact that the transgender community is at an increased risk of suicide, violence, and depression. Because of this, voice teachers should be especially aware of the possible impact of the advice that is provided, and refer students to therapists if and when it is necessary.

This paper is written from the perspective of a voice teacher teaching one-on-one lessons, however this information can be used by someone teaching class voice, and also by individuals who are transitioning. If one is teaching class voice, conversations about hormones, surgeries, or any other sensitive information should be held in private.

I hope this study will serve as a resource that a voice teacher or singer can consult based on their needs. Because I anticipate that some readers may consult only one chapter or section, I have included some information in both the Female-to-Male chapter and the Male-to-Female chapter. In the same way, some technical exercises that work well for both transgender women singers and transgender men singers may have similar explanations in both chapters, although the musical examples will be different based on the vocal needs of the students.

This project began a few years ago when I visited an accomplished singer and dear friend of mine who was just beginning his transition. He invited me to go with him to voice lesson, which I did. While observing his voice lesson, I started to wonder what resources were available to voice teachers who are teaching transgender singers. I began researching this and discovered that there is very little information available, and what is available is quite limited. As a member of

the LGBTQIA+ community, though cisgender, I have friends and colleagues in the transgender community and I care deeply about trans advocacy. This, in combination with my personal research interests in voice pedagogy and voice science, was the impetus for me to focus my time and effort on working with transgender singers. During the course of this project, I have worked with 13 transgender singers at various stages of the transition process. I also taught a transgender voice class that met weekly during the last year of this project.

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Finally, I thank all of my transgender students who have been wonderfully supportive, encouraging, and exceptionally patient with all of my questions. You are all incredible people with unique and wonderful voices. Thank you for sharing your talents with me and allowing me to help you grow as you discover your true voices. It has been and continues to be a tremendous honor for me to have the opportunity to be a part of this journey with you. As I have said from the beginning, you have helped me as much as (or more than) I have helped you. I will always be grateful to all of you.

Chapter 1

Terminology and Transgender Basics

What does it mean to be transgender? For many voice teachers, the transgender experience and having transgender students might be a new concept. In order to best support and understand transgender students, it is helpful to have a foundational understanding of terms and concepts related to gender and LGBTQIA+ issues. Gender and sexuality related information is complex and nuanced. The goal of this chapter is not to delve into complex arguments, but to offer a survey of current, widely accepted terms and definitions. Unless otherwise noted, the discussion that follows is based on information from the Human Rights Campaign, the American Psychiatric Association, and discussions with my transgender students and colleagues[2]. I acknowledge that terms and social ideas may change quickly, so while these ideas are culturally sensitive and appropriate in 2017, they will likely need to be revisited in the future.

While being transgender does fall under the LGBTQIA+ umbrella, being transgender has nothing to do with sexual orientation. *Sexual orientation* is a romantic or sexual attraction to other people. Sexual orientations include heterosexual, homosexual, bisexual, pansexual, and others. Being transgender

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[2] Human Rights Campaign, "Glossary of Terms," *Human Rights Campaign*, accessed November 3, 2016, http://www.hrc.org/resources/glossary-of-terms.
American Psychiatric Association, "Definitions Related to Sexual Orientation and Gender Diversity in APA Documents," *American Psychiatric Association*, accessed November 3, 2016, https://www.apa.org/pi/lgbt/resources/sexuality-definitions.pdf.

is about gender, which is unrelated to attraction to other people. Transgender people can be heterosexual, homosexual, bisexual, pansexual, queer, or any other sexual orientation.

Gender is a murky term that generally refers to the outward expression of whether one is a boy or girl, man or woman. It is different than biological sex. *Biological sex* (also called *assigned gender*) is a person's initial assignment as male or female at birth. This assignment is based on genitalia. Gender, on the other hand, also combines social and psychological factors. Many aspects of gender are determined by society, such as gender roles, leading some to believe that the concept of gender is a social construct and nothing more.[3] Female children receiving pink blankets and male children receiving blue blankets are socialized gender expressions that are derived socially and are not actually linked to chromosomes and genitalia. Sex is biological; gender is primarily social and psychological[4].

Gender identity refers to a person's identification as male, female, or some other category than male or female. This is an individual's deeply held sense of being male, female, or other, and does not always correspond to one's biological sex. According to the American Academy of Pediatrics, children have a firm

[3] George Winter, "DETERMINING GENDER: a social construct?" *Community Practitioner* 88 (2015): 15-17.

[4] It is important to acknowledge Judith Butler's argument that biological sex is also socially constructed. Though she has published many articles and books, a foundational work to consult for further information is *Gender Trouble: Feminism and the Subversion of Identity* (Routledge, 1990).

sense of their gender identity by age four.[5] In a transgender person, this means their biological sex is different than their core sense of self.

How someone chooses to express their gender identity is called *gender expression*. This may include wearing clothing or accessories associated with a certain gender and/or embracing behaviors, movements, and speech patterns typically associated with a specific gender. Gender expression is not just a concept for the transgender community. Anytime a woman wears a dress or styles her hair in a "feminine" way, it is an example of gender expression. In the same way, a man behaving in an overtly "masculine" way or wearing sports and hunting gear is expressing gender. A woman who expresses masculinity or a man who expresses femininity may be assumed lesbian or gay, even though gender expression has no inherent tie to sexual orientation. Gender expression is encountered constantly, and it is a global concept, not specifically a transgender one.

Transgender and *cisgender* are two important terms that will appear many times in this paper. Cisgender describes individuals whose gender identity aligns with their biological sex. The prefix *cis* comes from chemistry, where it describes two atoms or groups of atoms that lie on the same side of a plane. The majority of the people in the world are cisgender. This term can be shortened to "cis" or can be used with sex/gender terms; someone can be a cisgender man or cisgender woman. Cisgender is the opposite of transgender.

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[5] "Gender Identity Development in Children," *HealthyChildren.org from the American Academy of Pediatrics,* accessed December 12, 2016, https://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Gender-Identity-and-Gender-Confusion-In-Children.aspx.

Transgender is a term used to refer to people who experience and/or express their gender in a way that may differ from societal expectations. Transgender individuals are people who have a gender identity that does not match the sex assigned at birth or listed on their birth certificate, whether or not they have taken the steps to physically change their sex. *Transsexual* refers to people who have changed or are in the process of physically changing their sex to match their gender identity. This term can also be used to describe people who live full time as a gender that does not match the sex on their birth certificate, even if they have not undergone medical treatment.[6] In the same way that gender and sex are different, transgender and transsexual are different concepts. Someone who experiences a gender identity different than their assigned sex but continues to live life as their assigned sex is still a transgender person. A person who has come out to their friends and family as a different gender than the sex they were assigned at birth, but has taken no steps to make any physical changes is still a transgender person. People who identify as neither gender, both genders, or somewhere on the gender spectrum can be transgender people, even if no physical changes have been made. Transsexual, on the other hand, implies some sort of physicality or change, while transgender is a much broader concept.

Crossdressers are sometimes included in the transgender umbrella, but are not necessarily transgender people. Crossdressers wear clothing and/or accessories that are socially considered to correspond to the opposite gender.

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[6] Human Rights Campaign Foundation, Transgender Law & Policy Institute, and National Center for Transgender Equality. *Transgender Americans: a Handbook for Understanding.* Washington, D. C.: Human Rights Campaign Foundation, 2005.

Unlike many transgender and transsexual individuals, however, crossdressers do not generally wish to permanently change their physical characteristics or live full time as a different gender. Crossdressers are sometimes referred to as *transvestites*, but that term is currently considered out of date and is widely considered to be pejorative.

Non-Binary Individuals

Gender nonconforming, genderqueer, gender fluid, and *gender non-binary* individuals are people whose gender identity is outside of or not included within the binary of female and male. Their gender identity may be neither male nor female, a combination of the two, or it may lie somewhere else on the gender spectrum. These individuals may express their gender in an androgynous way, or they may have a more fluid gender expression. Many genderqueer people may not choose to physically transition, since they may not identify with one gender more than the other. However, some genderqueer people choose to take some steps to physically transition or to become more androgynous. It is important to note that many people associate androgyny with a somewhat masculine expression, but androgyny can also encompass feminine expression. Every genderqueer or gender nonconforming person has a different experience, so it is important to communicate with them, especially in regard to preferred pronouns.

Many non-binary singers have not undertaken hormone replacement therapy or medical treatments. With non-binary students who are not taking hormones, the best way to support them is to listen to how they identify and what

their wishes are, and help them achieve the desired outcome as it relates to singing. This will be different for every student. Some singers may wish to sound more androgynous, in which case the teacher should help them strengthen their middle or upper range, depending on the student, and find neutral or androgynous repertoire to study.

Other non-binary singers may choose to pursue physical changes through hormone therapy or other medical treatment. In this case, the process will likely have elements of either the Female-to-Male transition or the Male-to-Female transition. If the singer is taking testosterone in order to experience a slightly lower voice, the information in Chapter 3 can inform the process. If the singer is using estrogen and speech therapy to achieve femininity, the information in Chapter 5 can inform the process. Every non-binary student will have a different process and a different identity, so the teacher should use the available information and strive to support the student as much as possible.

Pronouns

Using the appropriate pronouns is an important step in accepting someone's gender identity. A transgender person who presents herself as a woman should be called *she/her*. A transgender person who presents himself as a man should be called *he/him*. Some people identify as neither *he* nor *she* and prefer a gender-neutral pronoun. The most common gender neutral pronouns are *they/them*, but some people prefer other pronouns such as *ze/zir*. If a teacher is unsure about which pronouns to use, it is perfectly acceptable to respectfully ask

a person which pronouns they prefer. As a voice teacher, it may be a good idea to have a section on the intake form in which a student may specify their preferred pronoun. Once a person's preferred pronoun has been established, it is considered insensitive to *misgender* them by using the wrong pronoun.

A person who was born biologically female but is actually a man is a Female-to-Male transgender person, a transgender man, or a trans man. Because he is actually a man, even if he is still female-bodied, people should use male pronouns such as he/him/his when referring to him. It is also unnecessary to refer to him as a transgender man; he is a man, and as such he can just be called a "man" or a "guy" or whatever male designation is satisfactory to all involved. A person who was born biologically male but is actually a woman is a Male-to-Female transgender person, a transgender woman, or a trans woman. Because she is actually a woman, even if she is still male-bodied, people should use female pronouns such as she/her/hers when referring to her. It is unnecessary to refer to her as a transgender woman; she is a woman and can just be called a "woman" or a "lady" or whatever female designation is comfortable for everyone involved. In this paper, the use of "transgender man" and "transgender woman" is pervasive because it is important to the topic and to clarity. However, in real life and in the voice studio, it would be best to simply refer to the students as men or women, because that is what they are.

Usage

Please note that the word *transgender* is an adjective describing a person, and it is not a noun. Someone can be a "transgender woman" or a "transgender student," but no one is "a transgender." In the same way that it would be unacceptable to call a black man "a black," because it is dehumanizing and strips away the fact that he is a person, it is unacceptable to call a transgender woman or man "a transgender." Similarly, the term "transgendered" makes it seem like some action has happened to a person in the past that made them a certain way—which is not the case. Therefore, "transgendered" should also be avoided.

Gender Dysphoria

The incongruity between biological sex and gender identity that is felt by transgender people is called *gender dysphoria*. According to the American Psychiatric Association, gender dysphoria is an "intense feeling of conflict between a person's physical or assigned gender and the gender with which he/she/they identify."[7] The 5th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V) defines gender dysphoria as "a marked incongruence between one's experienced/expressed gender and assigned gender."[8] Though people may begin to experience gender dysphoria during early childhood, the highest level of internal conflict typically arises with the onset of puberty. The experience can be very difficult for young people who are unable to identify with

[7] Ranna Parekh, "What is Gender Dysphoria?" *American Psychiatric Association Website,* accessed November 17, 2016, https://www.psychiatry.org/patients-families/gender-dysphoria/what-is-gender-dysphoria.

[8] American Psychiatric Association, *Diagnostic and statistical manual of mental disorders (5th ed.),* Arlington, VA: American Psychiatric Publishing, 2013.

their bodies; showering and wearing bathing suits can be extremely upsetting, and some may even undertake self-harm behaviors[9].

People with gender dysphoria may experience significant distress associated with this conflict between their self-perception and their assigned sex. This distress contributes to the fact that the attempted suicide rate of transgender individuals is 41%, compared to a 4.6% attempted suicide rate of the general population. When medical support is refused, the attempted suicide rate increases to 60%. However, when involved in therapies that are supportive of the person's gender identity, the cases of reported suicide attempt decrease dramatically.[10]

In addition to extremely high attempted suicide rates, transgender people face high rates of poverty, discrimination, sexual assault, and hate crimes. According to the Human Rights Campaign, 78% of K-12 students who express transgender identity or gender nonconformity experience harassment, and 15% of those students were so severely harassed that they had to leave school. In addition, transgender people are four times as likely to be living in extreme poverty as cisgender people, and this is compounded even further for transgender people of color. Half of all transgender people experience sexual assault, which is exacerbated by the fact that many trans individuals are denied medical services based on gender identity, and an astonishing 90% of transgender people have experienced harassment in the workplace. Because of a lack of accurate and reliable data, it is impossible to know how widespread

[9] Parekh.
[10] Jemma Tosh, *Psychology and Gender Dysphoria: Feminist and Transgender Perspectives*, London: Routledge, 2016: 64.

anti-transgender hate crimes are, but between 2013 and 2015 at least 53 transgender individuals were murdered, 46 of whom were trans women. In 2016, at least 22 transgender people were murdered.[11]

The DSM-V still considers gender dysphoria to be a mental disorder, though studies are beginning to indicate that gender identity is a neurobiological phenomenon as well as a psychiatric one.[12] This manual changes with time—in recent history, homosexuality was considered a mental disorder, but much of society now understands the inaccuracy of that designation. There are inherent problems with the continued pathologization of gender dysphoria, however, in that it frames gender nonconformity and incongruence as a disorder, which facilitates the continuation of unethical therapies used on transgender children and adults.[13] Additionally, as was noted above, gender-affirming therapies dramatically reduce the rates of attempted suicide, further indicating that pathologization is not beneficial to an already vulnerable and marginalized group of people.

