What Trans* Folks Talk About When They Talk About Voice: Learning About Voice Feminization on Reddit

by

Talia Mykolovna Kowalchuk

Submitted in partial fulfilment of the requirements for the degree of Master of Science

at

Dalhousie University Halifax, Nova Scotia June 2020

Table of Contents

List of Tables	iii
List of Figures	iv
Abstract	v
Acknowledgements	vi
Chapter 1: Introduction	1
1.1Reddit	1
1.2 Trans* Terms	3
1.3 Anatomical and Physiological Sex Differences and Voice	6
1.4 Vocal Parameters Important to Gender Perception	8
Chapter 2: Methods	12
2.1 Data Collection	12
2.2 Analysis	18
Chapter 3: Thematic Analysis (Results)	27
3.1 Theory of Voice Feminization	28
3.2 Parameters of Voice Feminization	33
Chapter 4: Discussion	48
4.1 What Can Speech-Language Pathologists Learn from the Advice That Trans* Folks on Reddit?	-
4.2 Limitations	
References	
Appendix I: Transcripts of Data Set	60

List of Tables

Table 1: Number of Posts by Type	14
Table 2: Posts Included in the Analysis	15
Table 3: Themes and Relevant Posts	23

List of Figures

Figure 1: Post Types by Function	. 14
Figure 2: Themes Version 1	. 20
Figure 3: Themes Version 2	. 21
Figure 4: Themes Version 3 (Final)	. 22
Figure 5: Themes and the Posts that Contribute to them	. 26

Abstract

This thesis project is an in-depth analysis of the voice feminization advice given by trans* people on the subreddit r/transvoice. The purpose of this project is to learn more about voice feminization from the perspective of people who have undergone voice feminization themselves. The two main research questions of this project are: what advice is given on the subreddit and how can speech-language pathologists learn from that advice? This thesis employs an interpretivist methodology to answer those questions. A thematic analysis was used to understand and interpret the information in the data set. The results of this project show ways to use the Reddit posts as resources in therapy, suggest future areas for research in voice feminization, and spotlight the experiences of transgender women in voice feminization.

Acknowledgements

I would like to thank my supervisor, Dr. Michael Kiefte, for his guidance and support for this project. Thank you for asking interesting questions and for always believing in the importance of this work.

Thank you to the rest of my committee, for challenging me to make this project better at every step along the way. Thanks to Dr. Eli Manning, whose expertise in gender studies and qualitative analysis has proved to be immeasurably valuable to this project. Thanks to Glen Nowell, a committee member and clinical educator, who took me in as a student and taught me a great deal about voice and being a clinician. Thank you to Dr. Rebecca Affoo, who joined this project in the final stretch and added a new perspective.

I'd like to thank my parents, Michelle and Mykola, for the innumerable ways you have supported me throughout my life. You have made me into a person, and I would not have been able to have written this thing without you.

Thanks to my friends and classmates who have made the past three years of this degree so enjoyable. Thanks for distracting me when we were supposed to be studying, for coming to visit this faraway coast, and for listening to my stories about the successes and failures of grad school.

Thanks to my partner, Steven, for driving some 3493 kilometers to make a home here in Halifax with me. You make the good parts (making excel spreadsheets) better and the bad parts (filling out forms) easier.

Finally, thanks to the users of the r/transvoice subreddit, without whom this project would've been truly impossible. You're an inspiration to this future speech-language pathologist.

Chapter 1: Introduction

This thesis project is an in-depth analysis of the advice of people discussing voice feminization on the subreddit r/transvoice. Primarily, the subreddit is a website where trans* individuals can learn how to feminize their voices. This thesis aims to contribute to the growing body of work on voice feminization. By using the posts on the r/transvoice subreddit, this thesis prioritizes the voices of the trans* community. This situates the users of the subreddit as experts in their own voice journeys. Learning how trans* people teach and discuss voice can help speech-language pathologists learn about voice feminization. From analyzing the posts on the subreddit, speech-language pathologists can learn more about the way that trans* people learn, think, and talk about voice feminization. The topics discussed on the subreddit include: the theory and anatomy that relate to voice feminization, the different parameters of voice that are manipulated to affect the perception of the voice, and the practicalities of feminization that go beyond the voice lesson. This thesis project aims to learn about what is being taught on the subreddit and how that can impact future research and practice in the field of voice feminization. The primary research questions of this thesis are:

- 1. What advice do trans* folks give about voice feminization on Reddit?
- 2. What can speech-language pathologists learn from the advice that is given by trans* folks on Reddit?

1.1 Reddit

Reddit is "an [online] network of communities based on people's interests" (reddit.com). These individual communities are called subreddits and are denotated by "r/" followed by the shortened name. Some of these subreddits are humorous, such as "r/wewantplates" where users post pictures of food on non-ideal serving dishes. There are communities that offer information, such as "r/explainlikeimfive" for users to ask questions and receive simple answers. There are also communities that offer support, such as r/languagelearning, for polyglots. On each subreddit, users can post content, including text, pictures, videos, and links. These posts can be voted up or down (by giving "upvotes" or "downvotes") which are used to indicate how popular a post is. On

each post, users can also comment with text or links. These comments can in turn, also receive comments, as well as up and down votes. On each subreddit, there are rules to direct the content of the posts, as well as moderators to enforce those rules. Users of the site are identified by their unique username, preceded by "u/". These usernames are generally designed to keep the user anonymous.

The subreddit of focus in this thesis, r/transvoice, is primarily geared towards support for individuals attempting to feminize or masculinize their voices. There are other subreddits with a focus on Trans* and LGBTQIA issues, including: r/traaaaaaaannnnnnnnnns, r/ainbow, r/lgbt, r/asktransgender, r/cisparenttranskid, and many, many others. The description for r/transvoice is given as: "a place to share your voice recording for constructive criticism by the community". Although this might have been the original purpose, it has since grown to become a place where people share and teach about voice, where people share successes and fears, and where people build community. This community was created on Feb. 23, 2012 and as of May 27th, 2020, it had 48,300 members. The membership of this community is growing rapidly. Near the beginning of this project, on Nov. 14, 2018, there were only 12,900 members.

The reddit page r/transvoice was chosen as the focus of this thesis project because of the information available to users about voice feminization and the community of people that created it. The nature of the subreddit allows users to contribute to the growing collection of resources being brought together in one place. In contrast to YouTube, where users post videos on their individual channels, Reddit allows multiple users to contribute to the same page. This allows all users to contribute to the same project and gives multiple voices to a single topic. Any user can contribute and the rest of the subreddit votes on the content, allowing it to be seen by more people, or less. In this way, users of the subreddit curate what they want the page to be. The result of this is a collection of resources that are free to use and constantly being updated. As the recommendations and resources are added to the page, the subreddit will grow and evolve. This thesis analyses a snapshot of the subreddit, elucidating the themes present on the subreddit and discovering how the subreddit can contribute to the body of research on voice feminization.

1.2 Trans* Terms

It is important to address the shifting sands that underlie the language used in the field of gender diversity. The terms that are used in this paper are what the author has deemed to be the most inclusive and appropriate at the time of writing. However, these terms will change with time and may quickly become outdated. In many cases, there is no singular path of agreement on the definite meaning of a term or the best usage.

Gender is widely believed to be socially constructed, defined by cultural ideas of gender roles and expression. Anne Enke states that gender is a result of the cultural practices of ordering and organizing people according to bodies and behaviours (2012). Stryker writes that "generally speaking, gender is considered to be cultural, and sex, biological" (2017, p.14) Gender identity is a person's inner perception of their gender. Enke writes that this identity may or may not match the sex assigned at birth and may or may not conform to conventional expectations (2012). Gender expression is the outward projection of a person's gender identity, including clothing, behaviour, and language (Enke, 2012). The terms man and woman are used when discussing gender identity, whereas masculine and feminine are used when discussing gender expression.

In the medical model, *sex* is defined as the sum of the biological traits that a person is born with and develops through life. These traits may include chromosomes, genitalia, larynx size, and other physiologic characteristics. Human sex is conventionally classified into two categories (*male* and *female*), but this understanding is limited. Stryker states that "what *counts as sex* is a cultural belief" (2017, p.15) and the biological traits that determine sex (chromosomes, genitalia, secondary sec characteristics, etc.) don't always appear in biological agreement. Thus, sex may also be understood as a cultural construction. Enke writes that with a greater understanding and acknowledgement of natural variation in sexual characteristics, "it would be theoretically possible to group humans into more than two categories" (2012, p.17). This disruption of the typical medical model is also enforced by Fausto-Sterling, who writes: "male and female, masculine and feminine, cannot be parsed as some kind of continuum. Rather, sex and gender are best conceptualized as points in a multidimensional space" (2000, p. 22).

The term *transgender* is a word "still under construction" (Stryker, 2017, p. 1), in part due to the fact that it has only come into common use since the 1990s. *Transgender* encompasses three levels of meaning: first, transgender activist Leslie Feinberg used the word to name a social movement for freedom of gender expression and gender identity for all people. Secondly, it can be used in the broadest possible manner to include the spectrum of gender non-conforming individuals. Lastly, *transgender* can be a specific identity that refers only to people who identify with a binary gender different from the one assigned to them at birth (Enke, 2012).

This third, specific, definition of *transgender* has largely replaced the term *transsexual*. *Transsexual* is a medical term that can be considered old-fashioned and stigmatizing; however, some people still use the word *transsexual* to differentiate trans identities that involve interaction with medical and legal systems from those that do not (Stryker, 2017). *Trans** is a term that expands the inclusivity of gender-diverse terms. Enke (2012, p. 19) writes that it is "an inclusive and respectful term available for use by people outside trans communities as well as by those who identify with or as trans". Using an asterisk allows the term to show "movement across a socially imposed boundary away from an unchosen starting place" (Stryker, 2017, p. 1). Halberstam writes that "the asterisk holds off any certainty of diagnosis...it makes trans* people the authors of their own categorizations" (2018, p. 4). Issues arise when nomenclature comes from the scientific community and claim to describe a natural order. This idea is described by Halberstam:

The power of naming that has fallen to doctors and psychologists, social worker and academics, command the authority of scientific inquiry and joins it to a system of knowledge that invests heavily in the idea that experts describe rather than invent. However, as we know from watching the slow implosion of seemingly "natural" systems from one hundred years ago, naming fixes bodies in time and space in relation to favored social narratives of difference. (2018, p. 8) This critique emphasizes the need to listen to members of the community and adopt terminology rather than impose names and definitions.

The terms surrounding trans* individuals have changed over time. Historically, it was common to refer to people who had transitioned as *transsexual*. For people

transitioning/transitioned from male to female, *MtF* was a common abbreviation, and *FtM* was used for people transitioning/transitioned from female to male. In current research, this is the language that is often used and represents the medical perspective. This language is not necessarily reflective of how trans* people define themselves. Thus, this thesis will use language that is suggested by trans* scholars and that is used by members of the subreddit.

To reflect a change in *gender expression*, the terms *transfeminine* and *transmasculine* may be used to identify people. *Transfeminine* refers to a person assigned male at birth who have transitioned toward a feminine gender expression. *Transmasculine* refers to a person assigned female at birth who has transitioned toward a masculine gender expression (Stryker, 2017). These two reflect a more fluid and flexible understanding of gender and include people who identify as non-binary (but still masculine or feminine).

The terms *transgender man* (or trans man) and *transgender woman* (or trans woman) reflect a change in *gender identity*. *Trans men* are people who were assigned female at birth but identify as men. *Trans women* are people who were assigned male at birth identify as women (Stryker, 2017).

Cisgender is a term that refers to staying with or being perceived to stay with the gender assigned at birth (Enke, 2012, p. 20). The latin prefix cis- signifies being "on the same side as". Stryker writes "it is meant to mark the typically unstated or assumed privilege of being nontransgender. The idea behind the term is to resist the way that 'woman' or 'man' can mean 'nontransgender woman' or 'nontransgender man' by default" (2017, p.13). When understood with too much rigidity, this may reinforce an invented binary between cis and trans (Stryker, 2017).

People who identify as *nonbinary* or *gender-nonconforming* do not conform or identify with binary notions of sex, gender, gender expression, or gender identity (Styker, 2017). Trans* people may identify as nonbinary or gender-nonconforming, but "in practice, however, these terms usually refer to people who reject the terms transgender and transsexual for themselves" (Stryker, 2017, p. 25).

1.3 Anatomical and Physiological Sex Differences and Voice

The need for voice feminization arises from the difference in masculine and feminine voices. These vocal differences are, in part, explained by differences in anatomy and physiology between cis females and males. In particular, the larynx, the vocal folds, and the vocal tract exhibit the sexual dimorphism that influences voice. The Source-Filter Theory helps explain how anatomical differences create differences in acoustic quality.

The larynx is important to the production of speech. The larynx is a series of cartilages connected by ligaments, membranes, and muscles that houses the vocal folds. The larynx is part of the vocal tract and connects the trachea to the pharynx. The larynx is involved in breathing, swallowing, and phonation. The size and configuration of the larynx is different in males and females. According to Titze (1989) the male larynx is approximately 1.2x the length of a female larynx in the anterior-posterior and sagittal planes. The length of the vocal folds is similarly different in males and females, but to a greater extent. Male vocal folds are 1.6x the length of female vocal folds. Females have an average vocal fold length of 10 mm and males have an average length of 16 mm (Titze, 1989).

The difference in male and female vocal ranges can be partially attributed to anatomical differences in the vocal folds. The vibration of the vocal folds creates the source sound for the voice and the rate of vibration determines the pitch of the voice. According to Hanamitsu & Kataoka (2004) the fundamental frequency of vocal fold oscillation is a function of the vocal fold's length, stiffness, and subglottal pressure. Since male vocal folds are significantly longer, on average, than female vocal folds, the average male speaking range is lower in pitch than it is for females.

Vocal tract length is similarly dimorphic in adults. The adult female vocal tract is approximately 14.1 cm and the adult male vocal tract length is approximately 16.9 cm (Markova et al., 2016). A study by Fitch and Giedd (1999) found that vocal tract length is strongly correlated with body size (height and/or weight) for both sexes, but that adult males have disproportionally longer vocal tracts than females. That is, for males and females of the same body size, males would still have longer vocal tracts due to the

descent of the larynx. These size differences translate into acoustic differences when people are using their voices. (Behrman, 2018)

One theory that helps explain the acoustic results of the vocal anatomy is the Source-Filter Theory. The Source-Filter Theory explains that speech production is based on the interaction of two components: the sound source (the vocal folds) and the filter (the vocal tract). The vocal folds create the energy associated with the source sound, but the filter affects how the sound is heard at the mouth. The vocal folds vibrate at a certain rate which determines the pitch of the sound. This sound is made up of the fundamental frequency (f_0) and its harmonics, which are multiples of the fundamental frequency. For example, a fundamental frequency of 220 Hz would have harmonics at 440 Hz, 660 Hz, 880 Hz and so on. These harmonics naturally decrease in intensity within the sound (decreasing in intensity with higher harmonics) which is referred to as the spectral roll-off.