In her book, Jemma Tosh suggests that psychiatrists practice therapy as if there were no DSM-V diagnosis.[14] She makes the point that transgender people are not the problem; society is the problem. While voice teachers are not psychological therapists, it would be beneficial to carry the spirit of this sentiment

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[11] Human Rights Campaign, "Addressing Anti-Transgender Violence," *Human Rights Campaign*, accessed January 8, 2017, http://www.hrc.org/resources/addressing-anti-transgender-violence-exploring-realities-challenges-and-sol.

[12] Alicia Garcia-Falgueras, Lisette Ligtenberg, Frank P.M. Kruijver, and Dick F. Swaab, "Galanin Neurons in the Intermediate Nucleus (InM) of the Human Hypothalamus in Relation to Sex, Age, and Gender Identity," *Journal of Comparative Neurology* 519 (2011): 3061-084.

[13] Tosh, 62.

[14] Ibid., 66.

into the voice studio. Transgender voice students are already facing a difficult and dangerous world. Voice teachers want to encourage and support their students in the best way possible, and supportive situations that affirm gender identity can dramatically improve the lives of transgender people. It is important that teachers carry that support and affirmation into the voice studio.

Chapter 2

The Transition Process: Social and Legal

The process of transitioning from one gender to another is complex and time consuming. It requires not only self-acceptance, but also extensive meetings with therapists, living as the target gender, and complicated legal red tape. Added to this is the considerable physical and financial commitment of hormone treatments and possible medical procedures. The process can take years, and because of inconsistent legal guidelines the exact course of action can vary widely depending on the state of an individual's residence as well as birth.

Counseling

In accordance with the World Professional Association for Transgender Health Standards of Care, before beginning any type of physical transition, many medical doctors require their patients to spend up to two years in mental health counseling.[15] Mental health professionals assess gender identity and gender dysphoria, the patient's history of gender dysphoria, the impact of the gender incongruence on the individual's mental health, and the support system of the individual. Another significant reason for necessitating mental health counseling is to confirm that the gender dysphoria is not a result of or secondary to another diagnosis. Therapists also counsel and educate their patients about the diversity

[15] "Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People," *World Professional Association for Transgender Health*, accessed September 5, 2016, http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=3926.

of gender identities and expressions, and they provide therapeutic options to help alleviate gender dysphoria before exploring medical intervention. If and when medical intervention is deemed the best option, therapists are responsible for ensuring that the individual is fully informed and consenting to any permanent physical changes.

Before the initiation of any type of medical treatment, doctors require a written referral from a therapist certifying that the individual meets all of the criteria for treatment, is fully informed, and has realistic expectations. Though not as prevalent in recent years, some doctors still require their patients to live for a period of time ranging from a few months to a year as the target gender before receiving hormones or medical treatment. This Real-Life Experience, or RLE, is meant to test the person's resolve and ability to function as the target gender, as well as the adequacy of the person's support system before any irreversible medical steps have been taken.[16] This can be a challenging and potentially dangerous task to live full time as the target gender while still having all of the physical characteristics of the biological sex assigned at birth.

Changing Legal Documents

When a person transitions from one gender to another, they often change their name as well. In more socially progressive states, the name change process is fairly simple and involves filing a petition with the court for a legal

[16] Wylie C Hembree, Peggy Cohen-Kettenis, Henriette A. Delemarre-van de Waal, Louis J. Gooren, Walter J. Meyer III, Norman P. Spack, Vin Tangpricha, and Victor M. Montori, "Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline," *Journal of Clinical Endocrinology & Metabolism* 94 (2009): 3139.

name change. In more restrictive states, there may be a requirement to post a publication in the local newspaper for a certain amount of time. This can pose a challenge for an individual who may risk losing housing or employment, and it can also present a safety risk for the person who is publically outed. The cost of a legal name change varies based on the state, however it is usually between $150 and $500, which may be a financial hardship that makes the legal name change inaccessible to lower-income individuals.

In addition to a legal name change, transgender individuals must update the gender designation on their driver's licenses. In socially progressive states, requirements may include submitting documentation demonstrating a legal name change and submitting a change of gender designation request form. In socially restrictive states, much more documentation is required. For example, in Oklahoma a person is required to provide an original or certified court order for the name change, and also "a notarized statement on letterhead from the physician who performed the sex change operation indicating the applicant or licensee has undergone a complete physical sex change. The letter shall state the sex change is 'irreversible and permanent.' The licensee shall also show proof of former legal name."[17] This type of restrictive legislation makes an already difficult process even more challenging, especially since these tasks are costly and involve taking time off of work.

Following a legal name change and changing the gender designation on driver's licenses, transgender individuals must also change their birth certificates,

[17] "ID Documents Center," *National Center for Transgender Equality,* accessed February 13, 2017, www.transequality.org/documents.

passports, and social security information. The level of difficulty involved in changing birth certificates varies based on the birth state. In more progressive states, individuals wishing to change the gender on their birth certificate must submit a written request from a medical doctor stating that the person has had all of the appropriate medical treatments. Some states refuse to completely change the birth certificate, and will leave the former sex on the document as well as the name and sex. This can pose a significant challenge in situations where these individuals could face discrimination. Change of gender on a passport also requires a letter from a medical doctor. Though social security cards do not list gender, gender is included in the social security records and must be updated. Social security will accept an updated passport, birth certificate, court order recognizing the correct gender, or letter from a medical doctor.

Clearly, changing one's gender on legal documents is a time consuming and expensive process, but without accurate and consistent identification documents, people can be denied bank accounts, jobs, and enrollment in schools and universities. Even with consistent names, inconsistencies in gender on official documents can result in the denial of employment, housing, and public benefits. Although this can be an arduous and taxing ordeal, it is necessary that transgender individuals update all of their identification documents.

Discrimination

In addition to legal challenges, people beginning their transitions may face other significant hurdles, especially in the workplace, school, and housing.[18] Many states still lack non-discrimination protections for transgender individuals. According to the National Center for Transgender Equality, based on the 2016 National Transgender Discrimination Survey, 26% of transgender people lost their jobs because of anti-transgender discrimination, 50% of people experienced on the job harassment, 20% of people were evicted or denied housing because of their gender, and 78% of transgender students reported being harassed or assaulted.[19] Even when not faced with this level of discrimination, insensitivity and misgendering are challenges regularly faced by transgender people.

[18] Michelle Dietert and Dianne Dentice. "Gender identity issues and workplace discrimination: The transgender experience." *Journal of workplace rights: JWR* 14 (2009): 121-140.
[19] "Issues | Non-Discrimination Laws," *National Center for Transgender Equality,* accessed February 13, 2017, www.transequality.org/issues/non-discrimination-laws.

Chapter 3

Female-to-Male: The Physical Transition Process

The following hormone-related information is found in the *Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline.*[20] After completing mental health counseling and meeting with a physician, the process of physically transitioning from female to male (FTM) involves several steps beginning with hormone replacement therapy, or HRT. There are two primary goals of hormone replacement therapy. The first is to reduce the endogenous (biologically produced) hormone levels and thereby reduce the secondary sex characteristics of the individual's biological sex and assigned gender. The second goal is to replace the endogenous sex hormone levels with the hormone levels of the reassigned sex.

There are longstanding principles and procedures in place regarding hormone replacement therapy in hypogonadal individuals. Hypogonadism in biological males occurs when the body does not naturally produce adequate amounts of testosterone. Because this is not an uncommon condition, endocrinologists are accustomed to providing treatments to increase testosterone levels in men. These principles are easily transferred to Female-to-Male transgender individuals.

[20] Hembree, 3132-3154.

Hormone Replacement Therapy for Masculinization

In order to induce masculinization, Female-to-Male individuals undergo androgen therapy. Androgens are male sex hormones, or testosterone, and these hormones are effective in the reduction of estrogen levels as well as in their role of masculinization. If further reduction of estrogen levels is necessary, gonadotropin-releasing hormone analogues or depot (injected) medroxyprogesterone may be used. Testosterone (informally called “T”) may be administered parenterally via injection or transdermally via a patch. The goal is to achieve testosterone levels in the normal range for a biological male, which is 300-1000 ng/dl. A person experiencing higher than normal levels of testosterone for a sustained period of time may experience adverse physical reactions.

Testosterone therapy in Female-to-Male transgender individuals results in many physical changes which occur during the first 1-2 years. In the first three months after the initiation of testosterone therapy, individuals can expect to experience cessation of menses, increased libido, increased facial and body hair, increased oiliness of skin, increased muscle mass, and redistribution and decrease of fat. During the first year, people can expect clitoromegaly, possible male pattern hair loss, and the lowering of vocal pitch.

Vocal Implications

During cisgender male puberty, testosterone initially creates edema (inflammation) on the vocal folds. Then, because of the accumulated collagen, the vocal folds begin to thicken and elongate, and the new structure of the folds

becomes permanent. This new structure is what gives the voice its masculine quality and lower fundamental frequency. The primary difference between the vocal evolution in cisgender males and Female-to-Male transgender people is that the cartilage in the larynx grows significantly only during puberty. In a transitioning post-pubescent individual, the vocal folds can thicken, but they cannot become as long as a cisgender man's because the cartilage cannot grow to accommodate extra length.[21]

While the lowering of vocal pitch typically occurs in the first six to twelve months after beginning testosterone therapy, it make take up to two years to have its full effect. Some individuals begin to notice changes around three months after beginning testosterone therapy, but a small percentage of transgender men never experience a decrease of fundamental pitch.[22] The first three to twelve months typically involve a considerable amount of vocal instability and unpredictability, not unlike male puberty, which can be unsettling for Female-to-Male transgender voice students. Students can be reassured that eventually their voices will settle into their new ranges and they will regain stability. Female-to-Male singers often retain some of their high vocal range, though they typically lose their highest notes because of the testosterone. Because every voice is different, there is no precise amount that every person will lose from the top of

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[21] Alexandros N. Constansis. "The Changing FTM Voice," *Radical Musicology* 3 (2008), accessed October 2, 2016, http://www.radical-musicology.org.uk/2008/Constansis.htm. Shelagh Davies and Joshua Mira Goldberg *Changing Speech*, (Vancouver: Trans Care Project, 2006), http://www.lalzimman.com/PDFs/Davies&Goldberg2006NonTechnical.pdf.

[22] Aaron Ziegler, "How to Facilitate a Successful Vocal Transition in TransMen," Paper presented at the Northwest Voice Conference, Seattle, WA, April 2017.

their range, in the same way that there is no exact amount that each person will gain at the bottom of their range.

Hormone replacement therapy generally affects softer tissues such as muscle, fat, and skin. This can be seen in individuals whose body mass changes dramatically, but whose height remains the same. Because of this principle, and as was briefly discussed above, the vocal folds will increase in mass, but the neck, throat, trachea, and larynx remain the same size in Female-to-Male individuals, even after hormone replacement therapy. This creates a unique vocal timbre because, though the vocal folds have increased in mass, the vocal tract has remained the same as it would be in a biological female. Due to this timbral phenomenon, a transmale voice usually sounds somewhat different than a cisgender male voice. Although accomodations can be made via resonance strategy that mitigates this somewhat, some timbral difference may remain.

Alexandros Constansis, a transgender singer and researcher, recommends that Female-to-Male individuals at the beginning of their transitions start with a very gradually increasing low dose of testosterone. His rationale is that the "secretion of testosterone in bio-males does not suddenly commence at the highest level. The boy does not turn into a man within 6 months or a year."[23] He states that because Female-to-Male transgender people want and need to "pass," which means to appear as the target gender to other people, they will sometimes try to proceed more quickly than is recommended with their testosterone regimens. Constansis believes this approach, and even traditionally

[23] Constansis, 15.

recommended testosterone doses, are unwise physiological choices. According to Paul Van Kesteren, it is well known that sex steroid treatment, especially in high doses, is associated with various side effects.[24] Testosterone is also known to lead to early ossification, as was found in Mupparapu's study that "there was a preponderance of laryngeal cartilage ossification in men compared with women."[25] This ossification, especially when testosterone is received in high doses, can cause less vocal flexibility and more problems for Female-to-Male singers.

Top Surgery and Chest Binding

After hormone replacement therapy, some transgender men decide to have a mastectomy (also called "top surgery") and/or sexual reassignment surgery (also called "SRS" and "bottom surgery"). Because sexual reassignment surgery has no impact on the singing voice, it will not be discussed this paper. Mastectomies only affect the students' singing during the recovery period, the timeline of which varies from student to student. Because of the post-operative pain, some students may have difficulty with posture and breathing until they have fully recovered.