The filter (in this case, the vocal tract) affects how the harmonics are heard. The filter determines which harmonics are emphasized or supressed in the overall sound (in terms of intensity), creating relative peaks and valleys in the harmonics of the sound. The places where the peaks occur are called formants and they are determined by the length of the vocal tract and the speed of sound. Many formant frequencies are present in the system, but generally the first three formants are considered to be the most influential for speech. These formants affect the perception of different vowels in speech. The formants change frequency when the shape of the vocal tract tube is changed, which can be accomplished by using articulators such as the tongue, jaw, and lips. Formants also affect the overall resonance, or "timbre", of the voice. This resonance reflects the size and shape of the vocal tract and consequently can influence the perception of masculinity or femininity in the voice. (Behrman, 2018)

The dimensions of the human vocal tract determine the average formant frequencies in the voice. Since males and females have different vocal tract lengths, these formants occur at different frequencies in masculine and feminine voices. However, the configuration of the vocal tract is not static, but can be changed based on the movements of articulators, such as the jaw, lips and tongue (Arai, 2012). For example, a study by Bachorowski & Owren (1999) looked at the acoustic differences between males and

females for a single vowel sound $/\varepsilon/$ as in "bed". They found that there were significant differences in the fundamental frequency and in the formants. For males, they found that f_0 was 125 Hz and F1, F2, and F3 were 582 Hz, 1604 Hz, and 2573 Hz, respectively. For females, they found that f_0 was 230 Hz and that F1, F2, and F3 were 716 Hz, 1900 Hz, and 2981 Hz. These results show that the fundamental frequency (f_0 , reflecting larynx size) and vowel formants (F1, F2, F3, reflecting vocal tract length) are strongly correlated to the speaker's sex.

1.4 Vocal Parameters Important to Gender Perception

A systematic review and meta-analysis by Leung, Oates, and Chan (2018) examined the aspects of communication that contribute to listener perception of gender in transgender individuals. Determining the areas of voice (and speech) that are important for listener perception allows transgender individuals and speech-language pathologists to be able to target different areas of voice in therapy and set more direct and appropriate goals. The various aspects of communication that were included in the studies were divided into three domains: voice, speech, and prosody. The aspects that were shown to affect the perception of gender include pitch, resonance, intonation, loudness, and articulation. Some aspects that did not show this relationship are tempo and stress. Voice quality was shown to have an ambiguous relationship, which may be attributable to sources of bias (Leung, Oates, and Chan, 2018). Other dimensions of communication, including word choice, body language, and gesture, may also contribute to perception of gender, but they are not included in the current thesis (which focuses on voice).

Habitual pitch is one of the first vocal parameters that is targeted in voice feminization. According to Leung, Oates, and Chan (2018), it accounts for 41.6% of the variance of gender perception. However, increasing speaking fundamental frequency will not, in itself, create the perception of a feminine voice (Alder et al, 2019). Additionally, a higher-pitched voice does not correlate strongly with vocal quality of life and voice satisfaction. (Alder et al, 2019). Though moving the average fundamental frequency does not guarantee the voice will be perceived as female, the evidence indicates that it will increase listener perceptions of female attributes in the voice (Dacakis, Oates, and

Douglas, 2012). In pitch modification, studies have shown that it is valuable to move the fundamental frequency of the speaking voice into a more feminine zone (Davies et al., 2015). This zone is not clearly defined, but generally agreed upon to be above the cismale range (100-140 Hz) and into the ambiguous range (145-175 Hz) or the cis-female range (180-220 Hz). It is important to note that these values also differ across age, dialects, and languages (Davies et al., 2015).

Resonance is the second most studied vocal domain in voice feminization (Leung et al., 2018). Here, the term resonance refers to the vocal tract characteristics (length, size, and shape) that influence the formant frequencies. Females have vocal tracts that are about 10-20% smaller that the vocal tracts of males (Titze, 2000). As a result, females have higher formant frequencies (Davies et al., 2015). The sum of these formants – resonance – gives the listener acoustic cues to the physiology of the vocal tract. Higher formant frequencies (particularly F1, F2, F3, and F4) are likely to contribute to the perception of a female speaker (Leung et al., 2018). Hillenbrand & Clark (2009) found that change in both speaking fundamental frequency and formant frequencies are needed for the correct perception of speaker gender. Using a source-filter synthesizer, Hillenbrand and Clark modified the pitch and resonance in recordings of male speakers to reflect acoustic measures typical of females. When either pitch or resonance was changed, most listeners did not perceive a difference in gender. When both parameters were altered, listener perception was changed 82% of the time. One protocol for change in oral resonance uses a slight retraction of the lips to shorten the length of the vocal tract (Carew et al., 2007). Using this approach, participants were able to raise all three vowel formants, which increased listener perception of femininity in the voice. Participants in this study also spontaneously increased their average speaking fundamental frequency.

Intonation is the differences in pitch across and within a phrase. Phrases can have upward inflection, downward inflection, or level inflection. Within a phrase, the range of pitch used is also part of intonation and reflects how monotone or melodic an utterance sounds. A study by Hancock, Colton & Douglas (2014) looked at differences in intonation across gender groups. They measured intonation by looking at the percentage of utterance that used upward inflection versus downward versus level. Additionally, they measured the semitone range of the utterances. They found that although there were

no statistical differences in the intonation of the four gender groups used in the study (cis men, trans men, cis women, trans women), there was a significant difference in the perception of gender with intonation. Speakers with a greater percentage of utterances with upward inflection and a larger utterance semi-tone range were more likely to be perceived as female. Trans women who were not perceived as female used more downward inflections and fewer upward inflections in their speech. Pitch range has been shown to be variable for male and female speakers, between the range of 16-27 semitones. Gelfer and Schofield (2000) believe that the targeted pitch range for trans women should be around 12 semitones in conversational speech.

Loudness was identified as a quality that contributes to listener perceptions of gender in by Leung, Oates, and Chan (2018); however, they also write that more research needs to be done on loudness modification before it can be confidently implemented as a therapy goal for transgender women. Importantly, the difference between average "male" intensity and average "female" intensity in speech is not very clear from the current research. A study done in 1997 (Gelfer and Young) showed that there was no significant difference between the available intensity range of males and females. There was a significant difference in conversational intensity level and in conversational intensity range, but only by a difference of 2 dB. Another study, that separated speakers by relative age as well as sex, found an average intensity of 65.8 and 69.7 dB in male speakers (older and younger, respectively) and an average intensity of 66.4 and 67.8 dB in female speakers (older and younger) (Goy, Fernandes, Pichora-Fuller, & Lieshout, 2013).

Articulation is another parameter identified by Leung, Oates, and Chan (2018) to have an impact on listener perceptions of gender. Booz (2016) found that increase in articulatory precision of vowels was correlated with an increase in perceived femininity for male speakers. Avery and Liss (1996) did not find a correlation between articulatory precision in vowels and perceived speaker gender. In speech that was perceived as less masculine, they did find that the second formant frequency (F2) was significantly higher, which reinforces the use of resonance as a therapy goal for trans women. Davies et al. (2015) write that female speakers do speak with more precision than male speakers and articulation is often included in therapy protocols for transgender women, but Leung, Oates and Chan (2018) posit that "it is unlikely that exaggerated articulation will

contribute to listener perceptions of speaker gender" and further research is needed before including articulatory precision as a goal in clinical practice with trans* individuals.

Voice quality (in particular, breathiness) is commonly reported to affect listener perceptions of gender (Owen & Hancock, 2010). In a 1990 study done by Klatt and Klatt, it was found that breathiness was greater in female speakers (in comparison to male speakers) but there was great variability between subjects of the same gender. In a study done by Cielo, Schwarz, Finger, Lima, & Christmann (2019) of young women, 86% presented with a posterior glottal gap (which is often associated with breathiness). No acoustic measure done on subjects with and without a posterior glottal gap showed a difference in voice quality. Leung, Oates, and Chan (2018) write that the limitations of auditory or perceptual measurement of breathiness as a vocal quality make it difficult to evaluate the contribution of breathiness to a speaker's gender. Davies et al. (2015) agree that further research is needed to confirm the effect of voice quality on the listener's perception of gender.

Chapter 2: Methods

This project uses an interpretivist epistemology to frame the knowledge that is gathered through investigation. Defining an epistemology clarifies the basis through which knowledge is understood. An interpretivist knowledge "emphasizes the role of subjective understanding in shaping our knowledge" (Rice & Ezzy, 1999). An interpretivist epistemology uses a subjective framework for truth and knowledge, based on an individual's own experiences and understanding (Ryan, 2014). In interpretivist research, the researcher is not viewed as objective and removed from the research, rather their interpretation and analysis of the data situates them as part of the research (Brown, 2017). This project prioritizes subjective understanding because it reflects the lived experiences and lessons learnt from the perspective of transgender women. This allows for inclusion and representation of trans* voices in the literature. The epistemological framework informs the methodology that is used to serve the purpose of the project.

Thematic analysis is the methodology employed for this project. During thematic analysis, the researcher inductively identifies themes that are present in the data, through close reading (Rice & Ezzy, 1999). Thematic analysis is a flexible methodology that can be used with a variety of epistemological approaches (Braun & Clark 2006). This flexibility requires the researcher to be explicit with the decisions that they make for their project and analysis. The employment of thematic analysis in this thesis project follows the guidelines of Braun and Clarke (2006). The thematic analysis will produce a thematic map that is representative of the data set and that addresses the research questions of the thesis project. The steps of the thematic analysis will be discussed later in this section.

2.1 Data Collection

Data was collected from the subreddit r/transvoice on Jan. 17th, 2020. For data collection, the posts were taken by sorting for "Top" and "All Time". This decision was based on the community's own recommendations. In a moderator post that is "stickied" ¹

¹ A "stickied" (or "sticky") post refers to a post that has been pinned to the top of the subreddit page, by moderators. The stickied posts are dependent on the sorting criteria chosen by the user, but generally appear

to the front page of the subreddit they recommend new users find resources by "sorting by all time top posts and working your way down" (u/TheMeanCanadianX, 2019). Several other redditors echoed the same message in their posts. A research article by Park, Conway, & Chen (2018)² explains that gathering top rated posts emphasizes topics that are relevant to the community. They used "top rated posts to systematically collect the most relevant topics to the community as a whole. We relied on collective opinions of the communities as a logical starting point for understanding the most relevant topics of the communities" (p. 100). Sorting for top posts of all time shows posts that are the most popular, based on the upvote system.

Based on this sorting, the first seventy posts were collected. Seventy posts were collected because this allowed for a substantial amount of informative posts to be included in the analysis. The collection of posts involved acquiring a stable link for each of the posts and assigning each post a number in the order that they appeared (i.e., the top-rated post is post #1, the second is #2, etc). From this, these posts were sorted in five categories: giving advice, getting advice, positive/celebration, negative/rant, and joke/meme. The posts were examined for their function to gain a better idea of the type of posts that populated the subreddit. Though this project focuses on the advice than can be gleaned from posts on Reddit, it is worthwhile to explore tangentially the other posts that appear on the subreddit (e.g., by looking at the function of all of the posts in the top of all time). The other posts that live on the subreddit colour how everything else is read. If most of the other posts were negative posts describing the difficulties of voice feminization, rather than celebratory, the data may be understood differently. Context, in this case, is important. This is relevant to the interpretivist epistemology that this research uses.

Posts labeled "giving advice" and "getting advice" were both relevant to the research questions being pursued in this thesis. However, posts labelled "giving advice" were more information-rich and provided advice that was both more varied and more

by default when opening a new subreddit. Stickied posts are indicated by a green thumbtack in the left-hand corner of the post.

² This article, "Examining thematic similarity, difference, and membership in three online mental health communities from reddit: A text mining and visualization approach" uses a different but related method of analysis.

relevant to a diversity of people. Thus, posts labeled "giving advice" were solely selected for analysis. Seventeen posts were included in this category. See Chart 1 and Figure 1 for further breakdown of post types.

From the data set, there were a few posts that required further decision-making for inclusion. One post (#35) was a repost of the video in post #10, so #35 was not included in the analysis. Post #47 "...and I'm still here struggling" is a repost of another video on producing a feminine-sounding voice with a self-deprecating title. Though the title indicates that the post is not meant seriously, the video itself is informative and relevant to voice feminization. Thus, this post was still included in the analysis. Lastly, one of the posts (#6) was submitted to the site in four parts, though only the first part technically met the criterion for selection. The likely reason that the post was broken down into parts is because of the character limit of reddit posts. The four parts are meant to be used consecutively and have more meaning as a group. Thus, all four parts were included in the analysis.

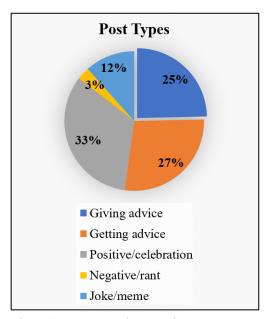


Figure 1: Post Types by Function

Table 1: Number of Posts by Type

Post Type	No. of posts
Giving advice	17
Getting advice	19
Positive/celebration	24
Negative/rant	2
Joke/meme	8

Table 2: Posts Included in the Analysis

Post	Title	Shortened	Author	Format	Date 13
#	T O .: 11 1	title	C1 (CD	D 11'4	posted ³
4	Inflection is all about	Inflection is	ClosetCD	Reddit	27-Sep-
	movement! How to get	all about		video	2019
	your voice from	movement			
	androgynous to feminine.	* * * * * *	x .1.		10.0
6	L's Voice Training Guide	L's Voice	Lsomething	Text	12-Sep-
	(Level 1) for MTF	Training	something		2019
	transgender vocal	Guide (1)			
(6)	feminization		- 1.		10.0
(6)	L's Voice Training Guide	L's Voice	Lsomething	Text	12-Sep-
	(Level 2) for MTF	Training	something		2019
	transgender vocal	Guide (2)			
	feminization				
(6)	L's Voice Training Guide	L's Voice	Lsomething	Text	12-Sep-
	(Level 3) for MTF	Training	something		2019
	transgender vocal	Guide (3)			
	feminization				
(6)	L's Voice Training Guide	L's Voice	Lsomething	Text	12-Sep-
	(Level 4) for MTF	Training	something		2019
	transgender vocal	Guide (4)			
	feminization				
8	Since we're talking about	Since we're	ClosetCD	Reddit	17-Jun-
	pitch, here's why pitch	talking		video	2019
	analysers do not work for	about pitch			
	trans women.				
10	The Art of Voice	The Art of	IamZhea	Youtube	12-
	Feminization: Part 1:	Voice		video	Nov-
	Overview, Acoustic	Feminizatio			2018
	Resonance, and A	n: Part 1			
	Conceptual Framework.				
	This is by far the biggest				
	education video I've ever				
	made (10+ minutes). It				
	took me roughly two				
	months to finish this.				
	This kicks off a new,				
	comprehensive series on				
	voice feminization.				

-

³ Posts are "archived" after 180 days (around 6 months) of inactivity. After posts are "archived" they can no longer receive new comments or votes.

12	How to brighten oral resonance and lift the larynx with one simple movement.	Brighten oral resonance	ClosetCD	Reddit video	30-Jun- 2019
13	How to Cough Cute in Two Minutes!	How to cough cute	IamZhea	Youtube video	25- Aug- 2019
17	The easiest way to find nasal resonance.	Find nasal resonance	ClosetCD	Reddit video	20- Aug- 2019
24	Vocal Feminization Guide for any voice type	Vocal Feminizatio n Guide	Zhotograph	Youtube video	03- Mar- 2019
27	The Art of Voice Feminization Part 2A: Larynx Basics, How to Raise the Larynx, and Common Issues. Time to put a rest to the confusion once and for all!	The Art of Voice Feminizatio n: Part 2A: Larynx	IamZhea	Youtube video	06-Jul- 2019
32	Y'all need to quit using the voice pitch analyzer app.	Quit using the voice pitch analyzer app	SanforizedJ eans	Text	24- May- 2019
474	How To Do The Girl Voice YouTube (and I'm still here stuggling)	How to do the Girl Voice	Crimson Oracle (local_clbrt)	Youtube video	28-Jul- 2018 (23- Aug- 2019)
53	LOOK INSIDE MY MOUTH! Oropharyngeal Closure + Tongue Repositioning Demonstration for Voice Feminization	Oropharyng eal Closure and Tongue Repositioni ng	IamZhea	Youtube video	08- Dec- 2019

-

⁴ This video was posted on the subreddit by a user who was not the author of the post. The user (u/local_clbrt) who posted the video titled it "...and I'm still here struggling". The video itself is titled, "How To Do The Girl Voice YouTube". On YouTube, the username of the person who originally posted the video is "Crimson Oracle". In the video, they also introduce themselves as "Matt". The way that the user discusses voice feminization techniques indicates that he is male and that he has taught himself how to "do a girl voice" as an impression, and not because a feminine voice aligns with his identity. The video was posted on YouTube on July 28th, 2018 and the post was posted on Reddit on Aug. 23rd, 2019. This is the only post included where the user who posted doesn't appear to be the person who created the content.