Some transgender men choose not to have top surgery for various reasons including not wanting to experience the pain and potential risks of

[24] Paul J. M. Van Kesteren, Henk Asscheman, Jos A. J. Megens, and Louis J. G. Gooren. "Mortality and Morbidity in Transsexual Subjects Treated with Cross-sex Hormones." *Clinical Endocrinology* 47 (1997): 337.
[25] Mupparapu, Muralidhar, and Anitha Vuppalapati. "Ossification of Laryngeal Cartilages on Lateral Cephalometric Radiographs." *The Angle Orthodontist* 75 (2005): 192.

surgery, as well as the significant expense of what is often considered an elective surgery. If a transgender man chooses not to have top surgery, he will likely wear a chest binder. This is called “chest binding” or simply “binding.” Chest binders often look like tank tops, though they may be ribcage-length instead of full-length, and they are extremely compressive. The purpose of a chest binder is to compress the breasts so that the transgender man’s chest appears to have the flatter shape that is associated with a male chest. Transgender men are usually aware that the binder should not be so tight that it inhibits normal breathing. Even a perfectly fitting binder, however, may present challenges in breathing for singing, since breathing for singing requires much more rib cage expansion than breathing for speaking.

Although it is generally acceptable to talk about the use of a binder and to help a student learn how to accommodate breathing while wearing a chest binder, it is insensitive to suggest that a student not wear a binder while singing. Chest binders are a helpful and important tool in easing the difficulty of gender dysphoria, and having a flatter chest is part of the transmale student’s identity. The student will be wearing a chest binder to sing, so it is the responsibility of the teacher to help facilitate appropriate breathing while wearing the binder.

Voice and Identity

Voice is integral to a person’s identity. Even idiomatically, the term “finding one’s voice” is powerful and related to inner strength and personal identity. With transgender students, one of the responsibilities of the voice teacher is to help

the singers explore the new facets of their voices and to establish a healthy singing technique that will serve them for years to come. In addition to this, however, voice teachers have the privilege of helping transgender students discover their true, authentic voices[26].

Studies have shown that even when a person's physical appearance is aligned with their gender identity, if their voice does not align with their gender identity, other people will not perceive them as their target gender.[27] [28] Studies have also shown that there is considerable correlation between the quality of life for transgender individuals and other people's perception of their voices.[29] Many factors are involved in voice matching the target gender including but not limited to pitch, breathiness, resonance, and vocal variability in regard to pitch, loudness, duration, and intonation contours. Most of these aspects are related to the speaking voice and are in the domain of the speech therapist, but it is helpful for voice teachers to realize the impact of the voice on others' perception of the student as well as on the students' own quality of life.

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[26] The use of "authentic" here means that the singer's voice aligns with their gender identity.
[27] John Van Borsel, Griet De Cuypere, and Hilde Van Den Berghe. "Physical Appearance and Voice in Male-to-Female Transsexuals." *Journal of Voice* 15 (2001): 570-75.
[28] John Van Borsel, Kathelijne De Pot, and Griet De Cuypere. "Voice and Physical Appearance in Female-to-Male Transsexuals." *Journal of Voice* 23 (2009): 494-97.
[29] Adrienne B. Hancock, Julianne Krissinger, and Kelly Owen, "Voice Perceptions and Quality of Life of Transgender People," *Journal of Voice* 25 (2011): 553-58.

Chapter 4

Teaching Female-to-Male Students

When a teacher begins working with a transgender male student, it is important to establish the student's preferred name and pronouns. The student may prefer a name that is different than their legal name, the name they use at work, or the name associated with their email account. This is especially likely if the student is in the beginning stages of their transition. Some individuals who are taking testosterone and are physically in the Female-to-Male category may identify as gender nonconforming and prefer gender-neutral pronouns. It is never safe to assume a preferred name or pronoun. Once the preferred name and pronoun have been established, it is important that these preferences are respected. For voice teachers who may be unaccustomed to gender-neutral pronouns, using they/them as singular, gender neutral pronouns may be challenging. Additionally, if the teacher has been teaching the student prior to the student's transition, addressing the student with a different name and pronoun may be a difficult task. Many students will understand this difficulty and be patient with the teacher during this process, but it is important for the teacher to put significant effort into respecting the student's name and gender.

Voice and Testosterone

With a Female-to-Male student, it is useful to know whether he is taking testosterone, and if so how long he has been taking it. Some singers are

understandably concerned about the voice risks involved with starting testosterone. Some individuals choose not to take testosterone at all because they do not want to lose their current voice. Others consider the options and then decide to start testosterone therapy. There is no right or wrong answer, and each individual needs to make whichever decision is right for him and is consistent with the advice of his medical team. If a student voices concerns about the vocal risks of taking testosterone, an honest answer is best. Any changes, as discussed in the previous chapter, that occur because of testosterone are permanent. There is also no guarantee of how much lower the voice may become. There is no guarantee of how much of the singer's high range will disappear. Every person is unique, and every person's transitional process is different. However, there is an excellent chance that the singer will have a lovely and viable, albeit different, voice after testosterone therapy. Some voice teachers have discouraged their trans men students from taking testosterone because of the perceived vocal risks associated with transitioning. Even if testosterone therapy seems like a risk, it is important to remember that transitioning is about the whole person. Testosterone affects more than just the voice, and the addition of testosterone may be essential to this student living a fulfilling and authentic life. It is best to listen to the student and answer his questions honestly, but to ultimately be supportive of whatever choice he decides is right for his life and wellbeing.

As was mentioned in the previous chapter, Constansis suggests that Female-to-Male transgender singers use a slow and gradual approach to taking

testosterone[30]. Although there was no scientific data, he experientially observed eight transgender men who had undergone testosterone therapy, and he found that the slow and gradual approach was helpful in ensuring the best vocal results after the voice had settled into its new range. As a voice teacher, one cannot make medical recommendations, but if a student is considering beginning testosterone, it is important to guide him toward information such as the Constansis article and suggest that he speak with his doctor about the advantages of a slow and gradual approach to testosterone initiation.

If a student says that he recently started taking testosterone, one should know that it may be six to twelve months before the student experiences any significant vocal change. There may be slight changes earlier than that, but the student will most likely experience more significant changes in future months. Some of the first signs that the voice is beginning to change involve symptoms similar to those of a cold, such as hoarseness, difficulty with high pitches, and instability around the passaggio. This is because testosterone causes the vocal folds to experience edema (inflammation). Such vocal impact is to be expected for a period of time, and this in itself is no cause for alarm on the part of the student or the teacher.

If the student experiences more severe symptoms or if the student and/or teacher feel that there is additional cause for concern, the student may wish to see a laryngologist or ENT voice specialist for a videostroboscopic exam. Edema is anticipated with testosterone therapy, however it is wise to exercise caution if

[30] Constansis, 16.

there is any additional cause for worry. Having a videostroboscopic exam will not have any negative effect, and it can serve to alleviate any anxiety the student or teacher may have.

Boundaries and Considerations

While it is generally acceptable to ask whether or not the student is taking testosterone, and if he is, how long he has been taking it, it is never appropriate to ask about sexual reassignment surgery, or bottom surgery. Bottom surgery is extremely personal and has no impact on the voice, so it is of no concern to the voice teacher. Talking about chest binding is generally appropriate, as it may impact respiration due to the ability to expand the thoracic cavity. Similarly, if a student has a mastectomy while taking voice lessons, the teacher would benefit from having this information, so as to be patient with the student during recovery.

It is a good idea to discuss how the singer feels about his upper range. Vocally, the best choice is to work the entire voice, and many students are comfortable continuing to use their upper ranges at times. However, spending considerable time working on the student's high range may trigger some of his gender dysphoria. One must be aware of and sensitive to this fact. The goal is to help this student find his true, authentic voice, and if utilizing the higher parts of his range interferes or presents a significant obstacle, the teacher should be understanding and supportive of the student.

Another consideration with transgender men is that there may be a tendency to engage in hyperfunctional voice behaviors such as extra-laryngeal

tension and over-adduction of the vocal folds. According to Davies, "testosterone doesn't always drop pitch low enough for FTMs to be perceived as male."[31] This, in combination with the timbral differences between the cisgender male voice and the transmale voice, can lead transgender men to "develop hyperfunctional voice production compensatory strategies when they try to force out the lower notes in their emerging lower range."[32] Not all students engage in this vocal behavior, but one should be aware of this possibility when working with transgender men. If one notices this compensatory behavior in speech, a referral to a speech language pathologist would be necessary to resolve this issue, as this is their scope of practice.

In the Voice Studio

A systematic and functional pedagogical approach, similar to the approach used with cisgender students, is a clear and effective way to work with transgender men students. Modifications are made to accommodate the vocal differences and challenges, but the basic framework is similar. Many of the teaching techniques below are based on those of my mentor, Dr. Kari Ragan of the University of Washington, whose pedagogical principles are based on voice science as well as experiential evidence. She approaches voice teaching by addressing what she calls the "Five Systems of the Voice," which are Respiration, Phonation, Registration, Articulation, and Resonance. Many pedagogy texts use some combination of these, but I have not encountered the

[31] Davies, 18.
[32] Anita Kozan, "The Singing Voice," in *Voice and Communication Therapy for The Transgender/Transsexual Client,* San Diego: Plural Publishing, Inc., 2012: 432.

use of all five in this specific way outside of Dr. Ragan's mentorship. After experiencing this methodology in my own voice lessons as well as experimenting with it in my teaching for the past several years, I feel that it is a clear, organized, and efficient way to teach students. Additionally, students have a clear understanding of what is being addressed in lessons and can practice more effectively at home. The order of the five systems that are listed above is the order in which they occur in my mind, but it is important to recognize that all of the systems work in conjunction with each other as well as independently.

In the following exercises, the pitches given are average starting and ending points, however, every voice is unique and each singer's voice will change during his transition. The primary focus should remain on creating exercises that accommodate transitioning voices: the use of small intervals when necessary, awareness so that no attempt is made to create a falsely masculine sound through hyperfunction, and incorporation of good habits throughout the process. There are no miraculous exercises that work perfectly on everyone, so each teacher should feel free to use these principles in creating exercises that serve the individual singer in the best way possible. Additionally, as the voice settles, the exercises, intervals, and starting and ending pitches suggested in this chapter should be modified to fit the current needs of the singer.

Respiration

Beginning a lesson with respiration is beneficial because breathing is the power source. With a transgender male singer, it is best to take a very holistic and body-positive approach to the teaching style as well as the language used. Most likely, he has spent years of his life feeling disconnected from his body, and doing exercises that encourage him to feel connected to his body and breath may have a positive impact on his overall singing experience.

The following beginning exercise is slow and meditative. Lying on the ground, the singer closes his eyes and brings awareness to his breath. On the ground it is easier for him to feel his ribcage expand as well as his abdominal expansion and engagement. His attention should be drawn to these experiences. Attention should move to his shoulders and throat, and he should be asked to release as much tension as possible. Attention then moves to the larynx. If the breathing is particularly audible, it is possible that there is tension that can be released. Next, he should become aware of his tongue. Is the tongue released of tension? While lying on his back, the tongue has likely fallen back somewhat due to gravity. Attention can be drawn to this and corrected to allow the tongue to reside in a forward neutral position with the tongue touching the bottom teeth. He should be encouraged to breathe for a few cycles, which allows him to feel the interconnectedness of the different parts of the body and the breath.

The next step of this exercise utilizes voiced and unvoiced pairs [z]/[s], [v]/[f], and [ð]/[θ], which encourage coordination of respiration and phonation. The student can be asked to exhale on an unvoiced [s]. The [s] sound can take the

full length of exhalation. If the teacher's viewpoint is from the direction of the student's feet or side, it is possible to see if they are engaging the tongue during this exercise. If one observes movement under the jaw when the exhalation process begins on [s], a reminder to release the tongue might be helpful and necessary. Because of the interconnection between the articulation and phonation systems, the teacher must also listen for the possibility of too much compression and subglottic pressure. Once the [s] is comfortable, the singer should alternate between an unvoiced [s] and a voiced [z] on a comfortable pitch to incorporate coordination of breath and phonation. The transition between the [s] and the [z] should ultimately be very smooth, though it probably will not be smooth at the beginning. The teacher should continue to observe any extra tongue tension, especially when the student moves from the [s] to the [z] sound. During this process, the singer should be prompted to be aware of ribcage expansion and the process of abdominal release and engagement.

Once the [s]-[z] pairing is comfortable, the same exercise can be done on [f]. The student can start with a full exhalation cycle on [f], then move to alternating [f] and [v], with the goal of a smooth transition with no extraneous tension, as well as ribcage expansion and abdominal activity. After the alternation of [f] and [v], the exercise can be repeated using unvoiced "th" [θ] and voiced "th" [ð]. This variation has the advantage of a vastly different tongue position, which adds another layer of complexity to this exercise.

The final step is to experience all of this connection and integration together by speaking one word over the duration of an entire exhalation. The

word “soup” is an effective option because the student gets to use the [s] sound from the beginning of the exercise in addition to a pure vowel and a plosive. It coordinates respiration, phonation, and articulation and exemplifies the interconnectedness of these systems.

The exercise above is beneficial as it relaxes the student and provides connection to his body; but it also clearly demonstrates how much physicality is involved in singing—before singing has begun. It is important for any singer to realize that singing is a physical activity that involves the mind and the entire body. The concept of the physicality of singing can be even more profound with a transgender student because he can connect with a body that is finally, or is finally becoming, a body that represents who he is as a person. Furthermore, using his body to express himself artistically in a way that aligns with how he perceives himself provides a positive experience. The voiced and unvoiced pairing exercise can take a long time, so focusing on it during the first or second lesson may be sufficient, with the possibility of dropping into parts of it as it becomes necessary or helpful in the future, or if the student requests it.