55	All Vocal Sexes	All Vocal	IamZhea	Youtube	15-Feb-
	Demonstrated. Hear and	Sexes		video	2019
	see resonance and pitch	Demonstrat			
	as purely independent	ed			
	elements.				
57	"Advice" for mtf in	Advice for	MarCat121	Text	30-
	retail.	mtf in retail	7		Nov-
					2019
66	PSA: Having a deep	Having a	GoodbyeBl	Text	01-
	starting voice doesn't	deep	ues		May-
	mean you can't achieve a	starting			2018
	passing feminine voice	voice			
69	Free Voice Feminization	Vocal	ZoeyAlexan	Youtube	14-Jan-
	Lesson: Vocal Registers	Registers	dria	video	2020

2.2 Analysis

The first step of the thematic analysis is to become familiar with the data. For this project, that involved first transcribing the data as necessary. Transcription was done manually for all videos. After transcription, all the data was read and re-read thoroughly. In the second stage, initial codes were generated. During this stage, all data were considered equally in generating initial codes. The data was worked through systematically in a data-driven manner in order to fully capture the content of the data set. Working through in a data-driven fashion (Braun & Clarke, 2006) allows the themes to come first from the data, rather than from an imposed theory. The third phase is a search for themes within the set of initial codes. A mind-map was used to visualize potential themes and the data was read through again to sort the codes into potential themes. This initial map is shown in Figure 2. As codes were placed into theme groups, new themes were created as patterns arose in the data. Codes that were not able to be placed in a theme were placed in an "other" category.

The fourth stage in Braun & Clarke's (2006) methodology is reviewing themes. Themes were reviewed at multiple levels. The themes were reviewed for internal consistency, which involved reading through all the codes and excerpts that were all assigned to a given theme. The goal of this stage of review is to ensure that the themes were cohesive and distinct from each other. Codes that were initially sorted into the "other" theme were either assigned a theme or discarded. Themes that did not have sufficient data were also discarded. Themes were discarded if they were only mentioned by a singular source, for example. The themes were also reviewed as a collective. This involved the consideration of the "validity of individual themes in relation to the data set" (Braun & Clarke, 2006) and the ability of the themes to represent the meanings in the data set. The themes were additionally considered in relation to the research question. Themes were adapted, created, and discarded to create a more comprehensive and relevant thematic map. The second draft of the thematic map is illustrated in Figure 3. The final version of the thematic map is show in Figure 4.

The fifth stage of the thematic analysis involves refining and defining the themes. During this stage, a detailed written analysis for each theme was started. The names for all the themes and sub-themes were considered and finalized. During this stage, the meanings of each of the themes were clarified and given a representative name. At the end of the analysis, three main themes were produced, each with 4-5 subthemes branching from them. In the sixth and final stage, the final analysis was written. This analysis included the definitions of all themes and subthemes as well as examples from the data set that show how the themes were used.

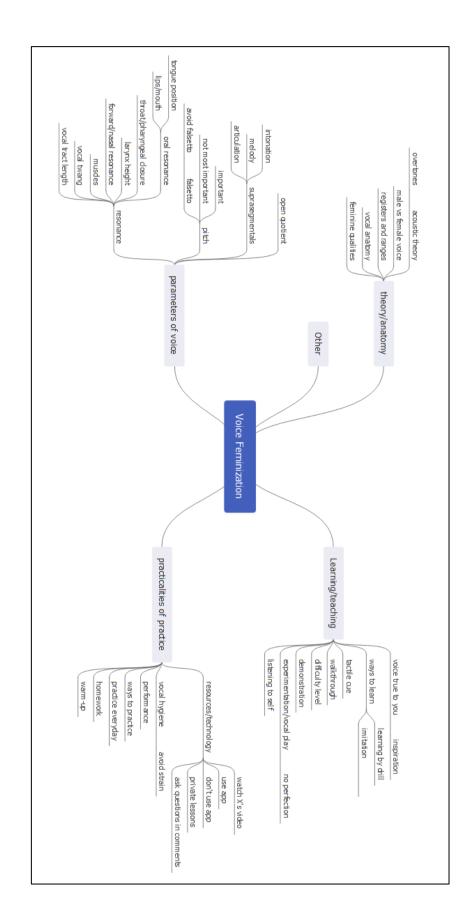


Figure 2: Themes Version 1

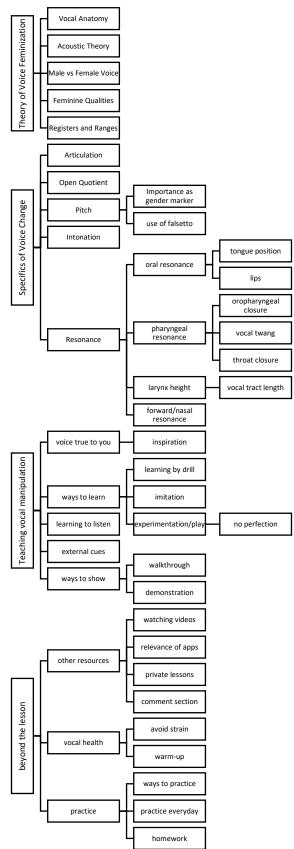


Figure 3: Themes Version 2

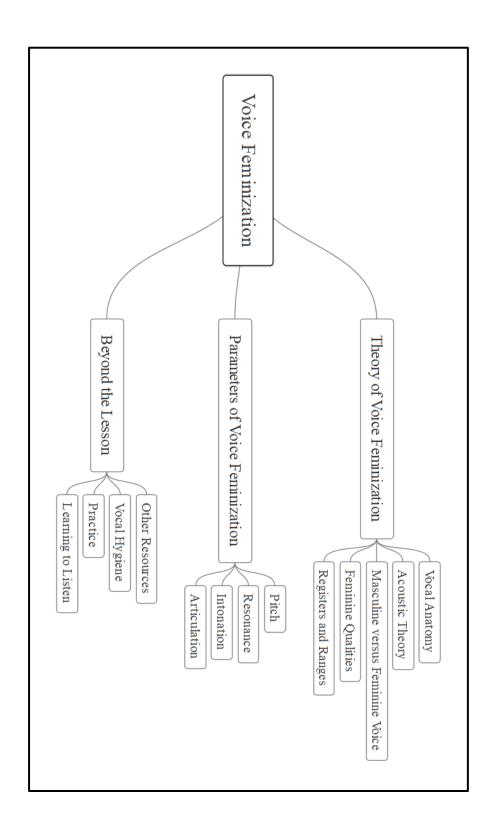


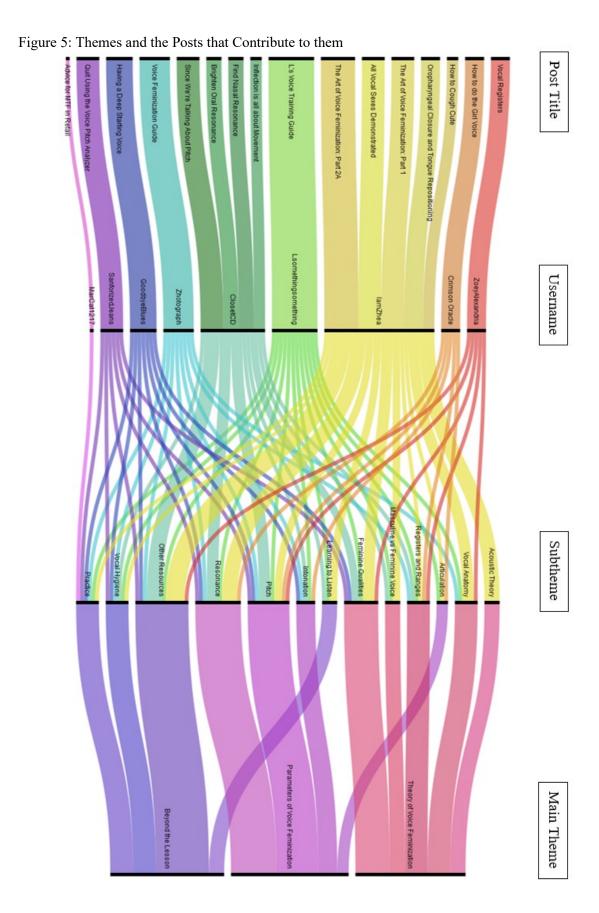
Figure 4: Themes Version 3 (Final)

Table 3: Themes and Relevant Posts

													I CHIMIZATION	Heminization	Theory of Voice														Theme Heading
		Negisters and Nauges	Danietare and Danas		Vocal Anatomy Acoustic Theory Masculine versus Feminine Voice Feminine Qualities															Subtheme									
ZoeyAlexandria	IamZhea	Crimson Oracle	Zhotograph	ClosetCD	Lsomethingsomething	ZoeyAlexandria	IamZhea SanforizedJeans GoodbyeBlues						Classici	Lsomethingsomething	Iamznea	I m Zhao	Lsomethingsomething	ClosetCD		Talliziika	Iom Zhea		ZoeyAlexandria	Zhotograph		IamZhea		Lsomethingsomething	Username
Vocal Registers	All Vocal Sexes Demonstrated	How to do the Girl Voice	Voice Feminization Guide	Since We're Talking About Pitch	L's Voice Training Guide	Vocal Registers	Having a deep starting voice	Quit Using the Voice Pitch Analyzer	Oropharyngeal Closure and Tongue Repositioning	How to Cough Cute	The Art of Voice Feminization: Part 1	Find Nasal Resonance	Since We're Talking About Pitch	L's Voice Training Guide	The Art of Voice Feminization: Part 2A	The Art of Voice Feminization: Part 1	L's Voice Training Guide	Inflection is all about Movement	All Vocal Sexes Demonstrated	Oropharyngeal Closure and Tongue Repositioning	How to Cough Cute	The Art of Voice Feminization: Part 1	Vocal Registers	Voice Feminization Guide	Oropharyngeal Closure and Tongue Repositioning	The Art of Voice Feminization: Part 2A	The Art of Voice Feminization: Part 1	L's Voice Training Guide	Post name

														1 CHIMIZATION	Feminization	Downstan of Voice															Theme Heading
	Resonance																Pitch								Intonation				Articulation		Subtheme
GoodbyeBlues	Crimson Oracle	SanforizedJeans	Zhotograph	ClosetCD IamZhea Zhotograph									GoodbyeBlues	Crimson Oracle	SanforizedJeans	TAILIZIICA	Tom Theo	Zhotograph		ClosetCD		Lsomethingsomething	GoodbyeBlues	Crimson Oracle	Zhotograph	Lsomethingsomething	ClosetCD	Crimson Oracle	IamZhea	Lsomethingsomething	Username
Having a deep starting voice	How to do the Girl Voice	Quit Using the Voice Pitch Analyzer	Voice Feminization Guide	All Vocal Sexes Demonstrated	Oropharyngeal Closure and Tongue Repositioning	The Art of Voice Feminization: Part 2A	The Art of Voice Feminization: Part 1	Find Nasal Resonance	Brighten Oral Resonance	Since We're Talking About Pitch	L's Voice Training Guide	Vocal Registers	Having a deep starting voice	How to do the Girl Voice	Quit Using the Voice Pitch Analyzer	All Vocal Sexes Demonstrated	The Art of Voice Feminization: Part 2A	Voice Feminization Guide	Find Nasal Resonance	Brighten Oral Resonance	Since We're Talking About Pitch	L's Voice Training Guide	Having a deep starting voice	How to do the Girl Voice	Voice Feminization Guide	L's Voice Training Guide	Inflection is all about Movement	How to do the Girl Voice	The Art of Voice Feminization: Part 2A	L's Voice Training Guide	Post Name

		Beyond the Lesson															Theme Heading													
Other Resources Other Resources Vocal Hygiene Practice Practice S C C C C C C C C C C C C															Subtheme															
	ClosetCD Zhotograph IamZhea SanforizedJeans GoodbyeBlues Lsomethingsomething Zhotograph IamZhea SanforizedJeans MarCat1217 GoodbyeBlues Lsomethingsomething ClosetCD IamZhea									Lsomethingsomething	ZoeyAlexandria			IamZhea			GoodbyeBlues	SanforizedJeans	Zhotograph		Closeich	ClastCD		Lsomethingsomething	Username					
	The Art of Voice Feminization: Part 2A All Vocal Sexes Demonstrated	Since We're Talking About Pitch	L's Voice Training Guide	Having a deep starting voice	Advice for MTF in Retail	Quit Using the Voice Pitch Analyzer	The Art of Voice Feminization: Part 2A	Voice Feminization Guide	L's Voice Training Guide	Having a deep starting voice	Quit Using the Voice Pitch Analyzer	The Art of Voice Feminization: Part 2A	Voice Feminization Guide	Brighten Oral Resonance	L's Voice Training Guide	Vocal Registers	All Vocal Sexes Demonstrated	Oropharyngeal Closure and Tongue Repositioning	The Art of Voice Feminization: Part 2A	How to Cough Cute	The Art of Voice Feminization: Part 1	Having a deep starting voice	Quit Using the Voice Pitch Analyzer	Voice Feminization Guide	Find Nasal Resonance	Brighten Oral Resonance	Since We're Talking About Pitch	Inflection is all about Movement	L's Voice Training Guide	Post Name



Chapter 3: Thematic Analysis (Results)

Overall, advice given on the subreddit fell under three themes: Theory of Voice Feminization, Parameters of Voice Feminization, and Beyond the Lesson. The theme "Theory of Voice Feminization" discusses the knowledge that the practices of voice feminization are based on. The subthemes included under this theme are: Vocal Anatomy, Acoustic Theory, Masculine versus Feminine Voice, Feminine Qualities, and Registers and Ranges. This theme provides context for the exercises and techniques taught in the theme "Parameters of Voice Feminization". The "Parameters of Voice Feminization" theme explains the different elements of voice that are relevant to voice feminization. The subthemes that fall under this theme are Articulation, Intonation, Pitch, and Resonance. The third theme, "Beyond the Lesson" includes advice that covers practical topics that go outside of the specifics of voice feminization. The subthemes included in this theme are Other Resources, Vocal Hygiene, Practice, and Learning to Listen. The advice given in this third section helps advise users how to learn and practice voice feminization.

These themes each contribute to our understanding of voice feminization in different ways. The first theme "Theory of Voice Feminization" shows the extent to which the information on the subreddit is backed by theoretical knowledge. The information in this theme allows the users of the subreddit to create context for the techniques that they propose for voice feminization. This theme shows how the r/transvoice community uses anatomy, acoustic theory, and other knowledge about the voice to reinforce their advice, but it adds minimal new information to the body of research on voice feminization.

The next theme, "Parameters of Voice Feminization" explains the elements of voice that are relevant to voice feminization and the exercises that may be used to target them. This is the most important theme present in the data set. This theme contains the most important information for trans women learning how to feminize their voices. This theme is also the most important for speech-language pathologists as the knowledge about important parameters of voice feminization dictates what voice therapy covers and how it is carried out. The question of which vocal parameters determine the perception of

femininity and how they can be manipulated is central to the study of voice feminization. In the subreddit, this theme tells a slightly different story than what previous research on voice feminization dictates. These differences may guide further research in the field.

The third theme, "Beyond the Lesson" explores practical factors that contribute to the process of voice feminization. This theme is presented last because it helps the user put everything else they have learnt about voice feminization into practice. This theme helps advise people how to use the subreddit and how to learn on their own. This theme includes important concepts for users using the subreddit to teach themselves about voice, but may have limited ability to contribute to voice feminization in other contexts (such as in the speech-language pathologist's office). This theme contributes to our understanding of voice feminization by showing how user's individual experiences may help advise others who are undertaking voice feminization.

3.1 Theory of Voice Feminization

In the posts on the subreddit, the techniques and exercises used to facilitate voice feminization are usually the main focus. To provide a rationale for these suggestions, the theory of voice feminization is discussed. The theme "Theory of Voice Feminization" includes information that provides the scientific rationale for voice feminization. This theoretical grounding is used to provide explanation and context for the specific techniques of voice feminization. Under the theme of "Theory of Voice Feminization" several sub-themes were identified: Vocal Anatomy, Acoustic Theory, Masculine versus Feminine Voice, Feminine Qualities, and Registers and Ranges. Posts containing the theme "Vocal anatomy" include information about the structures involved in the manipulation and production of the voice. "Acoustic theory" covers the properties of sound that affect voice production to facilitate feminization. Under "Masculine versus Feminine Voice" differences between masculine and feminine voices are highlighted to emphasize what the user is able to change. Similarly, "Feminine Qualities" highlights specifics of voice that give the perception of femininity. Lastly, "Registers and Ranges" discusses pitch, range, and register knowledge.

3.1.1 Vocal anatomy

In vocal anatomy, various parts of the body related to voice are defined, including the vocal tract, the larynx, the vocal folds, and the tongue. In "The Art of Voice Feminization: Part 1" IamZhea describes the vocal tract as "nothing more than a set of tubes" (IamZhea, 2018, 3:05). She shows an anatomical diagram and narrates: "We have the lungs and then we have the tracheal column. We have the larynx here where the voice actually begins. The source starts and then we have finally the pharynx area, the nasal passageway, and the oral cavity" (IamZhea, 2018, 2:49). In "L's Voice Training Guide (Level 1), Lsomethingsomething defines the vocal tract as "your larynx to your lips" (Lsomethingsomething, 2019a, "Vocal Tract Length"). The larynx is described by IamZhea as a "muscular mucosal chamber in which your vocal folds reside" (IamZhea, 2019d, 0:44). In another post, the larynx is also called the "voice box" (Lsomethingsomething, 2019a, "Vocal Tract Length"). The vocal folds are occasionally called "vocal cords" (ZoeyAlexandria, 2020, 1:28). One user emphasizes the aryepiglottic sphincter as a juncture of note. Lsomethingsomething writes, "the aryepiglottic sphincter (or AES) ...is right at the top of your larynx, above the vocal folds" (Lsomethingsomething, 2019c, "Vocal Twang"). The tongue is described by ClosetCD as "a huge muscle, it connects all the way back here [gestures to lower left jaw], down to the throat" (ClosetCD, 2019c, 0:44). Various parts of vocal anatomy are named and defined in order to demonstrate how they can be used in voice feminization. These descriptions, in general, give a nominal introduction to vocal anatomy (i.e., the description is quite minimal). Some structures, such as the larynx, are given more attention and description, but others, such as the soft palate, are simply named and not explained (IamZhea, 2018; Crimson Oracle, 2018).

3.1.2 Acoustic theory

Acoustic theory is used primarily to explain the effect of vocal tract manipulation on resonance and the perception of vocal femininity. This theme is discussed in three posts by IamZhea, but it is not mentioned in detail by other users. Other users do,

however, suggest learning about acoustic theory through IamZhea's videos (Lsomethingsomething, 2019a; SanforizedJeans, 2019; GoodbyeBlues, 2018). IamZhea introduces the source-filter theory in "The Art of Voice Feminization: Part 1":

Your voice is split into three parts. You have the power source which is essentially your airflow. You have your actual source tone which is the actual sound that your vocal folds make, you're never going to hear this, and then third, the filter, which is what your body actually does to the source sound. (IamZhea, 2018, 0:27)

The source-filter theory is key for understanding how vocal manipulation creates a difference in the sound of a person's voice. In the same video, IamZhea also explains the harmonic series and the concept of overtones (also known as harmonics). She shows a spectrogram and says, "each of these little lines are what we call a harmonic...and each of these is a multiple of the lowest one that I sing" (IamZhea, 2018, 1:53). She explains that these harmonics are "extra frequency inside your voice" (IamZhea, 2018, 4:04) and "depending on the length of your tube [vocal tract], you will bring out a different one [harmonic]. Okay, a female voice is nothing more than a voice which has a smaller tube and therefore higher harmonics are brought out" (IamZhea, 2018, 4:08). This introduction to acoustic theory provides the rationale and explanation for voice feminization techniques recommended by various users, especially under the parameter of resonance. The "acoustic theory" examples in the data set explain how sound is created by the voice and how it is affected by various factors, including manipulation of vocal tract length.

The acoustic theory presented by IamZhea is quite detailed and sophisticated. Her explanations of acoustic theory lay the groundwork for demonstrations of resonance manipulation. Using acoustic theory, she explains how the differences in male and female anatomy cause changes in male and female sounding voices. This explanation provides rationale for the vocal exercises she demonstrates that alter vocal tract length, larynx height, and overall resonance.

3.1.3 Masculine versus Feminine Voice

One way that users describe how to modify the voice to sound female is by comparing qualities of masculine and feminine voices. Often, users draw upon the differences between masculine and feminine voices in order to pinpoint the various factors that contribute (or detract from) a femininevoice. For example, Lsomethingsomething describes the difference between masculine and feminine intonation:

Masculine voices tend to be very monotone, where the pitch changes very slightly and infrequently from word to word, and important words are spoken louder for emphasis. Feminine voices tend to vary a lot in pitch, across a wider range, and big pitch changes are used to draw attention to the important words.

(Lsomethingsomething, 2019b, "Intonation")

Describing the difference between masculine and feminine voices illustrates the direction of change that is targeted in voice feminization and provides a greater understanding of the starting point for people who are feminizing their voices. That is, folks transitioning from a masculine voice to a feminine voice learn more about their starting masculine voice in comparison to the feminine voice they are working towards. IamZhea also describes differences between masculine and feminine voices. She explains the differences in masculine and feminine sounding resonances: "more space and length will shift the resonances lower, which will make your voice sound darker and more masculine. Less space and length will shift the resonances higher which will make you sound brighter and more feminine" (IamZhea, 2018, 7:44). Users describe qualities of masculine and feminine voices, as well as ways to make their voice sound more masculine and feminine. Learning how voices sound masculine or feminine helps users learn how to make their voices sound less masculine and more feminine. Users also discuss the similarities of masculine and feminine voices. ClosetCD says, "men and women have the same inflection points, the difference is that women exaggerate those inflection points" (ClosetCD, 2019d, 1:28). This helps clarify what specifically users are aiming to change and what they are not. Describing the masculine voice and the feminine voice in comparison to one another is one way to identify the qualities that are targeted in voice feminization.

3.1.4 Feminine Qualities

In addition to comparing masculine and feminine voices, users also simply discuss the qualities that make a voice sound feminine. Description of different "feminine qualities" is done across various parameters of voice. ClosetCD advises, "elongate those vowels. No matter what rate of speech you are at, it's also a more feminine way of speaking, is to elongate those vowels" (ClosetCD, 2019a, 2:05). Specifying the qualities that make a voice sound feminine is important for people who are learning how to feminize their voices. Lsomethingsomething also tells users about what makes a feminine sound. One example of this is her direction to, "reduce this nasality for a more feminine sound" (Lsomethingsomething, 2019c, "Throat Closure"). Instances of the theme "feminine qualities" differ from examples of "masculine versus feminine voice" when only the feminine aspect of voice is highlighted. In some of these examples, as with nasality, the opposite of feminine is not "masculine", but a sound that is off-target. By specifying "Feminine Qualities" in their posts, the users inform their audience about what elements of voice create the perception of femininity in the voice. Identifying "Feminine Qualities" is really central to voice feminization and enforces which parameters of voice are important for trans women to target.

3.1.5 Registers and Ranges

Vocal registers and ranges are elements of vocal education that are discussed in six of the posts. Vocal registers are discussed briefly by Lsomethingsomething in her post "L's Voice Training Guide" and they are discussed at length in ZoeyAlexandria's video "Free Voice Feminization Lesson: Vocal Registers". ZoeyAlexandria defines a vocal register as "a span of frequencies in the human voice produced by a distinct vibratory

⁵ This is supported by some research. Alder, Hirsch, & Pickering (2019) write that "women tend to elongate their vowels more than male speakers do" (p. 237)

configuration of the vocal folds" (ZoeyAlexandria, 2020, 1:06). She names the four important vocal registers as: chest voice, head voice, mix voice one, and mix voice two (ZoeyAlexandria, 2020). In "L's Voice Training Guide", Lsomethingsomething writes that users should learn "the differences between a chest voice and a falsetto (and a mix voice, which is technically the same register as your chest voice, your modal register)" (Lsomethingsomething, 2019a, "Pitch").

Ranges are discussed in different ways in the collection of posts.

Lsomethingsomething provides the most specific description of male and female ranges.

She writes:

A typical male speaking voice will stay between F2 and F3 (which are marked by horizontal lines, since we set the Scale to F Major). Now try talking higher and higher in pitch, until your voice is in the female range, around F3 and above.

Don't go higher than F4, though⁶ (Lsomethingsomething, 2019a, "Pitch") In the post "All Vocal Sexes Demonstrated" IamZhea demonstrates changes in pitch alongside changes in resonance (IamZhea, 2019c). IamZhea shows change in pitch on a cartesian graph while she demonstrates speaking at various pitches (IamZhea, 2019c). However, no numerical measure of pitch or pitch range is actually specified. In discussions of registers and ranges, there are some principles discussed on the subreddit, but overall there is ambiguity on the topic. The ambiguity seen in this theme may be related to the ambivalence that is demonstrated around the theme of "pitch", which is discussed below.

3.2 Parameters of Voice Feminization

The theme "Parameters of Voice Feminization" focuses on the specific parts of voice that are targeted and manipulated in voice feminization. In this section, users describe which parameters they target in voice feminization and ways to manipulate the elements. The question of which vocal elements to target is central to determining how to feminize a voice and how to provide voice therapy for trans women. The theme

33

⁶ The app that is recommended shows pitch on an F-major scale. F3 refers to the F below middle-C (approximately 175 Hz). F4 refers to the F just above middle-C (approximately 350 Hz) (MTU, n.d.)

"Parameters of Voice Feminization" presents an answer to that question, as expressed in the posts of the data set. This section is thus of central importance to this thesis. The subthemes that fall under "Parameters of Voice Feminization" are Pitch, Resonance, Intonation, and Articulation.

3.2.1 Pitch

Pitch was present as a theme in ten of the posts (just over half of the data set). Though pitch was often mentioned, it was the most contentious as an area of focus. Even posts that mentioned pitch as an element to work on tempered their recommendations. For example, in "L's Voice Training Guide (Level 1)" pitch is introduced as "just one of many elements, and not even the most important, but it's probably the most well-known difference between the average male and female voice" (Lsomethingsomething, 2019a, "Pitch"). "L's Voice Training Guide" recommends that you measure your pitch with a vocal pitch monitor app "until your voice in is the female range, around F3 and above" but not higher than F4⁷ (Lsomethingsomething, 2019a, "Pitch"). Another source, "The Art of Voice Feminization Part 2A: Larynx Basics" indicates that a helpful pitch to practice would be "anywhere between 160 to 250 Hz" for a specific one-note exercise (IamZhea, 2019d, 7:37). These few posts mention ways to modify pitch to sound more feminine. More common, however, are demonstrations that show why pitch is not that important.

The importance of pitch is often contrasted to the importance of resonance. One user, IamZhea, in a post titled "All Vocal Sexes Demonstrated. Hear and see resonance and pitch" emphasizes the difference between pitch and resonance in order to show that resonance is a more important element than pitch (IamZhea, 2019c). She demonstrates using high pitch and dark resonance and says, "if I keep my voice very dark but I start to go up in pitch like this I actually don't really pass which is a wonderful example of why pitch is not the element that gets you gendered" (IamZhea, 2019c, 2:52). This is emblematic of the way several posts discuss pitch. The importance of pitch is often

⁷ Again: the app that is recommended shows pitch on an F-major scale. F3 refers to the F below middle-C (approximately 175 Hz). F4 refers to the F just above middle-C (approximately 350 Hz) (MTU, n.d.)

defined in relation to the relatively greater importance of resonance. The user ClosetCD says that forward resonance is the reason pitch doesn't matter for her: "that's why I speak at a lower pitch and my voice is a more feminine place" (ClosetCD, 2019a, 0:07). ClosetCD makes the same argument as IamZhea by manipulating pitch and resonance to show that resonance has more of an impact on the perceived gender of her voice than pitch. She says that, "I'm still down here in the male range and more or less it sounds female" and then manipulates her resonance and pitch and says, "now I'm up here in the feminine range and I'm way up at the top of it, but does this really sound that feminine? Probably not" (ClosetCD, 2019b, 0:59). For this demonstration, ClosetCD uses a voice pitch analyser to show how the app measures her pitch in real time (ClosetCD, 2019b). She argues that since speaking in a female range does not correlate to perception of femininity, people should not be using pitch analyser apps to aid in voice feminization.

Discussions about the importance of pitch on the subreddit are also often associated with discussions about the usefulness of pitch analyser apps. The post titled "Since we're talking about pitch, here's why pitch analysers do not work for trans women" explains ClosetCD's opinion about the relevance of pitch analyzers and the parameter of pitch itself, as a useful measure for progress. The user demonstrates that that the perception of a female-sounding voice is not dependent on the gender of the pitch range she is using (ClosetCD, 2019b). In a post with a similar sentiment, "Y'all need to quit using the voice pitch analyzer app", another user presents a similarly dismissive view of pitch and pitch analysers. She writes: "Yes, it's an easy way to see where your pitch is, but the fact of the matter is that pitch doesn't really matter when it comes to having a convincing female voice. Yes, it can help, but it shouldn't be what you are focusing on" (SanforizedJeans, 2019). Pitch analysers are able to clearly measure changes in pitch and progress toward a female range. Still, their usefulness is dependent on the importance of what they are measuring.

In discussions of pitch, falsetto is often brought up. Usually, falsetto is discussed as something to be avoided. In "L's Voice Training Guide", she advises to aim for the female range "or as close as you can get without straining or going into falsetto" (Lsomethingsomething, 2019a, "Pitch"). The user IamZhea says to "make sure you avoid your falsetto" (IamZhea, 2019d, 7:45) and the video "How to do the Girl Voice" says the

same: "don't talk in falsetto" (Crimson Oracle, 2018, 3:02). Most users agree: falsetto is to be avoided in voice feminization. One post: "Free Voice Feminization Lesson: Vocal Registers" provided a contrasting opinion. The user ZoeyAlexandria says that through her methods, "instead of fighting falsetto we learn to utilize it selectively" (ZoeyAlexandria, 2020, 10:22). She advises that it could be used for part words for emphasis, or with more compression⁸ to affect the quality of the sound. However, this advice is not echoed by other users. In general, users recommend that falsetto should be avoided when trying to modify pitch.