Returning to a standing position, the singer should be encouraged to maintain as much of that connection and ribcage/abdominal activity as possible without feeling rigid. In the course of the lessons, how to best approach the specifics of breathing for singing will vary based on the singer’s individual body and vocal needs. Everyone comes to singing from a different perspective, so the teacher and student must work together to find the right balance for the unique

student. How and when to encourage more engagement will depend on the student as well as the interaction with the other systems.

Chest binders are an important consideration when working on respiration with a transgender male singer. Experientially, transgender men singers who wear chest binders have the tendency to take shallow, high breaths. Although there is not yet research, anecdotal experience and observation leads to the assumption that having a constant pressure and kinesthetic awareness of the upper ribs and chest subconsciously has the potential to cause the student to take high, shallow breaths. When teaching breathing to a transgender man, it is important to focus on taking “low” breaths by allowing abdominal release during inhalation. This process takes time and effort, but it is a necessary step in facilitating healthy and effective breathing in trans men.

Phonation

Phonation is the production of sound and involves the vocal folds and laryngeal activity. In this section, the primary focus will be on phonation that is optimally produced. The potential of hyperfunctional voice behaviors in order to create a more masculine sound is something to be aware of with transgender men students. Because of this, exercises may require a slower pace and softer volume as the student learns to sing without hyperfunctioning. Because every student is unique, this will not be a constant issue. However, it occurs with enough frequency to warrant maintaining awareness.

A rewarding aspect of working with transgender men singers is having the opportunity to explore their new ranges with them. If the student recently started testosterone therapy, it will be a few months before this low range begins to emerge. For a student well into his testosterone therapy, every day might be different. As was discussed at the beginning of this chapter as well as in the previous chapter, testosterone therapy causes edema as well as collagen accumulation on the folds as they begin to thicken. Because of this, vocal instability and variability are to be expected. This is a common part of the process. It is important to be patient and accepting of the instability, and to encourage the student to remain patient and accepting as well, however difficult that may be. For a student nearing the final stages of his vocal transition, the instabilities will begin to resolve, and the student can start exploring the newly emerged facets of his voice.

Beginning vocalization with a semi-occluded vocal tract (SOVT) exercise is beneficial (Figure 1). Studies have shown that semi-occlusion can help the voice to function more efficiently,[33] and beginning vocalization in this way seems to have a positive effect on the lesson as a whole. SOVT options include Ingo Titze's straw phonation[34], as well as lip trills and tongue trills. With trans men students, the use of small intervals is optimal in order to moderate muscle coordination and pitch navigation on a changing instrument. Starting in the middle of the student's range and then moving out to the higher and lower ends

[33] Ingo Titze, "Voice Training and Therapy With a Semi-Occluded Vocal Tract: Rationale and Scientific Underpinnings," *Journal of Speech, Language, and Hearing Research* 49 (2006): 448-59.
[34] Ibid.

works well with a transitioning student. For singers who have just begun to experience voice change, it is important to proceed quietly and carefully, especially when moving through the passaggio, as will be discussed later in this chapter. For a student who is further along in his vocal transition, his comfort level and current ability often guide decisions regarding more difficult vocalizations.

[Figure 1 follows]

Figure 1: Semi-occluded vocal tract exercise

After beginning vocalization with semi-occlusion, it is best to choose an easy exercise utilizing one note, or a very small interval. Avoiding large intervals is important due to the instability of the voice. Additionally, new vocal nuances will be unfamiliar to the student, so large leaps will require more skill and control than the singer is currently able to achieve. An effective exercise is an alternation

between [u] and [i] on a single pitch (Figure 2). This is helpful because it has the student sing on closed vowels, but without any of the vocal obstacles that might occur in a more complex exercise. It is important to encourage the student to retain the space of the [u] vowel while incorporating the resonant benefits of the [i] vowel. Ideally, both vowels will maintain aspects of each other throughout the exercise. The exercise also has the benefit of encouraging tongue flexibility in the shift between [u] and [i]. This exercise is best for the student's middle range, as he can focus on vowels without requiring modification to accommodate tessitura.

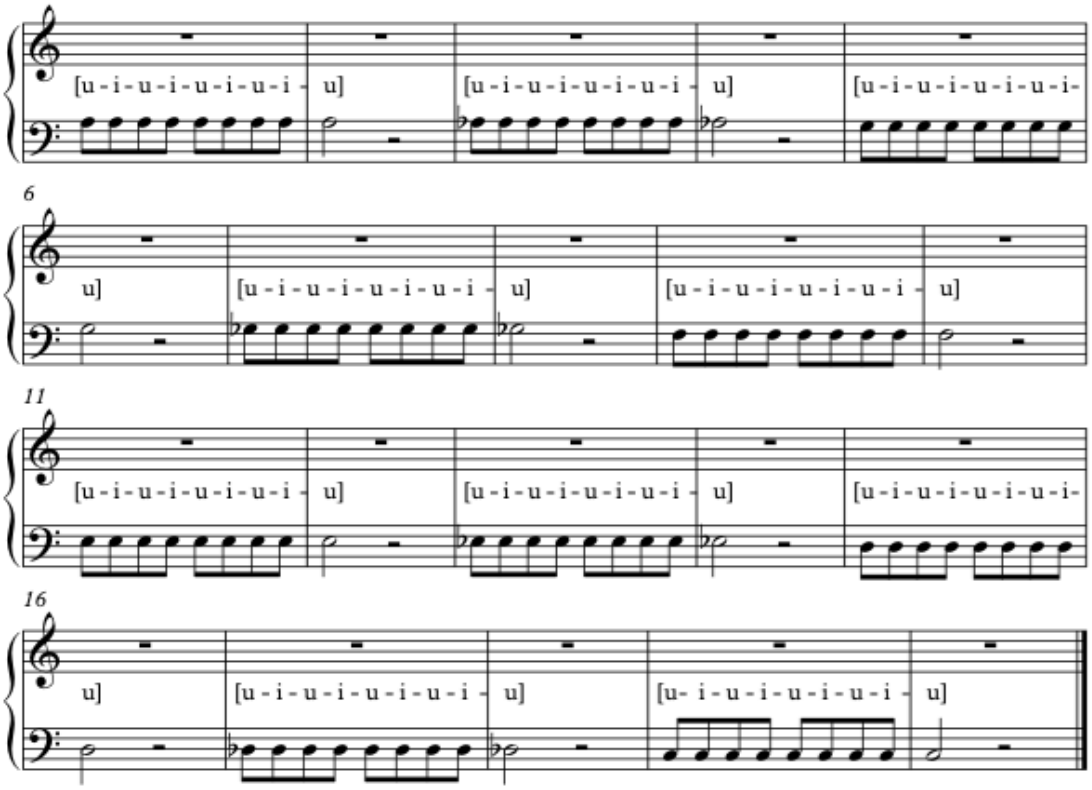

Figure 2: One-note exercise

After beginning with a one-note exercise, a gliding exercise is a useful follow-up because the vocal folds are able stretch and release without the more

challenging aspects of deliberate pitch change. The choice of interval depends on the student's level of vocal instability. An interval as small as a second or maybe a third should be used with a student who has just begun to experience vocal change. More advanced students may use an interval of up to a fifth as appropriate. This exercise can be used throughout the student's range on an [u] or an [a]/[ɑ], depending on the part of the range in use (Figure 3). Going through the passaggio will be discussed in more detail in the Registration section, but [u] is a helpful vowel when using the glide exercise to move upward through the passaggio.

Figure 3: Gliding exercise, to be sung on either [u] or [a]

With students who have regained or are in the process of regaining stability, this exercise provides the stretch and release of gliding, vowel equalization, the opportunity to practice onsets, and practice in creating a legato line (Figure 4). A single vowel ([u] or [a]/[ɑ]) can be used, but the combination of the vowels is helpful in creating vowel equalization. If utilizing both vowels, the student should start on an [u] vowel and maintain that vowel as he glides up a

major third, being sure to sing every possible pitch between the two target pitches, before he switches to the [a]/[ɑ] vowel. In the same way, he should maintain the [a]/[ɑ] vowel as he glides down a major second, at which point he will switch back to the [u]. Similarly to the one-note exercise in which the goal is to maintain aspects of both vowels throughout the exercise, in this exercise the goal is to keep the loft of the [u] vowel when the student is singing the [a]/[ɑ] vowel. Because of the length of the exercise and the consistent gliding, this exercise requires a considerable amount of air, so it also encourages the student to think about the skills he addressed in the breathing activity listed previously in this chapter. Additionally because of the consistent gliding, this exercise helps the student learn the concept of the legato line.

Figure 4: Gliding exercise with emphasis on legato line

Registration

Registration is probably the most challenging task for transgender men. When the voice begins to change, the passaggio is significantly affected. For example, one student who had a beautiful pre-transition soprano voice and a

smooth primo passaggio, the voice began to drop and he experienced an increase of the lower register for months with no negative affect on the passaggio. There was hope that he would transition without the usual passaggio chaos. Not so. After several months of experiencing vocal changes without effect on the passaggio, the break became difficult. This part of the transition process is to be expected, and few singers are able to transition without experiencing dramatic passaggio events.

Passaggio

The most important advice regarding the passaggio is to work through it. The student will be very self-conscious, but the passaggio is an area of the voice that should not be avoided. Even after the student has been guided through the passaggio, it will likely continue to present a challenge. Because the transition might last months, patience is required; but it is important to continue working through the registration changes. This work will guide the coordination of the muscles, and regular practice will have a significant impact on the passaggio once the voice has regained stability. An effective way of working gently through the passaggio is to do the glide exercise in Figure 4 on an [u] vowel. The voice is more delicate than usual during the transition, so it is best to not belabor this work, however it is important to work through the passaggio during every lesson.

Registration Isolation

Registration isolation, or working the head voice dominant and chest voice dominant registers separately, is also important. With transgender men, there is often some previous familiarity with the head/head-mix register, but depending on the student's normal voice usage, this register may be unfamiliar to him or weak. If this is the case, a good approach is to start slowly working the student's head voice dominant register by using an [u] vowel at a pitch level above his passaggio. The [u] vowel encourages the activity of the cricothyroid muscle by lengthening the vocal tract with a raised soft palate and some lip protrusion. Any exercise intended to work head register is well served by the use of the [u] vowel.

An effective beginning exercise is a three note descending passage on [u] (Figure 5). The starting pitch should allow all three notes to remain just above the passaggio, and this pattern can move up by half steps as it remains comfortable for the student. The voice is delicate, so avoiding anything that requires too much vocal effort from the student is helpful. The second exercise is similar to the previous one, but this is a glide exercise, and it can start on the lowest or the highest of the three pitches, depending on the student's needs at the time (Figure 6). Beginning at a group of pitches just above the singer's passaggio and working up by half steps as it remains comfortable for the student is effective in facilitating head voice dominant registration. These are exercises the student should do every day during his practice routine.

Figure 5: Three-note descending passage on [u]

Figure 6: Head voice dominant glide on [u]

To isolate the chest voice dominant register, the most effective vowel to use is the [æ] vowel, as in the word “cat,” as this vowel encourages thyroarytenoid engagement. The goal in using this vowel is to allow the vocal tract to shorten somewhat, which is helpful in chest voice use. The [æ] vowel involves a more neutral soft palate than something like an [u] vowel, and it requires a horizontal mouth shape without any protrusion of the lips, both of which shorten the vocal tract. As with the other examples, the best choice is to stick with smaller intervals, such as a second or a third. It is important to remember that the transitioning voice is changing and requires more care. Although the goal of these exercises is to engage the chest voice, the best choice is not to go too far beyond the natural passaggio with a student who is

mid-transition. If the student's voice has regained stability, the exercises can be taken further based on his needs and comfort level.

It is advisable to start at a pitch level in the student's lower mid range on a syllable such as [væ]. The [v] consonant creates back-pressure, keeping the larynx neutral, as in semi-occluded vocal tract exercises. Other effective consonant possibilities include [b] and [p]. If using the version of the exercise spanning a third (Figure 7), the student should sing "[væ-væ-væ-væ-væ]" in a way that feels light and more like spoken voice than singing voice. There should not be a preponderance of vibrato, and the shape of the mouth should be horizontally oriented. It is important that the student not try to create extra space in the back of the mouth, as the raised soft palate will make these exercises much more difficult. This exercise can be moved up by a half step until the natural passaggio is reached. If the student seems comfortable, he may be able to sing one or two more iterations of this pattern, but the student's limitations should be kept in mind. This exercise can be done with the student singing each individual note, as a glide exercise (Figure 8), or one right after another to reinforce the concept while adding variation.

Figure 7: Chest voice dominant [væ] exercise

Figure 8: Chest voice dominant [væ] glide exercise

In addressing the newly emerging low range, exercises that utilize one of the [a]/[ɑ] vowels is effective (Figure 9). The rounder [ɑ] vowel may be encouraging to the student because the timbre it induces tends to be more masculine sounding. Some teachers and singers may prefer an [o] vowel because of the timbral advantages, but students may use unnecessary tongue posturing and tension. For this reason, the [ɑ] vowel is an effective compromise that allows for tongue release while providing a warmer, more masculine timbre. Depending on the student's range and vocal stability, either a three or five note descending scale on the [ɑ] vowel can be used. The student may want to push as he gets lower in an effort to produce more sound in his newly emerging low range. He should be encouraged to maintain a neutral larynx and released tongue and to allow the new low notes to exist without extra effort. As he gains comfort with his low notes and is able to sing without extra tension, adding a bit of [o] shape will help him sound more traditionally masculine.