3.2.2 Resonance

Resonance is the vocal parameter that has the most in-depth discussions on the subreddit. It is present as a theme in ten of the posts. The focus on resonance comes from the theory of voice feminization discussed by IamZhea and followed by many users. In "The Art of Voice Feminization: Part 1" IamZhea says, "the actual goal of trans voice is to eliminate as much geometric chamber space in as many places as possible in a way that is as healthy and sustainable for your body and voice in the long run" (IamZhea, 2018, 9:40). The elimination or change in space in the vocal tract results in the modification of resonance. This change can occur through changing different parts of the vocal tract. In the subreddit, the various parts of resonance that are talked about are oral resonance, pharyngeal resonance and larynx height (or vocal tract length). With oral resonance, users talk about using the tongue position and lips to make it "sound like you have a smaller mouth" (Lsomethingsomething, 2019b, "Resonance"). In pharyngeal resonance, constriction is created through modification of soft palate, pharyngeal walls, and aryepiglottic sphincter. Modification of larynx height uses techniques to raise the larynx, changing the overall vocal tract length.

Modification of oral resonance is used to create a brighter, more feminine sound. Oral resonance is emphasized as an important factor in voice feminization. In the post "Voice Feminization Guide for any Voice Type" Zhotograph says "mouth space greatly

-

⁸ Compression here may refer to vocal twang (described later in the resonance section) but it is not wholly clear

changes resonance and is usually the difference between sounding, for lack of a better term, like a flamboyant man or a woman" (Zhotograph, 2019, 1:15). Oral resonance is modified by changing different aspects of a person's embouchure (i.e., how they hold their mouth, tongue and other oral structures when voicing). One factor in oral resonance is tongue position. In the post "How to brighten oral resonance and lift the larynx with one simple movement" the user ClosetCD says that "if our tongue is in a more forward position, we get a tighter oral resonance, which creates a smaller voice" (ClosetCD, 2019c, 1:02). In "L's Voice Training Guide", the concept of tongue position is tied to articulation of the word "key" – an idea that other users also mention. She says:

You want to learn to arch your tongue up and push it forward to reduce the amount of space in your mouth where sound can resonate. To get the feeling, whisper "kee" (as in "key") and keep pushing the middle of your tongue up high for the "ee" just below where it touches the roof of your mouth to make the "k" sound. (Lsomethingsomething, 2019b, "Resonance")

Using the tongue can change the way that sound is modified by the vocal tract. Using the word "key" as a guide narrows the vocal tract to create a brighter sound. Other parts of the mouth can be used similarly. Lsomethingsomething suggests retracting your lips to brighten resonance, "to smile while you speak, stretching your lips across your teeth, and making your mouth opening a little smaller" (Lsomethingsomething, 2019b, "Intonation"). Stretching your lips into a smile shifts resonance brighter since it reduces the length of the vocal tract. Various structures can change the oral resonance of the voice, shifting the overall resonance and vocal quality.

Pharyngeal resonance is modified in different ways by users of the subreddit. Instances of pharyngeal resonance modification describe changes to parts of the pharynx, resulting in a more feminine vocal quality. On the subreddit, this includes "vocal twang", "throat closure", "oropharyngeal closure", and "vocal posture". All these terms refer to methods that decrease the space in the pharynx. In "L's Voice Training Guide" describes throat closure as learning, "to move your *soft palate* and your *pharynx* to shrink the space in your throat" (Lsomethingsomething, 2019c, "Throat Closure"). Decreasing space in the pharynx affects the overall resonance of the voice to create a brighter, more feminine sound. In "How to do the Girl Voice" the component of vocal posture is taught by

modifying both the oral and pharyngeal resonance. First, "raise the back/root of your tongue" to modify oral resonance (Crimson Oracle, 2018, 1:08). Then, "lower your soft palate...like a /k/ sound or a /g/ sound or an / η /" (Crimson Oracle, 2018, 1:12). Finally, "you're going to want to close your pharyngeal wall. So, the pharyngeal wall is the back of your throat as it descends toward your voice box" (Crimson Oracle, 2018, 1:32). This constricting of the pharyngeal wall is also described by y/Lsomethingsomething: "the next thing you want to learn is how to constrict your pharynx, or close your pharyngeal wall. Doing this will bring in the sides of your throat just below the soft palate (oropharynx), pushing your tonsils against the back of your tongue" (Lsomethingsomething, 2019c, "Throat Closure"). This technique is demonstrated in a video by IamZhea. In this video she shows a video of the medialization of pharyngeal constriction. She describes that she "is maintaining something similar to that in the back of my mouth while I'm talking and that's what makes you sound female because that space back there is being decreased" (IamZhea, 2019b, 2:22). Using constriction in the back of the throat narrows the vocal tract, shifting vocal resonance. "Vocal twang" is also mentioned by one source as an additional method for pharyngeal constriction. Lsomethingsomething describes vocal twang in her guide: "vocal twang is created by squeezing what's known as the aryepiglottic sphincter (or AES) which is right at the top of your larynx, above the vocal folds" (Lsomethingsomething, 2019c, "Vocal Twang"). She writes that vocal twang will add "maximum brightness" to your resonance (Lsomethingsomething, 2019c, "Vocal Twang").

Raising the larynx is the final part of resonance that is described by users on the subreddit. Raising the larynx is done to "shorten the length of your vocal tract...to match the proportions of a typical female vocal tract" (Lsomethingsomething, 2019a, "Vocal Tract Length"). Some users train this method using an exercise called "swallow-and hold" (Lsomethingsomething, 2019a, "Vocal Tract Length"; Zhotograph, 2019), but others feel like this exercise is not productive (ClosetCD, 2019c). This training of the swallowing muscles to elevate the larynx is done by practicing using the swallowing muscles consciously. In the post "How to brighten oral resonance and lift the larynx with one simple movement" ClosetCD explains that, "we want to take the tongue and move it forward and you'll notice that the larynx lifts and lowers as I move the tongue forward

and backward" (ClosetCD, 2019c, 0:48). Raising the larynx effectively shortens the vocal tract as the vocal folds are moved closer to the lips, resulting in a brighter and more feminine sound (IamZhea, 2019d). In "The Art of Voice Feminization Part 2A" IamZhea describes using a sound without pitch to focus in on changes in resonance. She says, "first we use the air sound to hear exactly what our resonance is doing" before adding in pitch or speech (IamZhea, 2019d, 5:46). She describes that resonance is "literally hearing a blueprint, a guide and a diagram of what the inside of that person's body looks like" (IamZhea, 2019d, 10:51). Raising the larynx is a method of changing resonance that takes advantage of the body's physiology to manipulate a male vocal tract into one that more closely approximates a female vocal tract.

3.2.3 Intonation

Intonation is present in five of the posts. It is referred to by a number of different terms: intonation, inflection, musicality, cadence, etc., but all the terms share a common referent. This is described by "L's Voice Training Guide (Level 2)" as "the rise and fall of pitch as you speak", with pitch changes occurring from word to word or within words (Lsomethingsomething, 2019b, "Intonation"). "L's Voice Training Guide" recommends using imitation to learn feminine intonation, and other users also suggest this way of learning. For example, Lsomethingsomething suggests using the "great figurehead of exaggerated femininity, the Disney princess" (Lsomethingsomething, 2019b, "Intonation"). Another source of inspiration for intonation is the valley girl persona, recommended by GoodbyeBlues (2018) and Lsomethingsomething (2019c). The parameter of intonation particularly lends itself to learning through listening to others and imitating them.

Another way of using intonation is through movement. Two users describe more natural intonation when they use body language in combination with feminine intonation. In "How to do the Girl Voice" the user describes: "I find that it helps if I like get my body into it as well sort of like conducts it for me" (Crimson Oracle, 2018, 2:33). This concept is also discussed in a post by ClosetCD. She explains, if "I start speaking with more exaggerated movements, suddenly my voice will have that inflection and that

intonation, and that cadence that it needs, to get my voice to the next place...the more we exaggerate those movements, the more feminine the voice will sound" (ClosetCD, 2019d, 1:10). Both users describe intonation as something that can be propelled by movement of the body. Exaggeration in movement can mirror exaggeration in pitch variance.

3.2.4 Articulation

Articulation was discussed in two posts. Articulation is the use of teeth, tongue, lips, palate, and other structures to make speech sounds. Differences in articulation may also cause changes to oral resonance, but resonance and articulation are discussed as two separate concepts (though the end result – shifting vocal formants – may be the same). In the context of voice feminization, discussion of articulation is specific to speech sounds, whereas resonance discusses changes in the vocal tract to influence the voice more generally. To illustrate this distinction, "L's Voice Training Guide (Level 3) for MTF transgender vocal feminization" describes the use of articulation to affect feminization like this:

If you want to sound feminine, you're going to have to get really specific with the way your tongue moves inside your mouth, to hone your oral resonance. That is, you'll have to fine-tune the way you say all your vowels and consonants – your *articulation*. (Lsomethingsomething, 2019c, "Articulation")

Discussion of articulation is, in part, a very specific way to change oral resonance. These differences in oral resonance are created in part by modifying individual vowels. "L's Voice Training Guide" specifies: "replace each vowel sound in your speech with a slighter brighter vowel…these are called vowel mods" (Lsomethingsomething, 2019c, "Articulation"). Manipulating vowel sounds is one part of articulation.

Articulation of consonants was also targeted for feminization. In the video, "How to do the Girl Voice" the speaker talks about focusing on two consonants to create a different "accent" saying, "it's the r's and the s's, if I just focus on the r's and the s's then it already starts to create a sound that's a bit different" (Crimson Oracle, 2018, 2:43). This description does not specify how to modify the consonants, but simply instructs to

change them based on a female "accent". "L's Voice Training Guide" has a more indepth discussion of consonant modification:

There are also consonant mods, because consonants can be brighter or darker too. Consonants interrupt the flow of air from your lungs, by temporarily blocking your vocal tract with your lips, tongue, or soft palate. A heavier, more intense interruption will generally come across as more masculine, while a lighter, more subtle articulation will come across as more feminine. (Lsomethingsomething, 2019c, Articulation)

"L's Voice Training Guide" also provides two specific examples of consonants and the way that they would be modified to sound feminine. For the consonant /b/, the guide describes articulating quickly with your lips tightened to minimize movement (Lsomethingsomething, 2019c). For the consonant /r/, the guide suggests to "stop your tongue halfway through saying that heavy "r" sound...especially if you also raise the back of your tongue at the same time" (Lsomethingsomething, 2019c, "Articulation"). This description instructs the user to use a "lighter" articulation to sound more feminine.

3.3 Beyond the Lesson

The theme "Beyond the Lesson" discusses the more practical aspects of voice feminization that complement the theorical knowledge and technical exercises already discussed. This theme includes the discussion of other resources that will be potentially useful for trans* folks, information about vocal hygiene, creative ways to practice voice feminization techniques, and the importance of ear training. The sub-themes that fall under "Beyond the Lesson" are "Other Resources", "Vocal Hygiene", "Practice" and "Learning to Listen". "Other Resources" includes recommendations of other videos, the relevance of apps in voice training, private lessons, and discussion of the comments section. The theme of "Vocal Hygiene" discusses healthy vocal practices, including avoiding strain and warming up your voice. "Practice" includes innovative ways to practice and different ideas about structuring practice while learning voice feminization.

⁹ This is not demonstrated

"Learning to Listen" focuses on the importance of training your ear to the different parameters of voice.

3.3.1 Other Resources

Under "Other Resources" there are a variety of different resources discussed. Some resources that are discussed are watching other videos, taking private lessons from users on the subreddit, asking questions in the comments, and using apps as external cues.

Watching other videos was discussed in four posts. One user,
Lsomethingsomething, contributed many more instances of this theme than other users.
Often, Lsomethingsomething will reference videos to go in-depth about important concepts. For example:

Start by watching this video [link] for a really quick overview of the voice feminization process (and optionally, this video [link] to learn more about the acoustic theory involved). Then watch this video [link] for a breakdown of the vocal anatomy involved. (Lsomethingsomething, 2019a, "Inspiration")

She also references videos for exercises that users can follow along with, or examples of a technique being used. Interestingly, she references four other users whose posts appear in this analysis (IamZhea, ZoeyAlexandria, Zhotograph, and Crimson Oracle). Instances of this theme by other users also recommend looking at videos by users that contribute to the subreddit. Specifically, all other examples of this theme recommend watching videos by IamZhea, including IamZhea herself (SanforizedJeans, 2019; GoodbyeBlues, 2018; IamZhea, 2019d). For example, GoodbyeBlues writes: "The video that helped me the most [link]. Really just go ahead and watch all of her videos" (GoodbyeBlues, 2018). From this comment and others like it, the videos by IamZhea appear to be immensely useful for many other users of the subreddit.

One type of resource that users of the subreddit may use is apps. There are mixed opinions concerning the use of apps to aid in voice feminization. Lsomethingsomething recommends a number of apps to use, including a voice pitch analyzer, a rolling spectrograph, and a voice recording app (Lsomethingsomething, 2019a; 2019b; 2019d).

She describes how they can be used to monitor open quotient: "ideally, you will see faint yellow lines melding into a background of pink smudges. This is what it looks like when your voice has a high open quotient" (Lsomethingsomething, 2019b, "Open Quotient"). Other users recommend against using apps, particularly to monitor pitch. There are two posts in the data set that argue this point, titled: "Y'all need to quit using the voice pitch analyzer app" (SanforizedJeans, 2019) and "Since we're talking about pitch, here's why pitch analysers do not work for trans women" (ClosetCD, 2019b). These posts argue that voice pitch analyzers are not reliable at perceiving masculinity or femininity in a voice (SanforizedJeans, 2019; ClosetCD, 2019b). These two posts argue that users should not be using voice pitch analyzers because users shouldn't be focusing on pitch (SanforizedJeans, 2019; ClosetCD, 2019b). Thus, the argument against using apps for voice feminization is mainly an argument against focusing on pitch as a gender marker.

In several of the posts, there is a call for viewers to leave questions in the comments section of the video. This is done by IamZhea (2019a; 2019b; 2019c; 2019d), ClosetCD (2019a; 2019c), and Zhotograph (2019). For example: ClosetCD says, "let me know if you have any questions as well, in the comments and I'll be answering them throughout the day trickling off sometime tomorrow" (ClosetCD, 2019a, 2:29). This creates and increased dialogue in the vocal instruction. Questions are often asked in the comments, regardless of the poster prompting the viewers.

ClosetCD, IamZhea, and ZoeyAlexandria label themselves as voice teachers and promote their services¹¹ (ClosetCD, 2019a, 2019c, 2019d; IamZhea, 2018, 2019a, 2019d; ZoeyAlexandria, 2020). IamZhea says, "if you have any interest in working with me in a one-on-one setting or you have any other questions please email transvoicelessons@gmail.com" (IamZhea, 2019d, 12:10). The posts that they contribute to the subreddit may entice users to take lessons from them and act like a type of advertising. These private lessons are also another resource that users of the subreddit may access to aid them in voice feminization.

The resources that are identified and recommended by the authors of the data set may also be helpful for people in the process of voice feminization, with or without a

43

¹⁰ This is a description of what the spectrograph will look like when the user is using open quotient.