Figure 9: Low range exercise to be sung on [a] or [ɑ]

Articulation

The articulation system includes the tongue, pharynx, palate, and jaw. When bringing awareness to the articulators in voice lessons, the tongue and jaw often receive the most attention. With trans men singers, the tongue will likely be the biggest articulation challenge, especially around the passaggio and on lower notes. When navigating the passaggio, a student may attempt to exact some control over his voice via tongue posturing. It may sound like an effective strategy, but the singer must learn to allow his voice to function without creating unnecessary tension with his tongue. This process may require time and patience, but it will serve him in the future. The tongue can also create problems on lower notes and throughout the range if the singer subconsciously tries to create a darker sound by retracting the tongue and depressing the larynx. The exercises discussed below can be helpful for any student with tongue tension issues, but they have been modified to meet the specific needs of transgender students.

The first exercise is the “ya-ya” exercise (Figure 10), in which the student sings a two- or three-note pattern, depending on the student’s current ability and comfort level. He should open his jaw to an appropriate height for mid-range

singing and perform the exercise without any jaw movement. The goal is to sound “normal” with no jaw movement, which means the student will need to use considerable tongue movement to achieve a “normal” sound. The tongue will arch forward to create the [i/j] vowel, which encourages the disengagement of anterior tongue tension. The benefit of this exercise is that it encourages independence between the tongue and jaw as well as the release of anterior tongue tension.

Figure 10: Ya-ya exercise

Another tool that is helpful for releasing tongue tension in some students is to instruct the student to use gauze to hold his tongue just outside of his mouth while he is singing. If tongue tension exists, the tongue will pull backward into the mouth while the student is holding it. This can be effective in showing the student how much unnecessary involvement his tongue has while singing. This tool can be used on many different activities, from simple exercises to complicated repertoire. When using gauze, the student will be limited to a neutral open vowel, so this tool should not be combined with vowel-specific exercises.

In addressing tongue tension, another effective strategy is to place a small candy on the tongue to bring awareness to it while singing. The best option is some type of hard candy. To use this tool, when the student is singing, he should place the candy on the center of his tongue, about one inch back from the tip. The goal is to "balance" the candy on his tongue while he is singing. When the student first tries this exercise, the candy will likely move around due to tongue movement. The awareness that the candy brings to the tongue should encourage tongue stillness and release. This tool can be used with most exercises and repertoire choices, though it is much easier and effective when used on neutral vowels.

Resonance

When working on resonance with transgender men, the classical concept of chiaroscuro is of great importance. Forward resonance is important in singing, as it has a positive impact on efficiency as well as the ability of the voice to carry. However, in order to achieve a more masculine sound, a warmer, rounder resonance is beneficial. Because of this, a balanced chiaroscuro is the desired outcome. Both fortunately and unfortunately, as there is no fast or easy way to acquire chiaroscuro, the best way to achieve this is through proper breathing, a released and neutral larynx, and efficient resonance.[35]

When working with CCM or Musical Theater singers, finding chiaroscuro remains important, though not at the same level as with classical singers. CCM

[35] Richard Miller, *Solutions for singers: tools for performers and teachers*, Oxford: University Pr., 2004: 83.

and Musical Theater styles require brighter, more forward resonance strategy than does classical singing. However, in order for a trans man's voice to be perceived as masculine, he will need to use resonance that includes warmth and roundness.

In the effort to find efficient resonance, the transgender male singer can utilize the nasal [ŋ] sound and/or an [i] vowel. The [ŋ] sound can be used in most exercises and on portions of repertoire. When using this sound, the student should utilize adequate oral space, a released tongue position, and a neutral larynx. By making the [ŋ] sound, the sound is diverted through the nasal cavity instead of through the oral cavity. When good resonance is achieved in normal singing, singers may experience sympathetic sound vibrations in the nasal and sinus cavities. By using a nasal sound exercise, the singer has a better idea of how resonance feels. This is not meant to promote nasality, but instead to give the singer a kinesthetic association with resonance. Similarly to the [ŋ] sound, the [i] vowel can be used on most exercises and a good portion of repertoire in order to allow the singer to experience more efficient resonance. After using an [i] vowel on an exercise or on a portion of repertoire, the student should try to recreate that level of vocal efficiency once he has moved back to the words or to a more neutral vowel.

In order to achieve a rounder, warmer sound in trans men students, it is beneficial to encourage a more vertical orientation in mouth position, and it may be helpful to sing exercises or portions of repertoire on an [o] vowel. The teacher should be aware of the potential for over-darkening of the sound and possible

tongue posturing. The vertical orientation should not be extreme and should not involve anything more than slight rounding of the lips. If utilizing an [o] vowel, the student should be sure to maintain as much release as possible in the tongue, and he should be encouraged to maintain a neutral larynx instead of depressing the larynx, as might be a temptation with the [o] vowel.

Repertoire

When assigning repertoire to transgender men, the singer's level of comfort with the content of the music as well as the usable range at the time should be prioritized. For trans men, anything from a gender neutral or masculine perspective is potentially usable. It may be a good idea to communicate with the singer about gendered songs, in order to gauge his level of comfort with certain repertoire. In classical literature, art songs are a suitable choice throughout the transition, because it is possible to find something that is not overly gendered while at the same time has a more modest range and dynamic demand. Folk songs are also an appropriate option for the same reasons. Musical theater songs can be difficult because many of them are very gendered. If the student is comfortable or excited about singing something particularly masculine, musical theater literature might be a path to explore.

For someone just beginning his transition, or who has recently come out but who has not yet started testosterone therapy, art and folk songs are an excellent choice because gender neutral music is available in both the mezzo and soprano ranges. An additional and substantial source for singers in their

early transitions or who have not experienced voice change is castrati/countertenor repertoire. When the singer's voice changes, much of this repertoire will no longer be an option. However, for students who are still singing in a mezzo-soprano or soprano range, castrati repertoire can be an ideal resource because it is in the appropriate range and it is from a masculine perspective. Some of this music is extremely virtuosic, so maintaining awareness of the level of difficulty when assigning this repertoire is of importance. The most important items of which to be mindful are the nuances and abilities of the singer's voice at the time and his comfort level with the content of the songs.

Chapter 5

Male-to-Female: The Physical Transition Process

As was noted in Chapter 3 on the physical transition process for Female-to-Male transgender individuals, the following hormone-related information is from the *Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline.*[36] After completing mental health counseling and meeting with a physician, the process of physically transitioning from male to female (MTF) involves several steps, starting with hormone replacement therapy, or HRT. There are two primary goals of hormone replacement therapy. The first goal is to reduce the endogenous (biologically produced) hormone levels and thus the secondary sex characteristics of the individual's biological sex and assigned gender. The second goal is to replace the endogenous sex hormone levels with the hormone levels of the reassigned sex.

There are longstanding principles and procedures in place regarding hormone replacement therapy in hypogonadal individuals. Hypogonadism in biological females occurs when the body does not naturally produce adequate amounts of female sex hormones, such as estrogen and progesterone. Because this is not an uncommon condition, endocrinologists are accustomed to providing treatments to increase female sex hormone levels in women. These principles are easily transferred to Male-to-Female transgender individuals.

[36] Hembree, 3132-3154.

Hormone Replacement Therapy for Feminization

The hormone regimen for Male-to-Female individuals is more complex than the hormone regimen of Female-to-Male individuals, though these hormones have cause no permanent vocal changes. In order to reduce the endogenous testosterone levels in Male-to-Female individuals, anti-androgens are given in conjunction with the estrogens. As was discussed in Chapter 3, androgens are male sex hormones, such as testosterone. Anti-androgens, however, are used to block the effects of testosterone. Prevalent anti-androgen options include spironolactone, which directly inhibits testosterone secretion, and cyproterone acetate, which is a progestin that is used effectively as an anti-androgen.

Progestins are synthetic progestogens. Progestogens are steroid hormones that bind to and activate the progesterone receptor. Progesterone is an endogenous female hormone that is involved in menstruation, pregnancy, and embryogenesis. Progesterone has also been linked to breast development. Some endocrinologists and physicians do not think progestins are necessary in Male-to-Female transitions, but they continue to be utilized. Widely used in Europe, cyproterone acetate is a progestin that functions as an anti-androgen.

In addition to anti-androgens, estrogens are an important part of hormone replacement therapy in Male-to-Female transgender individuals. Estrogen can be given orally, transdermally (via patch), or parenterally (via injection). There are three types of estrogen: estradiol, estriol, and estrone. Estradiol is the most common type of estrogen present in non-pregnant, pre-menopausal women.

Estriol is the type of estrogen produced during pregnancy. Estrone is the type of estrogen that can be measured in women who have gone through menopause. The type of estrogen given to transgender women is estradiol, and levels should be maintained at the mean daily level for pre-menopausal women, which is <200 pg/ml. Testosterone levels should be kept in the normal female range, which is <55 ng/dl. The most common risk during this type of hormone replacement therapy is the risk of blood clots, especially in people who are tobacco users.

The results of hormone replacement therapy in Male-to-Female transgender individuals are decreased libido, decreased oiliness of skin, decreased facial and body hair, prostate and testicle atrophy, breast tissue growth, and redistribution of fat mass. In the first 3-6 months, people can expect to see the decrease of facial and body hair, decrease of skin oiliness, the growth of breast tissue, and the redistribution of fat mass. Maximal breast development can take up to two years after the initiation of hormone replacement therapy. Prostate and testicle atrophy can take longer than two years. A note of importance when discussing the body changes that occur with hormone replacement therapy is that Male-to-Female hormone replacement therapy does **not** change the voice.

Vocal Implications

Because Male-to-Female transgender individuals have experienced biological male puberty, their larynges, vocal folds, and vocal tracts are larger than those of most biological females. Therefore, hormones cannot raise the

fundamental vocal frequency of Male-to-Female transgender persons.[37] The most common option for raising vocal pitch in transgender women is through speech therapy with a Speech Language Pathologist. The physical composition of the vocal folds and vocal tract will not change, but the transgender woman speaker can manipulate the mechanism in order to achieve a vocal quality and pitch level that will be perceived as more feminine sounding.

A characteristic that is generally associated with a feminine speech quality is increased fundamental pitch. Some studies have indicated that pitch can be perceived as feminine with frequencies as low as 155-165hz, [38] and other studies have suggested the frequency needs to be around 238hz to be unanimously perceived as female.[39] The general consensus among studies, however, is that 180hz is an appropriate goal for a fundamental frequency that will be perceived as female. Other vocal characteristics that are significant to a voice being perceived as female are increased breathiness, increased vocal variability in regard to pitch, volume, duration, and intonation contours, and an increase of the second formant. This formant increase is typically achieved by using a more forward tongue position. This strategy maximizes resonance and therefore aids in the perception of the voice as feminine.

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[37] Mary Gorham-Rowan, and Richard Morris, "Aerodynamic Analysis of Male-to-Female Transgender Voice," *Journal of Voice* 20 (2006): 251.

[38] M P Gelfer, and K J Schofield. "Comparison of Acoustic and Perceptual Measures of Voice in Male-to-female Transsexuals Perceived as Female versus Those Perceived as Male." *Journal of Voice: Official Journal of the Voice Foundation* 14 (2000): 22.

[39] M. Brown, A. Perry, A. D. Cheesman, and T. Pring, "Pitch Change In Male-To-Female Transsexuals: Has Phonosurgery A Role To Play?" *International Journal of Language & Communication Disorders* 35 (2000): 134.

The increase of vocal pitch through speech therapy can be incredibly effective, but because this is achieved through conscious manipulation of the laryngeal mechanism, it also has some drawbacks. According to Gorham-Rowan, "It is likely that MTF persons frequently attempt to achieve a higher vocal pitch through increased tension and compression of the laryngeal muscles. The additional attempt to influence vocal resonance through anterior tongue carriage to raise F2 may also contribute to increased laryngeal tension via contraction of the suprahyoid musculature."[40] Brown warns speech therapists against substantial treatment of pitch, which may lead to hyperfunctional laryngeal use, voice fatigue, and possible pathology.[41] It has been anecdotally observed that it can be helpful for Male-to-Female transgender individuals to utilize vocal warm-up and cool-down exercises daily to counter some of the voice fatigue that they face.

Voice Feminization Surgeries

An alternative to raising vocal pitch through manipulation of the vocal mechanism is to administer laryngeal surgery to permanently raise the fundamental pitch in Male-to-Female persons. This section will include brief descriptions of some of the more popular laryngeal surgeries that are used to raise pitch in transgender women. This discussion is solely for the purpose of providing voice teachers with contextual information in the case that a voice student has had one of these surgeries, or so that if a student wishes to discuss

[40] Gorham-Rowan, 252.
[41] Brown, 130-131.

potential surgical options, the teacher is aware of the procedures. It is intended to be informative, and voice teachers should not make any medical recommendations or suggestions based on any of the following material.

Thyroid Chondroplasty is a common procedure among transgender women. This surgery is purely cosmetic, and it is used to reduce the appearance of the Adam's apple. It is also called a "tracheal shave" or "Adam's apple reduction." While there are risks involved with any surgery, this procedure is very common and has little risk of vocal injury as it removes excess cartilage from the outside of the larynx and should not involve interaction with the vocal folds.

A widely used laryngeal surgery for the increase of fundamental pitch is the Cricothyroid Approximation surgery. Physiologically, in order for pitch to increase in any person, the cricothyroid muscle, which is attached to both the cricoid and the thyroid cartilages, contracts causing the thyroid to tilt forward, thereby elongating the vocal folds. In this surgery, the vocal folds are permanently stretched by the closure of the crico-thyroid space with sutures of non-absorbable material, which are placed through the body of the cartilages with the needle passing entirely through the cricoid cartilage. This surgery can be done in conjunction with the Thyroid Chondroplasty. After having this surgery, individuals experience an increase in modal pitch and an allowance of the voice to be produced naturally without harmful vocal consequences. An advantage to this surgery is that it often prevents damage to the interior of the larynx. However, this surgery does include considerable risk. In several patients, the

sutures ripped through the cartilage. Additionally, some patients in the studies experienced a decrease in vocal quality after having the procedure.[42] [43]

An improvement on the Cricothyroid Approximation surgery is the Cricothyroidopexy. The Cricothyroidopexy works in the same way as the Cricothyroid Approximation by closing the crico-thyroid space and thereby permanently elongating the vocal folds. The improvement in this version of the surgery is that instead of suturing directly into the cartilages, which risks the sutures ripping through the cartilage, the surgeons place small titanium plates onto the cartilages and use them to anchor the sutures, which prevents the tearing of the cartilage. This surgery is much more effective than the Cricothyroid Approximation, but the titanium plates are visible through the neck and are aesthetically dissatisfactory. An important comment found in this study, which echoes sentiments in several of these studies, is that "despite an increase in the volume of the voice, preoperative vocal performance could not be achieved again."[44] With this surgery, 73% of patients experienced an increase in pitch, however range was generally reduced. Before having the surgery, patients had an average range of two and a half octaves, and after the surgery this was reduced to an average of less than two octaves. The average loss of range was about five semitones at the top of the range and three semitones at the bottom of the range. Some patients regained some of their top notes with time.[45]

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[42] Brown, 131-136.
[43] E. J. M. McNeill, "Management of the Transgender Voice," *The Journal of Laryngology Otology* 120 (2006): 521-23.
[44] Kerstin Neumann, and Cornelia Welzel, "The Importance of the Voice in Male-to-female Transsexualism," *Journal of Voice* 18 (2004): 160.
[45] Neumann, 153-67.

Another surgery to increase pitch in Male-to-Female transgender persons is called a Glottoplasty. In a Glottoplasty, the anterior part of the vocal folds is deepithelized with a CO_2 laser, with extreme care being taken not to injure the vocal ligament. The corresponding tissue is then sutured with reabsorbable threads. The study states that there have been no early complications associated with this surgery, and the fundamental vocal pitch is improved significantly. As with the other surgeries, however, there are risks involved, including decreased range in all patients and persistent hoarseness in one third of the patients.[46]

Laryngeal Framework Surgery, also known as Anterior Commissure Repositioning, is a different and rather invasive surgery to increase pitch. In this surgery, the larynx is surgically reshaped in order to adjust the vocal fold tension. There are several possibilities for reshaping the larynx, based on the needs of the patient. The study reports that there are very few complications associated with this surgery, which may be surprising considering the level of complexity involved. This surgery is successful in raising pitch by approximately six semitones in most patients. The most significant dissatisfaction with Laryngeal Framework Surgery is that because of the reshaping of the larynx, it may be more prominently accentuated.[47]

Laser Assisted Voice Adjustment, or LAVA, is another very different surgery used to elevate pitch in Male-to-Female transgender individuals. In this surgery, a CO_2 laser is used to vaporize portions of the vocal folds. According to

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[46] Marc Remacle, Nayla Matar, Georges Lawson, Dominique Morsomme, and Ingrid Veduyckt, "Glottoplasty for Male-to-female Transsexualism: Voice Results," *Journal of Voice* 25 (2011): 120-23.

[47] Harvey M. Tucker, "Anterior Commissure Repositioning for Adjustment of Tension in the Vocal Cords," *Operative Techniques in Otolaryngology - Head and Neck Surgery* 4 (1993): 178-82.

the study, “the resulting decrease in mass and increase in stiffness resulting from the scarring process of vocal fold tissues accounts for the significant rise in vocal pitch.”[48] The location of the scar is also thought to be a key determinant in the success of elevating the vocal pitch. In all post-operative patients, glottal closure was preserved and mucosal waves appeared to be normal and symmetric. According to the study, LAVA appears to be safe, well-tolerated, durable, and in most cases successful, and it is regarded as a conservative pitch raising procedure. However, as is the case with most of these surgeries, the study reported decreased vocal quality, loudness, and range.[49]

These surgeries and others like them may be valid and helpful choices for transgender women who are not able to elevate their speaking pitch through speech therapy, or for transgender women who experience significant vocal fatigue because of vocal mechanism manipulation. However, the consensus among the authors of the studies is that vocal quality tends to diminish. One author, speaking specifically about an anterior commissure surgery but with a sentiment that might be appropriately applied across the board, says the following:

> Feminization laryngoplasty might be less appropriate for patients employed as vocal performance professionals, such as singers… The variability of the change of the uppermost register means that those who wish to sing could lose some of their vocal range. Another element not measured by highest and lowest pitches is continuity of range… though

[48] Lisa A. Orloff, Andrea P Mann, John F Damrose, and Stephen N Goldman, "Laser-assisted Voice Adjustment (LAVA) in Transsexuals," *The Laryngoscope* 116 (2006): 655.
[49] Orloff, 655-660.

speaking voice quality might be smooth, postoperative video stroboscopy showed vocal cord asymmetry in some patients.[50]

The student should make any decisions with the help of her medical team, however at this point in time these surgeries seem to be a considerable risk for a singer. Echoing the author above: yes, pitch elevation surgeries seem to be less appropriate for vocal performance professionals. Any singer wishing to pursue a pitch elevating surgery should consult a laryngologist who specializes in the performing voice and the available literature to ensure that she is fully aware of the vocal risks involved in the surgery.

Voice and Identity

As was discussed in the chapter on the Female-to-Male transition, a person's voice is integral to her identity. Even idiomatically, the term "finding one's voice" is powerful and related to inner strength and personal sense of self. With a transgender woman student, one of the responsibilities of the voice teacher is to help the singer explore different facets of her voice and to establish a healthy singing technique that will serve her in the future. In addition to this, however, voice teachers have the privilege of helping these students discover their true, authentic voices.

Studies have shown that even when a person's physical appearance is aligned with their gender identity, if their voice does not align with their gender

[50] James Thomas and P. MacMillan, "Feminization Laryngoplasty: Assessment of Surgical Pitch Elevation," *European Archives of Oto-Rhino-Laryngology* 270 (2013): 2699.

identity, other people will not perceive them as their target gender.[51] [52] Studies have also shown that there is considerable correlation between the quality of life for transgender individuals and other people's perception of their voices.[53] Many factors are involved in voice matching the target gender including but not limited to pitch, breathiness, resonance, and vocal variability in regard to pitch, loudness, duration, and intonation contours. Most of these aspects are related to the speaking voice and are in the domain of the speech therapist, but it is helpful for voice teachers to realize the impact of the voice on others' perception of the student as well as on the students' own quality of life.

[51] John Van Borsel, Griet De Cuypere, and Hilde Van Den Berghe. "Physical Appearance and Voice in Male-to-Female Transsexuals." *Journal of Voice* 15, no. 4 (2001): 570-75.
[52] John Van Borsel, Kathelijne De Pot, and Griet De Cuypere. "Voice and Physical Appearance in Female-to-Male Transsexuals." *Journal of Voice* 23 (2009): 494-97.
[53] Adrienne B. Hancock, Julianne Krissinger, and Kelly Owen, "Voice Perceptions and Quality of Life of Transgender People," *Journal of Voice* 25 (2011): 553-58.

Chapter 6

Teaching Male-to-Female Students

When a teacher begins working with a transgender woman student, it is important to establish the student's preferred name and pronouns. The student may prefer a name that is different than their legal name, the name they use at work, or the name associated with their email account. This is especially likely if the student is in beginning stages of their transition. Some individuals who are taking feminization hormones and who are physically in the Male-to-Female category may be gender nonconforming and prefer gender-neutral pronouns. It is never safe to assume a preferred name or pronoun. Once the preferred name and pronoun have been established, it is important that these preferences are respected. For voice teachers who may be unaccustomed to gender-neutral pronouns, and using they/them as singular, gender-neutral pronouns may be challenging. Additionally, if the teacher has been teaching the student prior to the student's transition, addressing the student with a different name and pronoun may be a difficult task. Many students understand this difficulty and will be patient with the teacher during this process, but it is important for the teacher to put significant effort into respecting the student's name and gender.

Voice and Feminization Hormones

A Male-to-Female student may wish to discuss her hormone therapy with her voice teacher, but as has been discussed in the previous chapter, there is no

significant or permanent vocal change that occurs because of the feminization hormones. Some transgender women feel as though their voices are changing, and this is because of the natural effect that estrogen and progesterone have on the quality of the voice, similar to the experience of a cisgender woman at various stages of her menstrual cycle. According to Jean Abitbol,

> Progesterone causes cells on the surface of the mucous membrane to slough off… It thickens the secretions of the gland located below and above the vocal cords, causing, during the four days preceding the menses, dryness of the larynx, the need to clear one's throat, less agility when singing, and a narrow register…Progesterone also brings on a slight decrease in the muscle tone of the vocal cords, and it diminishes, and may even inhibit, the permeability of the capillaries. This causes the extravascular fluid…to stagnate in the tissues of the vocal cords, bringing on an edema of the vocal cords, which remain swollen during the week prior to menses.[54]

Estrogen, however, is a much kinder hormone to the larynx, the effects of which "result in a slight thickening of the cordal mucous membrane, which creates a greater vibratory amplitude. The voice acquires a good timbre… The lipid cells under the cordal mucous membrane are stimulated. The voice becomes more supple."[55] Depending on the balance and doses of the hormones involved in the student's hormone replacement therapy, she may be experiencing any number of symptoms that may feel like her voice is changing. However, these are not

[54] Jean Abitbol, *Odyssey of the Voice*, San Diego, CA: Plural Pub., 2006: 216.
[55] Abitbol, 214.

permanent changes, and they will only affect the quality of the voice, not the pitch.

Boundaries and Considerations

While it acceptable to talk about the student's hormone replacement therapy and to educate her about the effects of female hormones on the voice, it is never appropriate to ask about sexual reassignment surgery, or bottom surgery. Bottom surgery is extremely personal and has absolutely no impact on the voice, so it is of no concern to the voice teacher. Some transgender women choose to have breast augmentation surgeries, which should generally warrant no discussion. However, if a student has a breast augmentation, she may experience changes in her posture, alignment, and center of gravity due to the breast augmentation. The teacher would benefit from having this information so as to reevaluate posture and breath, in addition to having patience with the student during recovery.

It is a good idea to discuss how the student feels about her lower range. Vocally, the best choice is to work the entire voice, and many students are comfortable continuing to use their lower ranges at times. However, spending a considerable amount of time working on the student's low range may trigger some of her gender dysphoria. One must be aware of and sensitive to this fact. The goal is to help this student find her true, authentic voice, and if utilizing the lower parts of her range interferes or presents a significant obstacle, the teacher should be understanding and supportive of the student.

It is important to be aware that in order to be perceived as feminine, a transgender woman may be using a manipulation of the vocal mechanism in order to achieve a higher fundamental pitch. This may be necessary for her to be perceived as feminine. Studies have shown that even when a person's physical appearance is aligned with their gender identity, if their voice does not align with their gender identity, other people will not perceive them as their target gender.[56] [57] Studies have also shown that there is considerable correlation between the quality of life for transgender individuals and other people's perception of their voices.[58] If she feels that it is necessary to speak at a higher pitch level, this decision should be respected.

Because speaking at a higher pitch requires manipulation of the vocal mechanism, a transgender woman student may experience vocal fatigue in both speaking and singing. This should be considered for voice lessons occurring at the end of the day. In order to mitigate some of the vocal fatigue, it is beneficial to educate the singer about good vocal health practices, such as being adequately hydrated, minimizing caffeine and alcohol intake, abstaining from smoking, moderating vocal activity, and getting adequate rest. Additionally, in order to lessen the impact of vocal fatigue, the voice teacher may wish to advocate

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[56] John Van Borsel, Griet De Cuypere, and Hilde Van Den Berghe. "Physical Appearance and Voice in Male-to-Female Transsexuals." *Journal of Voice* 15, no. 4 (2001): 570-75.
[57] John Van Borsel, Kathelijne De Pot, and Griet De Cuypere. "Voice and Physical Appearance in Female-to-Male Transsexuals." *Journal of Voice* 23 (2009): 494-97.
[58] Adrienne B. Hancock, Julianne Krissinger, and Kelly Owen, "Voice Perceptions and Quality of Life of Transgender People," *Journal of Voice* 25 (2011): 553-58.

utilizing singing voice warm-ups at the beginning of the day and cool down exercises at the end of the day.[59]

In the Voice Studio

As was discussed in in Chapter 4, a systematic and functional pedagogical approach, similar to the approach used with cisgender students, is a clear and effective way to work with transgender women. Modifications are made to accommodate the vocal differences and challenges, but the basic framework is similar. Many of the teaching techniques below are based on those of Dr. Kari Ragan at the University of Washington, whose pedagogical principles are based on voice science as well as experiential evidence. She approaches voice teaching by addressing what she calls the "Five Systems of the Voice," which are Respiration, Phonation, Registration, Articulation, and Resonance. Many pedagogy texts use some combination of these, but I have not encountered the use of all five in this specific way outside of Dr. Ragan's mentorship. After experiencing this methodology in my own voice lessons as well as experimenting with it in my teaching for the past several years, I have found that this approach is a clear, organized, and efficient way to teach students. Additionally, students have a clear understanding of what is being addressed in lessons and can practice more effectively at home. The order of the five systems that are listed above is the order in which I prefer to approach them, but it is important to

[59] Kari Ragan, "The Impact of Vocal Cool-down Exercises: A Subjective Study of Singers' and Listeners' Perceptions" *Journal of Voice* 30 (2016): 764.e1-64.e9.

recognize that all of the five systems work in conjunction with each other as well as independently.