¹¹ These three users are the only three who appear to promote their voice services.

speech-language pathologist. Watching videos about acoustic theory or vocal registers may help users better understand voice feminization. These resources could be used in the therapy room to the same effect or recommended for individuals to watch at home to supplement their therapy.

3.3.2 Vocal Hygiene

Under the theme "Vocal Hygiene" there are several ways of keeping your voice healthy that are reinforced. Six posts advise users to "avoid strain" and to stop practicing if something hurts or feels tense. IamZhea says to make sure "there's no extra tension" and to stay relaxed (IamZhea, 2019d, 9:38). Another userSanforizedJeans writes that "straining your voice to make it a higher pitch can really really really damage your vocal cords" (SanforizedJeans, 2019). This reinforces the idea of avoiding strain and avoiding injury. Lsomethingsomething also recommends to "drink water throughout [practice] and take a break if you feel your voice getting strained or hoarse" (Lsomethingsomething, 2019a). Another component of vocal hygiene is warming up your voice. Two users discuss vocal warm-ups. Lsomethingsomething recommends watching a video on warm-ups and then using them before long practice sessions (Lsomethingsomething, 2019a). GoodbyeBlues says that you may need to take a few minutes to "do some vocal exercises or sing for 5 minutes" to get back to your voice everyday (GoodbyeBlues, 2018). The discussion of vocal hygiene in the data set shows care and mindfulness about maintaining the health of users' voices.

3.3.3 Practice

Practice is part of the voice feminization process. Several users talk about the importance of practice, expectations of practice, as well as creative ways to practice. "L's Voice Training Guide" is very explicit about expectations regarding practice and even outlines the users' "homework" for each section of voice feminization. For example, she writes: "Your homework is to set aside some time every day (say, half an hour) to warm up with the video above and then practice speaking in the female range"

(Lsomethingsomething, 2019a). For another exercise, she recommends practicing "for [a] few minutes whenever you remember, throughout the day" (Lsomethingsomething, 2019a, "Pitch"). Throughout her guide, she reinforces the idea of learning an exercise and then adding it to a daily practice. Zhotograph says that practice is very important to progress: "it's important during this stage however that you utilize speaking this way [with modified resonance] as much as possible otherwise you will not gain any ground" (Zhotograph, 2019, 4:29). GoodbyeBlues echoes the same sentiment a little more bluntly: "not practicing on the other hand, determines without a doubt that you won't have a passing female voice" (GoodbyeBlues, 2018). These users emphasize the importance of practicing in order to make progress in voice feminization.

Another part of practice is finding ways to practice when circumstances make it difficult to practice in your everyday life. Many situations may prevent trans* folks from practicing their voice, including being in the closet, or experiencing vocal dysphoria. Several users have ideas of different ways to practice. GoodbyeBlues suggests, "if you're in the closet and can't find time to practice without being outed, play music while you shower and practice your voice there" (GoodbyeBlues, 2018). She also writes, "Online gamers are brutal. If you're looking for honest feedback instead of hug boxing¹², launch CSGO¹³ and give callouts in your female voice" (GoodbyeBlues, 2018). Zhotograph has some similar suggestions for finding ways to practice:

If you aren't out of the closet yet you could always utilize this voice for things like drive-throughs, phone calls, video game coms, etc. I know a lot of people who have dysphoria over their voice making it difficult to practice and trust me I was the same way. My advice to you is to sing in your car whenever you drive anywhere alone. Just put on some music loud enough that you can't hear yourself and sing along, every once in a while, turn the music down and see how you're doing, get terrified of how you sound, turn the music back up and continue. (Zhotograph, 2019, 4:30)

45

¹² A hug box is a negative term for an online forum/community where users create a safe, supportive, and confrontation-free community and provide no constructive criticism for others in the name of being a safe place. (Urban Dictionary, 2011).

¹³ CSGO refers to a videogame: Counter Strike Global Offensive.

These recommendations show that while practice can be difficult, there are innovative methods to find a way to practice. These suggestions give practical advice for people who need help navigating the voice feminization process. The recommendations from this theme show how users can draw on examples from their own voice feminization process to give advice to others. The advice given here is unique because it comes from first-hand experience of the voice feminization process.

3.3.4 Learning to Listen

"Learning to Listen" is a theme present in four of the posts in the data set. This theme talks about the importance of training your ear alongside training your voice. In "The Art of Voice Feminization: Part 1" IamZhea says: "listening is the single most important thing you can do in this entire process you literally have to use your ears critically" (IamZhea, 2018, 10:10). She emphasizes that you should use your own ear to guide your voice training. ClosetCD agrees with this perspective, saying, "we really kind of want to be relying on our ear and how others perceive us" (ClosetCD, 2019b, 0:17). In "L's Voice Training Guide" Lsomethingsomething recommends you practice listening as part of your homework exercises, listening and thinking about the different parameters of voice:

First, listen to the clip and just think about pitch. Does it sound to you like the pitch is in the male range, or the female range, or somewhere in between? ... then listen to the clip while just focusing on the resonance, the timbre of the voice. Does it sound hollow and masculine, or bright and feminine, or more ambiguously androgynous?... Once you've established the pitch and resonance, you can listen again for the other elements of the voice (Lsomethingsomething, 2019d, "Polishing")

Learning how to listen is an important part of the voice feminization process and allows users to be self-reliant for feedback. Being able to hear changes in pitch, resonance, and other elements allows users to manipulate and control those elements in their own voice. This theme argues that the ability to listen critically is important for people who are learning voice feminization on their own. This theme may also be relevant for people

who are undergoing voice feminization with the help of a speech-language pathologist or vocal coach. If "learning to listen" positively contributes to a person's ability to feminize their voice, then ear training could be used in therapy sessions to improve this skill.

Chapter 4: Discussion

4.1 What Can Speech-Language Pathologists Learn from the Advice That Is Given by Trans* Folks on Reddit?

The findings from this data should be incorporated into clinical practice for voice feminization therapy. Clinical reasoning using evidence-based practice (EBP) is done by integrating three types of information: scientific evidence, clinical experience, and patient preferences (Haynes & Johnson, 2009). The evidence shown here should be used as part of the process that determines how to approach voice therapy with a trans woman seeking services for voice feminization. This research should be understood alongside existing high-quality research, as well as a clinician's own experience and the individual client's preferences for therapy.

The way this data can further our understanding of voice feminization is three-fold: it can help direct new areas of research, be used as a tool to complement voice therapy, and expand our knowledge of the experience of voice feminization. Further research may be done on aspects of voice feminization where the posts on the subreddit provide a new perspective. Several posts could be used as resources that help explain the process of voice feminization and give background knowledge that supports voice therapy. Lastly, there are aspects of the data that simply add to our understanding of the process of voice feminization and what the experience is like for a person undergoing voice feminization. The theories, techniques, and methods described in the data set are not understood in the interpretivist epistemology as fact, but as subjective opinion and experience. With this understanding, the themes present in this data set can help guide new research, the posts themselves can be used as resources within voice therapy, and the experiences and the voices of the trans* population can add to the growing body of voice feminization research.

4.1.1 Future Research

Based on the thematic analysis of the data, there are a few areas of discussion on the subreddit that should be explored in future research. In the thematic analysis, there are themes that add a new perspective to the research on voice feminization. Two themes that warrant further exploration are Resonance and Learning to Listen. Further research into these areas may improve our understanding of voice feminization and the quality of our voice feminization therapy.

According to Hyung-Tae (2020): "voice feminization has been thought to be equal to pitch elevation" (p.1). This perspective of voice feminization is shifting to acknowledge how other parameters (including resonance) contribute to the perceptions of femininity in the voice. Leung, Oates, & Chan (2018) write that both fundamental frequency and formant frequency contribute to the perception of gender. However, fundamental frequency is more widely studied in the literature (Leung, Oates, & Chan, 2018). Thus, more research should be done on resonance, particularly on the role of each of the formants to the contribution of "femininity" in the voice, and mechanisms for trans women to modify their resonance. In the data from the subreddit, resonance is emphasized as the most important parameter to change. Users of the subreddit are critical of sources that emphasize pitch for voice feminization. The perspective of trans women who have undergone voice feminization is an important data point to consider in understanding the relative importance of pitch and resonance.

On the subreddit, several ways of modifying resonance are described. These techniques should be studied further to test their efficacy over larger groups and to better understand the risks and benefits. One method that is discussed on the subreddit is "lifting the larynx" to manually shorten the vocal tract and by doing so, change the formant frequencies. This technique is described in different ways by many users, including using the tongue to pull the larynx up (ClosetCD, 2019c), swallowing (Zhotograph, 2019), and panting like a small dog (Lsomethingsomething, 2019a). It would be worthwhile to investigate this technique to explore what is actually happening physiologically to the vocal tract, if "raising the larynx" is effective at changing the perception of femininity in the voice, and if that technique is safe for people to use.

Another theme of the data that may initiate further research is the theme "Learning to Listen". This theme is influenced partially by posts that discourage reliance on technology to track changes in voice feminization (ClosetCD, 2019b; SanforizedJeans, 2019). The importance of listening is also discussed by users who emphasize learning how manipulating different aspects of your voice changes the quality of your voice in

different ways. Both IamZhea and Lsomethingsomething talk about the importance of being able to perceive changes in pitch, resonance, intonation, and other parameters (IamZhea, 2019c; Lsomethingsomething, 2019d). Being able to discriminate between high and low pitch, or bright and dark resonance is the first step to be able to change those parameters in your own voice. Further research could be done on ear training for trans women in voice therapy, especially as it relates to their satisfaction with their voice. More research could also be done on the benefit of using technology to monitor parameters of voice in comparison to only using the client's own perception of their voice.

4.1.2 Using Reddit as a Resource

There is a lot of value in watching and reading the posts on the r/transvoice subreddit and clinicians should incorporate these resources into therapy for trans* individuals. The videos and text posts used in this project, as well as future posts to the subreddit, would be valuable resources to use in therapy. Videos may be particularly useful because they feature the voices of trans women. The information provided in the videos is informative and these videos are made all the more important because that information is delivered by trans women. By including these resources in clinical practice, speech-language pathologists are showing that these trans* voice teachers are valued and important. These resources could be included in a variety of delivery models. Videos from the subreddit could be included in presentations during group therapy for voice feminization. Videos and text posts could also be watched or read during individual therapy or assigned as homework. Additionally, the posts on the subreddit may be useful as educational tools for students or clinicians.

Here are two examples of how videos from the data set may be used as voice feminization resources:

1. The video "Inflection is all about movement" by ClosetCD focuses on the parameter of intonation (ClosetCD, 2019d). This short video may be watched in a group or individual session as an introduction to the concept of intonation. ClosetCD describes in the video the differences between male and female

- intonation and gives an example of what that sounds like. She also gives some advice for how to feminize intonation by incorporating body movement. The clinician may have further instruction about how and when to use intonation, but this video would provide a good introduction to the topic.
- 2. The video "The Art of Voice Feminization: Part 1" by IamZhea provides a really in-depth overview of acoustic theory, including the Source-Filter Theory, harmonics, and resonance (IamZhea, 2018). This video is an excellent resource that could be used in speech science classes. This video provides very thorough explanations of acoustic theory as it pertains to voice feminization but could also be helpful for students learning these concepts in a more general sense. The visuals used in the video along with her oral demonstrations make for a very thorough and well-done explanation.

4.1.3 Experience of Voice Feminization

In this data set and all the posts on the subreddit, there a wealth of knowledge about the experience of voice feminization. Reading and watching the posts in this data set has provided the opportunity to hear the experiences and opinions of people who have gone through voice feminization. These experiences are unique to trans* people who have undergone or are going through voice feminization. One experience that several users had in common was finding covert and innovative ways to practice when they were not totally comfortable in their feminine voice (GoodbyeBlues, 2018; Zhotograph, 2019). The posts that describe "Ways to Practice" describe ideas that could only come from experiencing the process of voice feminization. These experiences of voice feminization can help advise people who are encountering similar obstacles in their voice feminization journey. The posts that describe these experiences can also serve to educate clinicians working with trans* individuals to better understand the realities of the process of voice feminization. This r/transvoice community reveals experiences that speech-language pathologists may not otherwise understand.

Additionally, this data set contains many voices of trans women, who demonstrate a diversity of feminine voices. Hearing these voices is beneficial for people studying or

teaching voice feminization and is also informative for people who are undergoing voice feminization themselves. These voices demonstrate what is possible for people who are feminizing their voices as well as the immense variety of voices that can exist in the population of trans women. On the subreddit, there are voices that rely on resonance to convey their femininity, there are voices that are high in pitch, and there are voices with different accents from people who come from different parts of the world. Being able to listen to different voices from trans women is beneficial for speech-language pathologists and the trans* people they work with.

4.2 Limitations

There are several limitations of this thesis. One of the main limitations is that the data set used for the analysis is constantly changing. In this analysis, the top 70 posts of all time on the subreddit r/transvoice were collected. Even in the time since the collection of the data to the time of writing the analysis, there has been major change in the top posts of the subreddit. It is reasonable to assume that in one or five years, the posts that are at the top of the subreddit will have changed. The oldest post in the data set was posted in November of 2018 (just over a year from when the data was collected), but most were published in 2019. The lifetime of the data set is relatively short and thus, some of the specifics of this thesis may be outdated in a short period of time.

Another limitation is the unknown variable of the users who contributed to the subreddit. As written previously, most of the reddit users have generally anonymous usernames. There is generally little information available about the users who contribute to the subreddit. Some information about the users who contributed to the data set may have provided greater credibility to the advice. As a result of this anonymity, the veracity of the experiences and the advice shared may come into question.

In regard to limitations in the methodology, the thematic analysis (in all its components) was done by the author of this thesis. This includes the categorization of the posts by function, the transcription of the videos, and the coding and theming of the data set. This may be viewed as a limitation since there are inherent personal biases that influence a person's work.

References

- Adler, R., Hirsch, S., & Pickering, J. (2019). Voice and communication therapy for the transgender/gender diverse client: A comprehensive clinical guide (Third ed.). San Diego, CA: Plural Publishing.
- Arai, T. (2012). Education in acoustics and speech science using vocal-tract models. The Journal of the Acoustical Society of America, 131(3), 2444-2454.
- Avery, J. D., & Liss, J. M. (1996). Acoustic characteristics of less masculine-sounding male speech. *The Journal of the Acoustical Society of America*, 99(6), 3738-3748. https://doi-org.ezproxy.library.dal.ca/10.1121/1.414970
- Bachorowski, J., & Owren, M. (1999). Acoustic correlates of talker sex and individual talker identity are present in a short vowel segment produced in running speech. The Journal of the Acoustical Society of America, 106(2), 1054-1063.
- Booz, J. A. (2016). Perceived gender in clear and conversational speech (Master's dissertation). Retrieved from https://collections.lib.utah.edu/ark:/87278/s6sr3903
- Brown, N. (2017). Epistemology. Retrieved from http://www.nicole-brown.co.uk/epistemology/
- Carew, L., Dacakis, G., & Oates, J. (2007). The effectiveness of oral resonance therapy on the perception of femininity of voice in male-to-female transsexuals. *Journal of Voice*, 21(5), 591–603.
- Cielo, C., Schwarz, K., Finger, L., Lima, J., & Christmann, M. (2019). Glottal Closure in Women with No Voice Complaints or Laryngeal Disorders. *International Archives of Otorhinolaryngology*. 23(4), E384-E388.
- Clarke, V., & Braun, V. (2017). Thematic analysis. The Journal of Positive Psychology:

 Qualitative Positive Psychology. Edited by Kate Hefferon and Arabella Ashfield,
 12(3), 297-298.

- ClosetCD. (2019a, August 20). *The easiest wat to find nasal resonance*. [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/ct7vl5/the_easiest_way_to_find_na_sal_resonance/
- ClosetCD. (2019b, June 17). Since we're talking about pitch, here's why pitch analysers do not work for trans women. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/c1triy/since_were_talking_about_pitch_heres_why_pitch/
- ClosetCD. (2019c, June 30). How to brighten oral resonance and lift the larynx with one simple movement. [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/c7lndv/how_to_brighten_oral_resonance_and_lift_the/
- ClosetCD. (2019d, September 27). *Inflection is all about movement! How to get your voice from androgynous to feminine*. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/da5a6e/inflection_is_all_about_movement vement how to get your/
- Crimson Oracle. (2018, July 28). *How To Do The Girl Voice YouTube*. [Video]. YouTube. https://www.youtube.com/watch?v=lGHoIjPJ7nc
- Dacakis, G., Oates, J., & Douglas, J. M. (2012). Beyond voice: Perceptions of gender in male-to-female transsexuals. *Current Opinion in Otolaryngology and Head and Neck Surgery*, 20(3), 165–170.
- Davies, S., Papp, V., & Antoni, C. (2015). Voice and communication change for gender nonconforming individuals: Giving voice to the person inside. *International Journal of Transgenderism*, 16, 117-159.
- Devor, A., Haefele-Thomas, Ardel, & ProQuest. (2019). *Transgender: A reference handbook (Contemporary world issues*). Santa Barbara, California: ABC-CLIO.
- Enke, A. (Ed.) (2012). *Transfemininist Perspectives: In and beyond transgender and gender studies*. Philadelphia, PA: Temple University Press
- Fausto-Sterling, A. (2000). The five sexes, revisited. *The Sciences*, 40(4), 18-23.

- Fitch, W., & Giedd, J. (1999). Morphology and development of the human vocal tract: A study using magnetic resonance imaging. The Journal of the Acoustical Society of America, 106(3 Pt 1), 1511-1522.
- Gelfer, M., & Young, S. (1997). Comparisons of intensity measures and their stability in male and female sneakers. *Journal of Voice*, 11(2), 178-186.
- GoodbyeBlues. (2018, May 1). *PSA: Having a deep starting voice doesn't mean you can't achieve a passing feminine voice*. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/8gba0v/psa_having_a_deep_starting-voice-doesnt-mean-you/
- Goy, H., Fernandes, D., Pichora-Fuller, M., & Van Lieshout, P. (2013). Normative Voice Data for Younger and Older Adults. *Journal of Voice*, 27(5), 545-555.
- Halberstam, J. (2018). *Trans*: A quick and quirky account of gender variability*. Oakland, CA: University of California Press
- Hancock, A., Colton, L., & Douglas, F. (2014). Intonation and Gender Perception: Applications for Transgender Speakers. *Journal of Voice*, 28(2), 203-209.
- Haynes, W. O. & Johnson, C. E. (2009). *Understanding Research and Using Evidence Based Practice in Communication Disorders: A Primer for Students and Clinicians*. Boston, MA: Allyn & Bacon.
- Hersh, D., Sherratt, S., Howe, T., Worrall, L., Davidson, B., & Ferguson, A. (2012) An analysis of the "goal" in aphasia rehabilitation, Aphasiology, 26:8, 971-984, DOI: 10.1080/02687038.2012.684339
- Hillenbrand, J., & Clark, M. (2009). The role of f_0 and formant frequencies in distinguishing the voices of men and women. *Attention, Perception and Psychophysics*, 71(5), 1150–1166.
- Hyung-Tae, K. (2020). Vocal feminization for transgender women: Current strategies and patient perspectives. *International Journal of General Medicine*, *13*, 43-52. doi:http://dx.doi.org.ezproxy.library.dal.ca/10.2147/IJGM.S205102

- IamZhea. (2018, November 12). The Art of Voice Feminization: Part 1: Overview,
 Acoustic Resonance, and A Conceptual Framework. This is by far the biggest
 education video I've ever made (10+ minutes). It took me roughly two months to
 finish this. This kicks off a new, comprehensive series on voice feminization.
 [Online forum post]. Reddit.
 https://www.reddit.com/r/transvoice/comments/9wkxxe/the-art-of-voice-feminization-part-1-overview/
- IamZhea. (2019a, August 25). How to Cough Cute in Two Minutes! [Online forum post].
 Reddit.
 https://www.reddit.com/r/transvoice/comments/cvd20t/how_to_cough_cute_in_twominutes/
- IamZhea. (2019b, December 8). LOOK INSIDE MY MOUTH! Oropharyngeal Closure + Tongue Repositioning Demonstration for Voice Feminization. [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/e7yvj7/look_inside_my_mouth_oropharyngeal_closure_tongue/
- IamZhea. (2019c, February 15). *All Vocal Sexes Demonstrated. Hear and see resonance and pitch as purely independent elements*. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/ar0ntk/all_vocal_sexes_demonstrated-hear_and_see/
- IamZhea. (2019d, July 6). The Art of Voice Feminization | Part 2A: Larynx Basics, How to Raise the Larynx, and Common Issues. Time to put a rest to the confusion once and for all! [Online forum post]. Reddit.
 https://www.reddit.com/r/transvoice/comments/c9xioo/the_art_of_voice_feminization_part_2a_larynx/
- Kawitzky, D., & Mcallister, T. (2020). The Effect of Formant Biofeedback on the Feminization of Voice in Transgender Women. Journal of Voice, 34(1), 53-67.
- Klatt, D H, & Klatt, L C. (1990). Analysis, synthesis, and perception of voice quality variations among female and male talkers. *The Journal of the Acoustical Society of America*, 87(2), 820-857.
- Lee, Potamianos, Narayanan, & Lee, S. (1999). Acoustics of children's speech:

 Developmental changes of temporal and spectral parameters. The Journal of the

 Acoustical Society of America, 105(3), 1455-1468.

- Leung, Y., Oates, J., Chan, S., P. (2018). Voice, articulation, and prosody contribute to listener perceptions of speaker gender: A systematic review and meta-analysis. *Journal of Speech, Language and Hearing Research (Online)*, 61(2), 266-297. doi:http://dx.doi.org.ezproxy.library.dal.ca/10.1044/2017_JSLHR-S-17-0067
- Litosseliti, L., & Leadbeater, C. (2013). Speech and language therapy/pathology:

 Perspectives on a gendered profession. International Journal of Language &

 Communication Disorders, 48(1), 90-101.
- Lsomethingsomething. (2019a, September 12). L's Voice Training Guide (Level 1) for MTF transgender vocal feminization. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/d3clhe/ls_voice_training_guide_level1 for mtf/
- Lsomethingsomething. (2019b, September 12). *L's Voice Training Guide (Level 2) for MTF transgender vocal feminization*. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/d3cp1w/ls-voice-training-guide-le-vel-2 for mtf/
- Lsomethingsomething. (2019c, September 12). L's Voice Training Guide (Level 3) for MTF transgender vocal feminization. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/d3cq51/ls_voice_training_guide_level_3_for_mtf/
- Lsomethingsomething. (2019d, September 12). L's Voice Training Guide (Level 4) for MTF transgender vocal feminization. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/d3cqqm/ls-voice-training-guide-le-vel-4-for-mtf/
- MarCat1217. (2019, November 30). "Advice" for mtf in retail. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/e46569/advice_for_mtf_in_retail/
- Markova, D., Richer, L., Pangelinan, M., Schwartz, D., Leonard, G., Perron, M., . . . Paus, T. (2016). Age- and sex-related variations in vocal-tract morphology and voice acoustics during adolescence. Hormones and Behavior, 81, 84-96.

- Miao, M., Power, E., & O'Halloran, R. (2015) Factors affecting speech pathologists' implementation of stroke management guidelines: a thematic analysis, Disability and Rehabilitation, 37:8, 674-685, DOI: 10.3109/09638288.2014.932444
- MTU (Michigan Technical University). (n.d.). Physics of Music Notes. Retrieved from https://pages.mtu.edu/~suits/notefreqs.html. Accessed Apr. 10, 2020.
- Owen, K., & Hancock, A. (2010). The Role of Self- and Listener Perceptions of Femininity in Voice Therapy. *International Journal of Transgenderism*, 12(4), 272-284.
- Purdue Online Writing Lab. (n.d.). *In-Text Citations: The Basics*. Purdue Online Writing Lab. Retrieved from https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_st yle_guide/in_text_citations_the_basics.html
- Ryan, G., & Sfar-Gandoura, H. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 14-20.
- SanforizedJeans. (2019, May 24). *Y'all need to quit using the voice pitch analyzer app*. [Online forum post]. Reddit. https://www.reddit.com/r/transvoice/comments/bsims2/yall_need_to_quit_using_the-voice-pitch_analyzer/
- Södersten, M., & Lindestad, P. A. (1990). Glottal closure and perceived breathiness during phonation in normally speaking subjects. *Journal of Speech and Hearing Research*, 33(3), 601-611.
- Stryker, S. (2017). Transgender history: The roots of today's revolution. New York, NY: Seal Press
- Titze, I. (1989). Physiologic and acoustic differences between male and female voices. The Journal of the Acoustical Society of America, 85(4), 1699-1707.
- Titze, I. R. (2000). *Principles of voice production* (2nd ed.). Iowa City, IA: National Center for Voice and Speech.

- TheMeanCanadianx (2019, May 14). A welcome to new users and some FAQ's answered.

 [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/bokzzu/a_welcome_to_new_users_
 and some faqs answered/
- Zhotograph. (2019, March 3). *Vocal Feminization Guide for any voice type*. [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/ax2520/vocal_feminization_guide_for_any_voice_type/
- ZoeyAlexandria. (2020, January 14). Free Voice Feminization Lesson: Vocal Registers.

 [Online forum post]. Reddit.

 https://www.reddit.com/r/transvoice/comments/eomy1e/free_voice_feminization_lesson_vocal_registers/

Appendix I: Transcripts of Data Set

4. Inflection is all about movement! How to get your voice from androgynous to feminine.

Hey so, today I want to talk about inflection. So there's a lot of information about inflection, intonation, cadence, rhythm, uhh, It's all kind of revolves around the same idea and you know, people will say that you got to bounce the voice on every word or maybe its uhh y'know create more a sing-songy voice, going up and down or perhaps it's the ending the sentence on an up-stroke. Ehhh, it all sort of like, y'know falls into the same category of getting your voice to be more feminine. Um, also transmen if you watch this as well, umm pay attention, you can just do the opposite of this. So, if I uh, if I take my body, my head, my movements and I diminish them quite a bit, you're going to notice that right away my voice starts to become a lot more monotone. There's not a whole lot of movement going into my voice until I start moving my body with the words and as I start moving my body with the words, I start speaking with my hands, I start speaking with more exaggerated movements, suddenly my voice will have that inflection and that intonation, and that cadence that it needs, to get my voice to the next place. So there's a study done, that actually shows that men and women have the same inflection points, the difference is that women exaggerate those infection points, right? That is really important if we want to find a feminine voice, or a masculine voice in this case, right? The more we exaggerate those movements, the more feminine the voice will sound. So, if you want to take lessons with me, I teach online, umm like, like this. It kind of looks like this when we are on a call together, uh you can send me a PM, I'll be answering some questions down below as well. Alright, peace out, I'll see you in the next one (tongue click). I missed the button.

6. L's Voice Training Guide (Level 1) for MTF transgender vocal feminization

L's Voice Training Guide

Level 1 - Foundations

- 1. Inspiration ^{*}
- 2. Vocal Tract Length ***
- 3. **Pitch** **

Level 2 - Intermediate

- 4. Resonance ***
- 5. Open Quotient *
- 6. Intonation **

Level 3 - Advanced

7. Articulation **

- 8. Vocal Twang *
- 9. Throat Closure ***

Level 4 - Mastery

- 10. Exploration *
- 11. Polishing *
- 12. Performance ***

*easy **medium ***hard

Introduction

Hey, friend. Want to change your voice? Well... you can - that's an option.

Your voice is much more malleable than you may realize. There are at least a dozen different dimensions that you can learn to control independently to change the sound of your voice. The way you talk right now is not your one "true" voice, it is a *habit*. A habit that can be changed, if you so choose.

I like to come at this challenge from two angles. One is to break down all the muscle movements involved and learn to manipulate them individually, through simple *drills*. The other is to listen to carefully selected example voices and learn to *imitate* them, intuitively. You will get results much faster by using both, as you do in this guide.

My approach to voice training is not a process of feminization. It is a journey in flexibility, to full *fluency* over the entire possibility space of your voice. This guide is aimed at those of you who are already comfortable in the masculine end of the spectrum. With the exercises I've gathered here, you will familiarize yourself with the feminine end - and everything in between.

Once you have gained complete freedom across your vocal range, you can *choose* exactly where you'd like to live - whether that is within one voice, or two. Or three. Masculine, feminine, or androgynous, young or old, human or cartoon. Any or all. It's up to you.

So now, **listen to this clip** to hear me demonstrate the eight most important elements for vocal feminization, gradually transforming a masculine voice into a feminine one. Then, **listen to this clip** to hear how they sound one at a time, in isolation. With practice, you can learn to do this too!

Most of the material in this guide can be traced back to the pioneering work of <u>Zheanna</u> <u>Erose</u> of <u>TransVoiceLessons</u>, as well as the excellent free tutorial videos at <u>New York</u> <u>Vocal Coaching</u>. Many thanks, also, to the <u>Scinguistics</u> community, and of course, all of you lovely people here on r/transvoice!

I've organized this guide into four levels, from Foundations to Mastery, each split into three subsections. You could easily spend a month on each level - a week or two per

subsection. But you don't have to master each subsection before moving on to the next. Just give yourself enough time to digest the material and get a feel for it, and then start the next subsection as soon as you no longer feel overwhelmed.

Ready? Let's begin.

 $\sim L$

Level 1 - Foundations 1. Inspiration

Start by watching <u>this video</u> for a really quick overview of the voice feminization process (and optionally, <u>this video</u> to learn more about the acoustic theory involved). Then watch this video for a breakdown of the vocal anatomy involved.

Your homework is to find a recording of a female speaking voice that you'd like to be able to imitate, that can serve as an *inspiration* and a point of reference. It doesn't have to be the one perfect, ultimate voice - just find one or two examples that seem pleasant and relatable. Think of female actresses or characters with nice voices, or YouTubers or podcast hosts you enjoy (search for "female youtubers" or "female podcast hosts" if you need some ideas). Mine is <u>this podcast interview with Keon Saghari</u>. Go ahead and use that if you can't decide on one right now!

Then start listening to it, at least a little bit every day. This will help you internalize the sounds and speech patterns of the voice that you like. And be on the lookout for new voices - if you find one you like better, start listening to that one instead!

2. Vocal Tract Length

Next you want to start strengthening and learning to control the muscles that raise your *larynx* (or voice box). This is how you shorten the *length of your vocal tract*, from your larynx to your lips, to match the proportions of a typical female vocal tract. Building these muscles will take a while, so we'll start with this first.

Watch this video and try the *swallow-and-hold* exercise. You want to touch your larynx (Adam's apple) lightly with your finger, and then yawn and feel it move down, and then swallow and feel it move up.

Once you have felt this a few times, watch <u>this video</u> and try the "big dog, small dog" exercise. If you're having trouble with the small dog, it can help to start yawning, to bring the larynx down, and then start to swallow to bring the larynx up, and then stick your tongue out like a dog panting and say "ahh" in a whisper to make sure you're not closing off your throat. Then watch <u>this video</u> and try the whisper siren exercise. You want to smoothly slide from a big dog "uhh" to a small dog "ehh" as your larynx slides upward. Again, place a finger or two lightly on your throat to feel your larynx move up and down.