In the following exercises, the pitches given are average starting and ending points, but every voice is unique and each individual's needs should dictate the exact starting and ending pitches, as well as which exercises are used. The primary focus should remain on creating exercises that accommodate the singers' needs: releasing any tensions that might naturally arise, helping the student comfortably access a part of her voice that might be unfamiliar to her, and incorporating good habits throughout the process. There are no miraculous exercises that work perfectly on everyone, so each teacher should feel free to use these principles in creating exercises that serve individual singers in the best way possible. Additionally, as the voice develops, the exercises, intervals, and starting and ending pitches suggested in this chapter should be modified to fit the current needs of the singer.

Respiration

Beginning a lesson with respiration is beneficial because breathing is the power source. With a transgender woman singer, it is best to take a holistic and body-positive approach to the teaching style as well as the language used. Most likely, she has spent years of her life feeling disconnected from her body, so doing exercises that encourage her to feel connected to her body and breath have a positive impact on her overall singing experience.

The following beginning exercise is slow and meditative. Lying on the ground, the singer closes her eyes and brings awareness to her breath. On the ground it is easier for her to feel the ribcage expand as well as her abdominal expansion and engagement. Her attention should be drawn to these experiences. Attention should move to her shoulders and throat, and she should be asked to release as much tension as possible. Attention then moves to the larynx. If the breathing is particularly audible, it is possible that there is tension there that can be released. Next, she should become aware of her tongue. Is the tongue released of tension? While lying on her back, the tongue has likely fallen back somewhat due to gravity. Attention can be drawn to this and corrected to allow the tongue to reside in a forward neutral position with the tongue touching the bottom teeth. She should be to breathe for a few cycles, which allows her to feel the interconnectedness of the different parts of the body and the breath.

The next step of this exercise utilizes voiced and unvoiced pairs [z]/[s], [v]/[f], and [ð]/[θ], which encourage coordination of respiration and phonation. The student can be asked to exhale on an unvoiced [s]. The [s] sound can take the full length of exhalation. If the teacher's viewpoint is from the general direction of the student's feet or side, it is possible to see if they are engaging the tongue during this exercise. If one observes movement under the jaw when the exhalation process begins on [s], a reminder to release the tongue may be helpful and necessary. Because of the interconnection between the articulation and phonation systems, the teacher must also listen for the possibility of too much compression and subglottic pressure. Once the [s] is comfortable, the

singer should alternate between an unvoiced [s] and a voiced [z] on a comfortable pitch to incorporate coordination of breath and phonation. The transition between the [s] and the [z] should ultimately be very smooth, though it may not be smooth at the beginning. The teacher should continue to observe any extra tongue tension, especially when the student moves from the [s] to the [z] sound. During this process, the singer should be prompted to be aware of ribcage expansion and the process of abdominal release and engagement.

Once the [s]-[z] pairing is comfortable, the same exercise can be done on [f]. The student can start with a full exhalation cycle on [f], then move to alternating [f] and [v], with the goal of a smooth transition with no extraneous tension as well as ribcage expansion and abdominal activity. After the alternation of [f] and [v], the exercise can be repeated using unvoiced “th” [θ] and voiced “th” [ð]. This variation has the advantage of a vastly different tongue position, which adds another layer of complexity this exercise. The final step is to experience all of this connection and integration together by speaking one word over the duration of an entire exhalation. The word “soup” is an effective option because the student gets to use the [s] sound from the beginning of the exercise in addition to a pure vowel and a plosive. It coordinates respiration, phonation, and articulation and exemplifies the interconnectedness of these systems.

The exercise above is beneficial as it relaxes the student and provides connection to her body; but it also clearly demonstrates how much physicality is involved in singing—before singing has begun. It is important for any singer to realize that singing is a physical activity that involves the mind and the entire

body. The concept of the physicality of singing can be even more profound with a transgender student because she can connect with a body that is finally, or is finally becoming, a body that represents who she is as a person. Furthermore, using her body to express herself artistically in a way that aligns with how she perceives herself provides a positive experience. The voice and unvoiced pairing exercise can take a long time, so focusing on it during the first or second lesson may be sufficient, with the possibility of dropping into parts of it as it becomes necessary or helpful in the future, or if the student requests it.

Returning to a standing position, the singer should be encouraged to maintain as much of that connection and ribcage/abdominal activity as possible without feeling rigid. In the course of the lessons, how best to approach the specifics of breathing for singing will vary based on the singer's individual body and vocal needs. Everyone comes to singing from a different perspective, so the teacher and student must to work together to find the right balance for the individual. How and when to encourage more engagement will depend on the student as well as the interaction with the other systems.

Phonation

Phonation is the production of sound and invovles the vocal folds and laryngeal activity. In this section, the primary focus will be on phonation that is optimally produced. Something of which to be aware with transgender women singers is the potential for vocal fatigue due to the fact that the student may be manipulating her vocal mechanism during speech. Because of this, exercises

may require a focus on relaxation and the release of any extra tensions, as well as the encouragement of a neutral laryngeal position. Every student approaches her speech pattern differently, but teachers should be aware of this possibility and work to mitigate any unnecessary tension and fatigue in trans women students.

Beginning vocalization with a semi-occluded vocal tract (SOVT) exercise is beneficial (Figure 11). Studies have shown that semi-occlusion can help the voice to function more efficiently,[60] and beginning vocalization in this way seems to have a positive effect on the lesson as a whole. SOVT options include Ingo Titze's straw phonation[61], as well as lip trills and tongue trills. Starting in the middle of the singer's range and gradually moving out to the higher and lower parts of her range may be beneficial in easing tension and maintaining release. Depending on the student's facility with her head/head-mix register, going through her passaggio may involve instability and unwieldiness, which is to be expected.

[60] Ingo Titze, "Voice Training and Therapy With a Semi-Occluded Vocal Tract: Rationale and Scientific Underpinnings," *Journal of Speech, Language, and Hearing Research* 49 (2006): 448-59.
[61] Ibid.

Figure 11: Semi-occluded vocal tract exercise, to be sung through a straw

After beginning vocalization with semi-occlusion, it is best to choose an easy exercise with the goal of encouraging laryngeal release. A three-scale-degree hum beginning in the student's mid range, and then working up through the passaggio, is an effective choice (Figure 12). How high this exercise is taken depends on the student's comfort level and ability. The second part of this

exercise is a three-note descending hum starting below her passagio, moving down into her low range.

Figure 12: Exercise to encourage laryngeal release

After doing a humming exercise, one-note vocalization can be used to encourage a release of tension. An effective exercise is an alternation between [u] and [i] on a single pitch (Figure 13). This is helpful because it initiates phonation on closed vowels, but without any of the vocal obstacles that might occur in a more complex exercise. It is important to encourage the student to retain the space of the [u] vowel while incorporating the resonant benefits of the [i] vowel. Ideally, both vowels will maintain aspects of each other throughout the exercise. The exercise also has the benefit of encouraging tongue flexibility in the shift between [u] and [i]. This exercise is best for the student's middle range and lower head voice dominant register, as she can focus on vowels without requiring modification to accommodate tessitura.

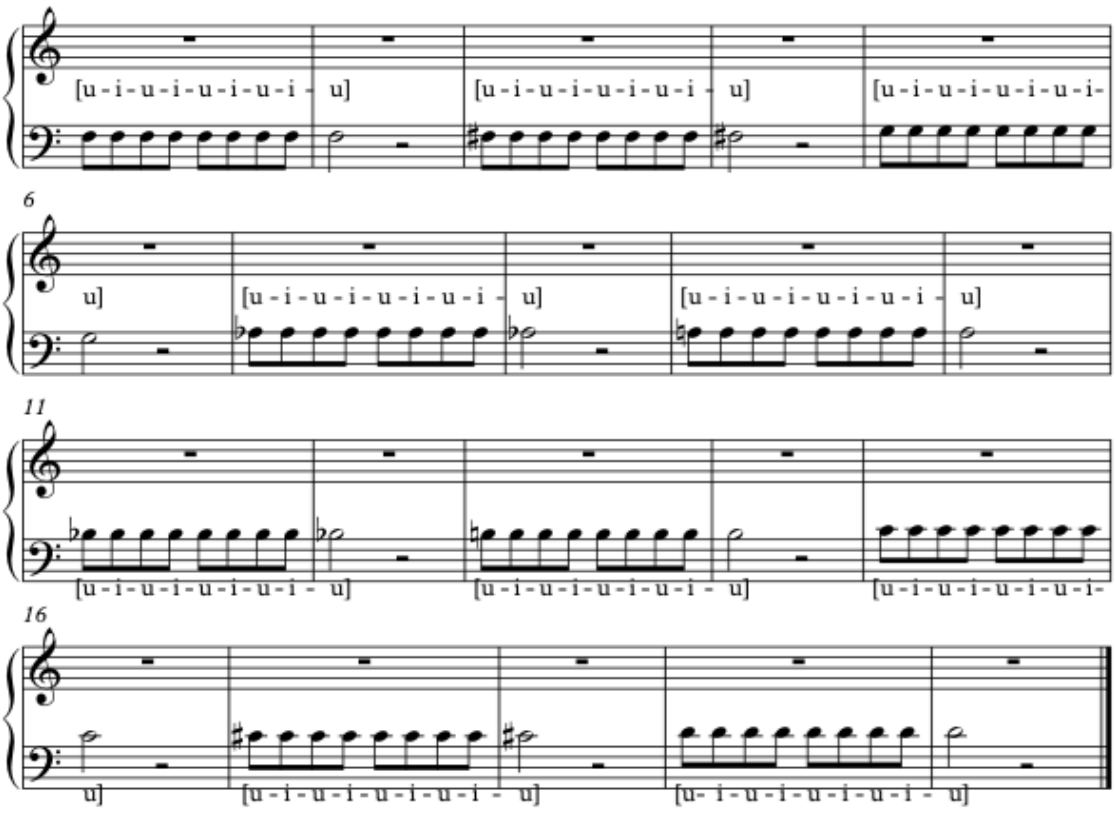

Figure 13: One-note exercise

This exercise provides the stretch and release of gliding, vowel equalization, the opportunity to practice onsets, and practice in creating a legato line (Figure 14). A single vowel ([u] or [a]/[ɑ]) can be used, but the combination of the vowels is helpful in creating vowel equalization. If utilizing both vowels, the student should start on an [u] vowel and maintain that vowel as she glides up a major third, being sure to sing every possible pitch between the two target pitches, before she switches to the [a]/[ɑ] vowel. In the same way, she should maintain the [a]/[ɑ] vowel as she glides down a major second, at which point she will switch back to the [u]. Similarly to the one-note exercise in which the goal is to maintain aspects of both vowels throughout the exercise, in this exercise the goal is to keep the loft of the [u] vowel when the student is singing the [a]/[ɑ] vowel. Because of the length of this exercise and the consistent gliding, it requires a considerable amount of air, so it will also encourage the student to think about the skills he addressed in the first breathing activity of this chapter. This exercise can be used below and above the student's passaggio. Depending on the ease with which she navigates the passaggio, the teacher may or may not want to go over the passaggio. If she is somewhat comfortable with that transition, this can be an effective exercise to help with passaggio navigation as well.

Figure 14: Gliding exercise for stretch and release, balanced onsets, vowel equalization, and legato line

Registration

Registration work with a transgender woman is important. Because she is likely interested in singing in a higher range than she previously has, she will need to increase the facility of her head voice dominant register, and she may also need to increase the range of her chest voice dominant register. It will be important for the student to develop and/or strengthen her mix so that navigating the passaggio and accessing her upper range will be an easy option for her. In

order to achieve this, it is necessary to utilize tasks that isolate the head and chest registers individually.

Registration Isolation

With transgender women, there may or may not be some familiarity with the head voice dominant register, so depending on the student's normal voice usage, this register may be unfamiliar to her or weak. If this is the case, a good approach is to start slowly working the student's head voice dominant register by using an [u] vowel at a pitch level above her passaggio. The [u] vowel encourages the activity of the cricothyroid muscle by lengthening the vocal tract with a raised soft palate and some lip protrusion. Any exercise intended to work head register is well served by the use of the [u] vowel.

An effective beginning exercise is a three or five note descending passage (Figure 15). Whether to use three or five notes depends on the student's familiarity with her head register. If she has a more developed head register, the five note descending passage will be a good choice. If she is unfamiliar or uncomfortable with her head register, the three-note passage will be the best option. The starting pitch should allow all of the notes to remain above the passaggio, and this pattern can move up by half steps as it remains comfortable for the singer. Ease of production and release of tension should be encouraged.

Figure 15: Descending passage for head voice dominant register

The second exercise is a glide exercise that starts on the lower of the pitches, moves to the top note, and then returns to the original note (Figure 16). Beginning at a group of pitches just above the singer's passaggio and moving up by half steps as it remains comfortable for the student is effective in facilitating head voice dominant registration. These are exercises to strengthen the cricothyroid muscle and should be done regularly by the singer in her practice sessions.

Figure 16: Head voice dominant register glide exercise

To isolate the chest voice dominant register, the most effective vowel to use is the [æ] vowel, as in the word "cat," as this vowel encourages thyroarytenoid engagement. The goal in using this vowel is to allow the vocal tract to shorten somewhat, which is helpful in chest voice use. The [æ] vowel

involves a more neutral soft palate than something like an [u] vowel, and it requires a horizontal mouth shape without any protrusion of the lips, both of which shorten the vocal tract. In these exercises, the goal is to help the student learn how to extend the use of her chest voice. The teacher must listen carefully to the student and monitor any tension in the student's voice. In these types of chest voice/belting exercises, the student may experience physical sensations in the larynx, unlike what she experiences when using her head voice. These sensations are acceptable, but the teacher should listen carefully to be sure the student is not pushing or using extra-laryngeal tension.

It is advisable to start at a pitch level in the student's lower mid range on a syllable such as [væ]. The [v] consonant creates back-pressure, keeping the larynx neutral as in semi-occluded vocal tract exercises. Other effective possibilities include [b] and [p]. Depending on the student's abilities, versions of the exercise spanning either a third or a fifth may be used (Figure 17), with the student singing "[væ-væ-væ-væ-væ]" in a way that feels light and more like spoken voice than singing voice. There should not be a preponderance of vibrato, and the shape of the mouth should be horizontally oriented. It is important that the student not try to create extra space in the back of the mouth, as the raised soft palate will make these exercises much more difficult. This exercise can be moved up by half steps as long as the student can remain in her chest voice. In chest voice exercises, the student should try not to go into her mixed voice and should remain in a chest voice dominant configuration for the duration. If she sounds as if she is beginning to yell, or as if she is carrying too

much weight up with her, it is important to ensure that she is singing a true [æ] vowel and is utilizing a horizontal mouth shape. She should produce a bright/brassy sound that is felt in the mask. This exercise can be done with the student singing each individual note, as a glide exercise, or one right after another to reinforce the concept while adding variation.

Figure 17: Chest voice isolation exercise

Register Coordination

After isolating the chest voice dominant and head voice dominant registers individually, it is important to move through the passaggio and begin to coordinate the registers. Using a glide exercise on an [u] and/or [i] vowel can be an excellent choice. Initially, it is helpful to encourage a softer dynamic level. By singing at a loud volume, the thyroarytenoid muscle (chest voice) may be more active than it needs to be. The thyroarytenoid muscle likely outbalances the cricothyroid muscle (head voice), so encouraging the engagement of the cricothyroid muscle will be necessary for the coordination. The student should think about aligning timbres when going through the passaggio. For example,

when preparing to move from a chest voice dominant registration to head voice dominant registration, she should aim for a loftier chest voice sound and a reedier head voice sound so that the timbres are similar and will help with the ease of transition. Voice pedagogues refer to this as mixed registration.

A useful exercise for the coordination of the registers is shown in the example above (Figure 18). Beginning on a pitch above the passaggio and ending on a pitch below the passaggio, the student should glide down from the top note to the bottom note on an [ŋ] and then transition to [a] on the bottom note. She should then glide up and back down on the [a] vowel while retaining the feeling of the [ŋ]. The student should then sing a five-note scale on [a]. This can be moved up by half steps until the bottom note is just above the passaggio. The student should allow the voice to switch to a chest voice dominant configuration whenever it is comfortable to do so; she should not try to carry a head voice dominant configuration down any further than is natural in her voice. The primary principle of this exercise is to guide the voice to a smooth path between the registers. Eventually, the muscles will coordinate and the register shift will become smoother. This exercise is a dual exercise of resonance and registration, but it is included in the registration section because of its usefulness in coordinating the registers.

Figure 18: Exercise for register coordination

Articulation

The articulation system includes the tongue, pharynx, palate, and jaw. When bringing awareness to the articulators in voice lessons, the tongue and jaw often receive the most attention. As was discussed previously, transgender women frequently utilize manipulation of the vocal tract, especially the anterior portion of the tongue, in order to achieve a more feminine timbre.[62] Because of this, when working with trans women, it is important to be aware of the potential for significant tongue tension and to provide students with tools to release this tension. The exercises discussed below can be helpful for any student with tongue tension issues, and they are especially helpful for the release of anterior tongue tension in transgender women singers.

[62] Gorham-Rowan, 252.

The first exercise is the “ya-ya” exercise (Figure 19), in which the student sings a three-note triadic pattern on a [ja] syllable without any jaw movement. She should begin with a jaw width appropriate for singing into her upper range without adjusting her jaw position. The goal is to sound “normal” with no jaw movement, which means the student will need to use considerable tongue movement to achieve a “normal” sound. The tongue will arch forward to create the [i/j] vowel, which encourages the disengagement of anterior tongue tension. The benefit of this exercise is that it encourages independence between the tongue and jaw as well as the release of anterior tongue tension.

Figure 19: Ya-ya exercise

Another tool that is helpful for releasing tongue tension in some students is to instruct the student to use gauze to hold her tongue just outside of her mouth while she is singing. If tongue tension exists, the tongue will pull backward into the mouth while the student is holding it. This can be effective in showing the student how much unnecessary involvement her tongue has while she is singing. This tool can be used on many different activities, from simple exercises to complicated repertoire. When using gauze, the student will be limited to a neutral open vowel, so this tool should not be combined with vowel-specific exercises.

In addressing tongue tension, another effective strategy is to place a small candy on the tongue to bring awareness to it while singing. The best option is some type of hard candy. To use this tool, when the student is singing, she should place the candy on the center of her tongue, about one inch back from the tip. The goal is for her to “balance” the candy on her tongue while she is singing. When the student first tries this exercise, the candy will likely move around due to tongue movement. The awareness that the candy brings to the tongue should encourage tongue stillness and release. This tool can be used with most exercises and repertoire choices, though it is much easier and effective when used on neutral vowels.

Resonance

When working Resonance with transgender women, it is important to remember that in spoken voice, trans women’s voices are perceived as being more feminine when they speak with forward resonance. According to Lisa

Carew, “oral resonance therapy may be effective in increasing femininity of voice in male-to-female transsexual clients.”[63] Voice teachers can carry this concept into singing voice lessons to help students maximize forward resonance while they are singing. Carew’s article discusses the fact that forward tongue carriage is helpful in achieving a feminine sounding resonance. Voice teachers can encourage a neutral/forward-neutral tongue position while the student is singing, but the teacher should listen carefully and ensure that the student is not becoming rigid or tense in her attempt to find forward resonance.

In order to feel her resonance, a student can utilize the nasal [ŋ] sound and/or an [i] vowel. In the registration example above, the student moved from [ŋ] to [a], trying to maintain the feeling of the [ŋ]. This is an effective way to maintain consistent resonance. The [ŋ] sound can be used in most exercises and on portions of repertoire. When using this sound, the student should utilize adequate oral space, a forward tongue position, and a neutral larynx. By making the [ŋ] sound, the voice is being diverted through the nasal cavity instead of through the oral cavity. When good resonance is achieved in normal singing, singers may experience sympathetic sound vibrations in the nasal and sinus cavities. By using a nasal sound exercise, the singer has a better idea of how resonance feels. This is not meant to promote nasality, but instead to give the singer a kinesthetic association with resonance.

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[63] Lisa Carew, Georgia Dacakis, and Jennifer Oates, "The Effectiveness of Oral Resonance Therapy on the Perception of Femininity of Voice in Male-to-Female Transsexuals," *Journal of Voice* 21 (2007): 591.

The [i] vowel is naturally very bright and resonant, as it requires a forward tongue position. Similarly to the [ŋ] sound, an [i] vowel can be used on most exercises and a good portion of repertoire in order to allow the singer to experience more efficient resonance. After using an [i] vowel on an exercise or on a portion of repertoire, the student should try to recreate that level of vocal efficiency once she has moved back to the words or to a more neutral vowel. With the [i] vowel, the teacher should be sure the student's tongue maintains a sense of release and does not become rigid. The student should also maintain appropriate space in the mouth.

Repertoire

When assigning repertoire to trans women, the student's level of comfort with the content of the music as well as the usable range at the time should be prioritized. If the student develops facility in her head/head-mix register, art songs, folk songs, and legit musical theater songs in the mezzo-soprano key may be appropriate for her. If she is able to carry her chest voice up to G4 or A5, some lower musical theater belt songs may be a great option for her. Some transgender women enjoy their low ranges and still wish to sing in the tenor or baritone key. This should be accommodated if it is the singer's preference.

The singer's comfort is the most important facet. Because of this, websites such as www.musicnotes.com and music publishers that provide custom keys can be utilized. If the student finds a song she enjoys, but it is in a key that is inappropriate, she should be encouraged to purchase it in a comfortable key so

that she can sing it without difficulty. The only time in which this may be problematic is in an audition where the judges expect the selection to be in the original key. In any other situation, it is acceptable for the singer to perform a song comfortably in a key that works with her voice.

Conclusion

As a teacher, one of the most fascinating and rewarding parts of the job is to help a person discover new facets of who they are, or to see the enjoyment as they learn how to do something they have always wanted to do. There is immense joy in helping a person achieve what they want to achieve, and there is wonder to be found in watching the unique paths every individual person takes to reach their goal. When working with a student who has faced more than the average amount of obstacles, a teacher wants to be able to support the singer and facilitate their growth in the best and most efficient way possible.

The current literature on teaching transgender singers is extremely limited, which can be frustrating to well-meaning voice teachers who are looking for answers about the experiences of their trans students. In this paper, I have attempted to answer some of the most important questions and share teaching experiences that have proven to be successful with my students. This is by no means exhaustive and will hopefully be augmented by the work of others as they learn how to best serve students from the transgender community. Working with my trans students has been and continues to be an honor, and I thank them immensely for their patience and trust as we helped each other learn and grow.

Appendix I: Suggested Intake Form

Student Orientation and Intake Form

Please complete this form.

Name: _____ Age _____

Preferred Pronouns: _____

Email Address: _____

Phone Number: _____

Have you had any previous vocal study? _____

If so, name of teacher(s), type of instruction (Classical, Pop/Rock, Musical Theater, etc.), and years studied?

_____

_____

_____

Do you play an instrument? Can you read music?

_____

What are your vocal goals?

_____

_____

_____

What do you feel you need to work on in your vocal technique?

_____

_____

Who are your favorite vocalists? Which singers do you listen to most frequently?

_____

_____

Do you have any past vocal injuries or voice concerns? (If yes, include dates)

_____

_____

Are there any health concerns that might affect your voice?

_____

_____

Are you taking any hormones or medications that might affect your voice? If so, how long have you been taking them?

_____

_____

Are there any other physical and/or emotional issues that may hinder your realizing your vocal/performance goals that you feel comfortable sharing with me?

_____

_____

_____

Studio Policies:

(studio policies here)

Student Signature: _____

Date: _____

Appendix II: Repertoire Suggestions

The following list is a starting point of suggested repertoire ideas. Some of the musical theater songs listed below should be avoided in auditions because they are overused, however the songs can be helpful for technique and can be utilized in lessons. Many of the songs are available in multiple keys. The key most comfortable for the singer should be used whenever possible.

Female-to-Male: Castrati/Classical (pre- or early-transition)

"Ombra mai fu" from *Serse*, Handel

"Your tuneful voice" from *Semele*, Handel

"Lascia, ch'io pianga" from *Rinaldo*, Handel

"Dove sei" from *Rodelinda*, Handel

"O Rest in the Lord" from *Elijah*, Mendelssohn

Female-to-Male: Art Songs

"Die Schwälble," Brahms

"The Nightingale," Kjerulf

"Quando miro quell bel ciglio," Mozart

"Mein Herz ist wie die dunkle Nacht," Lassen

"Qual farfalletta Amante," Scarlatti

Female-to-Male: Musical Theater

"Corner of the Sky" from *Pippin*

"I Could Write a Book" from *Pal Joey*

"On the Street Where you Live" from *My Fair Lady*

"They Can't Take That Away from Me" from *Crazy for You*

"The Mason" from *Working*

Male-to-Female: Art Songs/Classical

"Der Schmeid," Brahms

"O del mio dolce ardor," Gluck

"Ce que je suis sans toi," Gounod

"Du bist wie eine Blume," Liszt

"Es ist bestimmt," Mendelssohn

Male-to-Female: Legit Musical Theater

"Wouldn't it be Loverly" from *My Fair Lady*
"My Favorite Things" from *The Sound of Music*
"Frank Mills" from *Hair*
"It Might as Well be Spring" from *State Fair*
"Stars and the Moon" from *Songs for a New World*

Male-to-Female: Musical Theater Belt Songs

"Mama who Bore Me" from *Spring Awakening*
"There are Worse Things I Could Do" from *Grease*
"Anything Goes" (low key) from *Anything Goes*
"A Trip to the Library" from *She Loves Me*
"I Know Your Kind" from *Destry Rides Again*

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