Your homework is to practice the whisper siren for few minutes whenever you remember, throughout the day - say, whenever you go to the bathroom. It's almost silent, so you can do it anywhere and practice holding your muscles in place at the top (the high end of the siren, or the small dog) to build strength. Eventually, you want to learn to lift your larynx easily, without straining the muscles in your jaw and neck. As you get more comfortable with it, try to relax your neck a little bit more each time, until you can do it without tension.

3. Pitch

Keep doing the previous exercises every day, but when you're ready for something more, you can start working on your *pitch*, or how high or low your voice is. Pitch is just one of many elements, and not even the most important, but it's probably the most well-known difference between the average male and female voice.

In addition to pitch, there are several *registers* that your voice will lock into at different points along your range, each with a different sound quality. Watch <u>this video</u> to hear the differences between a *chest voice* and a falsetto (and a *mix voice*, which is technically the same register as your chest voice, your *modal register*). Follow along with the warmups in <u>this video</u>, and then try switching between the registers a few times, both singing and speaking.

Then download the Android app <u>Vocal Pitch Monitor</u> (or <u>Vocal Pitch Monitor</u> on iOS) and in the settings, change the *Scale* to *F Major* and check the box to *Display frequency in Hz*. With the app running, talk in your starting voice and see where your pitch falls, naturally. A typical male speaking voice will stay between F2 and F3 (which are marked by horizontal lines, since we set the Scale to F Major). Now try talking higher and higher in pitch, until your voice is in the female range, around F3 and above. Don't go higher than F4, though, or you'll sound like a cartoon character!

You might find that you start in your modal register when you're in the male range, but flip over into falsetto at some point in order to get into the female range. Or you might find that you have to strain and shout to get that high. If that happens, just go back down to the pitch where you can still speak comfortably in your modal register and don't worry about going higher for now.

Your homework is to set aside some time every day (say, half an hour) to warm up with the video above and then practice speaking in the female range (between F3 and F4) or as close as you can get without straining or going into a falsetto. You can just say random things that pop into your head, recite lines from memory, or read a book or reddit comments out loud, while keeping an eye on your pitch in Vocal Pitch Monitor.

It might sound terrible, but that's okay - the important thing is to get used to speaking in that range. Drink water throughout and take a break if you feel your voice getting strained or hoarse.

(continue to Level 2 - Intermediate...)

L's Voice Training Guide (Level 2) for MTF transgender vocal feminization

L's Voice Training Guide

Level 1 - Foundations

- 1. Inspiration *
- 2. Vocal Tract Length ***
- 3. Pitch **

Level 2 - Intermediate

- 4. Resonance ***
- 5. Open Quotient *
- 6. Intonation *

Level 3 - Advanced

- 7. Articulation **
- 8. Vocal Twang *
- 9. Throat Closure ***

Level 4 - Mastery

- 10. Exploration *
- 11. Polishing **
- 12. Performance ***

Level 2 - Intermediate

4. Resonance

Once you are comfortable with manipulating your larynx and your pitch, and you'd like an additional challenge, you can try doing them at the same time. That means, while you are trying to talk in the female range, you also raise your larynx to reduce your vocal tract length. Start by following along with the exercises in this video.

It will probably sound pretty bad at first, but that's fine! Your goal at this stage is not to sound feminine, but to keep your pitch between F3 and F4 (with Vocal Pitch Monitor) and keep your larynx raised while talking (which you can feel by holding a finger lightly to your throat).

Your voice should sound more buzzy and brassy, which you'd call a *bright resonance* (or *bright timbre*), as opposed to the dark, hollow resonance of more masculine voices - and that's a good thing! Watch this video to hear a great demonstration of this effect - you want your voice to be in the upper-right quadrant of the diagram.

^{*}easy **medium ***hard

Then, on top of that, you want to learn to arch your *tongue* up and push it forward to reduce the amount of space in your mouth where sound can resonate. To get the feeling, whisper "kee" (as in "key") and keep pushing the middle of your tongue up high for the "ee" - just below where it touches the roof of your mouth to make the "k" sound. Say it a few times, while keeping your tongue clenched, pushing it a little higher each time. This is the smallest space you can make inside your mouth, the bright extreme of your *oral resonance*, opposite a yawn.

That's great for saying an "ee" sound, but when feminizing the other vowels, your tongue will be lower than it is for the "ee" but still higher and more forward than it would be in your masculine voice. And you still want to feel a bit of tension in your tongue, that clench, throughout. Essentially, you want to talk with a small space at the front of your mouth. That makes it sound like you have a smaller mouth than you actually do, which makes you sound more feminine.

Gaining mastery over your tongue is one of the trickiest skills of voice feminization, but it's arguably one of the most important. Get started on it by practicing the exercises in <u>this video</u>. Then watch <u>this video</u> and try some *sirens* and *trills* across your range while raising your larynx and tongue.

Your homework is to take your daily speaking practice, where you try to keep your pitch between F3 and F4, and spend at least half that time talking with your larynx raised as well, for a bright, buzzy sound. Then, as best you can, try to add in the tongue clench too, pushing it up and forward to brighten the sound even more. See how it sounds with your larynx raised or lowered, your tongue arched or relaxed, and your pitch high or low, as well as in a whisper.

This is likely to cause a lot of tension in the muscles of your neck and throat at first, so do trills and yawn every so often to help them relax again. You can even try lying on your back while practicing, to force your body to relax. And of course, sip water throughout your practice session and take a break when your voice gets too tired or hoarse.

Also, keep practicing your whisper sirens multiple times a day, but add a whispered "kee" at the end of each one to bring your tongue up. This will allow you to go even higher with the siren and make a really tiny dog sound! Again, hold those muscles in place at the top and really clench your tongue. At the same time, try to relax as much tension as you can in your jaw and neck while still holding the same shape.

5. Open Quotient

Go ahead and breathe a sigh of relief, because it's time for something a little easier!

Feminine voices generally sound *softer* and more *breathy* than masculine voices. Marilyn Monroe is an iconic example of this, as you can hear in this video.

When you try to speak in the upper range of your modal register without going into a falsetto, the natural tendency is to strain to reach those higher notes, which makes your voice sound harder, not softer, and not particularly feminine. This is because you put a lot of *compression* on your vocal folds (vocal cords), squeezing them together more tightly. You want to learn to use less compression for a softer sound, where your vocal folds stay open more (*open quotient*) while vibrating. With high compression (closed quotient), adding breathiness will just result in a strained, smoky sound like Dr. Girlfriend in this video.

To learn to control the compression in your voice, start by watching <u>this video</u> and trying the "ah-ha" exercise and the vowel slides. Then download the Android app <u>Spectroid</u> (or <u>Spectrogram Pro</u> on iOS), and in the audio settings, change the <u>Desired transform</u> interval to 10 ms (100 Hz) and check the box to <u>Stay awake</u> in the display settings.

With the app running, start by saying "ahh" for a few seconds in your normal speaking voice. In the scrolling display, you should see a bunch of bright yellow lines showing up against the purple and pink background noise. Then whisper "ahh" for a few seconds, just with your breath. You should see some faint pink smudges, but no yellow lines. Now, heave a big, breathy sigh while saying "ahh..." in a soft, relaxed voice. Ideally, you will see faint yellow lines melding into a background of pink smudges. This is what it looks like when your voice has a high open quotient. It's somewhere in between a normal voice and a whisper.

Your homework is to spend a few minutes before your other voice exercises, to slide between a whisper and your normal speaking voice. It's a good warmup! You can start with one long, whispered "ahh" that you gradually turn into a spoken "ahh" and then back to a whisper, just by changing the compression. Do this with the Spectroid app running, so you can see the change as well as hear it. For a bit more of a challenge, try smoothly changing from a whisper, to a soft voice, to a normal voice while speaking or reading out loud.

Of course, you can also play with this during your daily speaking practice. See if you can make your voice a little softer, or really breathy, or changing from one extreme to another while still maintaining the feminine aspects of pitch and resonance that you've been working on.

6. Intonation

All right. It's time to start imitating some voices!

Intonation is the rise and fall of pitch as you speak. Masculine voices tend to be very monotone, where the pitch changes very slightly and infrequently from word to word, and important words are spoken louder for emphasis. Feminine voices tend to vary a lot in pitch, across a wider range, and big pitch changes are used to draw attention to the important words. Oftentimes, every word is spoken at a different pitch than the one before, and sometimes the pitch will change multiple times within a single word!

The clearest example of this can be found in that great figurehead of exaggerated femininity, the Disney princess. Watch <u>this video</u> for a virtuosic vocal tour through a diversity of Disney princess voices, and try closing your eyes and listening to the rise and fall of pitch in each one. You can even pull out your Vocal Pitch Monitor app and watch the pitch rise and fall on the screen!

Your homework is to spend some time every day trying to talk like a Disney princess, in addition to all your other exercises. Listen to this clip with Vocal Pitch Monitor open, watching the pitch rise and fall, and pause every sentence to try parroting back what you just heard, with the same rise and fall in your pitch. Don't worry about sounding good, and don't worry about your larynx or resonance either. Just focus on the pitch, and go ahead and use your falsetto to go high if you can. It will sound fake and silly, and that's okay - enjoy it!

The only thing that you should try to do, other than match the pitch, is to *smile* while you speak, stretching your *lips* across your teeth, and make your mouth opening a little smaller, like you're saying "ooh" (just pretend you're a dainty princess). This will also brighten your resonance a tiny bit, and make your voice sound that much more feminine. Use this for your princess voice practice, but also for your resonance practice as well, tightening your lips in addition to raising your larynx and tongue.

If you get bored of using that clip or just want to find something in your own accent, feel free to practice with other example voices, like in <u>this video</u>. Or make up your own princess voice if you can - the sillier the better. Delight in the ridiculousness of it all, and just have fun with it!

(continue to Level 3 - Advanced...)

L's Voice Training Guide (Level 3) for MTF transgender vocal feminization

٠

L's Voice Training Guide

Level 1 - Foundations

- 1. Inspiration *
- 2. Vocal Tract Length ***
- 3. Pitch **

Level 2 - Intermediate

- 4. Resonance ***
- 5. Open Quotient *
- 6. Intonation **

Level 3 - Advanced

7. Articulation *

- 8. Vocal Twang * 9. Throat Closure ***
- Level 4 Mastery
- 10. Exploration *
- 11. Polishing *
- 12. Performance ***

*easy **medium ***hard

Level 3 - Advanced

7. Articulation

Ready to refine your resonance with another round of voice impressions? Like, totally!

So far, you've been working to brighten the timbre of your voice by raising your larynx and tongue to shrink the size of your vocal tract. But that doesn't always translate into sounding more feminine. If you want to sound feminine, you're going to have to get really specific with the way your tongue moves inside your mouth, to hone your oral resonance. That is, you'll have to fine-tune the way you say all your vowels and consonants - your *articulation*.

Fortunately, there's a fun way to do this! To put it simply, you want to talk like a Valley girl. Watch this video to hear what a stereotypical Valley girl sounds like. Not only do they rival Disney princesses in terms of their extreme intonation, they also brighten their vowels to a much greater degree than you'll hear in any other American accent (and if you have a British accent, try imitating the brighter vowels of an Australian accent instead, as in this video).

Some vowels are naturally dark in resonance (like "uh") because your tongue is low and there is more space in your mouth. Some vowels are naturally bright (like "ee") because your tongue is high, leaving a small amount of space in the back of your mouth. What Valley girls do, and what you want to learn to do yourself, is to replace each vowel sound in your speech with a slightly brighter vowel. Your "oh" becomes "uh", your "uh" becomes "eh", your "eh" becomes "ih", your "ih" becomes "ee" and so on, as in this video. These are called *vowel mods*.

For a Valley girl, "ummm..." becomes "emmm..." and "lah-eek, toh-duh-lee" becomes "lih-eek, teh-dih-lee" - try saying each one! Then see if you can say them with vowels that are in between the two extremes - that's the sweet spot. Whatever your accent, the key is to push your tongue up and forward and just use the front for articulation. It helps to close your *jaw* so your teeth are almost touching, to make it impossible for your tongue to drop too low.

There are also *consonant mods*, because consonants can be brighter or darker too. Consonants interrupt the flow of air from your lungs, by temporarily blocking your vocal

tract with your lips, tongue, or soft palate. A heavier, more intense interruption will generally come across as more masculine, while a lighter, more subtle articulation will come across as more feminine.

For example, if you explosively say "bah!" in disgust, it will sound more masculine. If you quickly say "bababababa" it will sound more feminine, especially if you tighten your lips together to minimize the movement. If you say "arr!" like a pirate, it will sound more masculine. If you stop your tongue halfway through saying that heavy "r" sound, it will sound more feminine, especially if you also raise the back of your tongue at the same time to shrink the space in your mouth. Watch this video to hear the difference between a masculine and feminine "r" and "s" sound.

Your homework is to spend some time every day trying to talk like a Valley girl, in addition to all your other exercises! Start with Lumpy Space Princess in <u>this video</u>. Pause after each line she says and try to repeat it with the same vowel mods - "to get it" becomes "teh get eht" in her accent. Then try it again with a whisper. Do the same with <u>this video</u>, <u>this video</u>, and the Valley girl video above. Don't worry too much about pitch, but pay close attention to the sounds of each vowel and consonant.

When you start to feel comfortable with these vowel and consonant mods, try incorporating them into your other voice exercises as well. You don't have to go to such an extreme that you sound like a Valley girl, of course, but play around with them to see how they change the sound! At the same time, focus on clenching your tongue (like "key") to brighten each vowel and consonant as much as possible, while keeping your lips tight and your jaw almost closed to minimize the space inside.

8. Vocal Twang

Now, if you want to be heard above a lot of background noise, without relying on the booming strength of a masculine voice, you'll need to add a piercing brightness that will give your voice more power and clarity while also making it more feminine at the same time.

The secret is a singing technique known as *vocal twang*. It sounds almost like nasal resonance, where the sound goes through your nose, but it's not. Instead, vocal twang is created by squeezing what's known as the *aryepiglottic sphincter* (or *AES*), which is right at the top of your larynx, above the vocal folds. You can see and hear the difference dramatically in <u>this video</u>, showing the throat of a female singer as she first hums (nasal resonance), then sings normally, then sings with a very pronounced twang.

The best way to learn this is through imitation. Quack like a duck, cry like a newborn baby, or say "I AM A ROBOT" in your best robot voice. They may not be pretty, much less feminine, but all of these are great examples of vocal twang pushed to an extreme. And you want to learn the extreme and then dial it back from there - it's a lot easier that way. So take a moment to try a few quacks, to cry like a newborn, and talk like a robot. Then watch this video and follow along with the singing exercise at the end.

Next, open up the Spectroid app, and say "uhh" in a relaxed voice. Notice where the yellow lines appear on the scrolling spectrograph. Then try saying "quack" like a duck or "I AM A ROBOT" in a robot voice - something with a lot of vocal twang. If you've done it correctly, you'll see a bright yellow band of lines appear past the 1000 Hz mark. The more you constrict the AES, the brighter the yellow band will be and the more you'll hear a harsh edge to your sound. Watch this video for a great example of this, starting with a dark "uhh" and gradually raising the larynx, raising the tongue, and then adding the vocal twang for maximum brightness.

Your homework is to spend a few minutes every day practicing your vocal twang, perhaps right after your open quotient warmup. With Spectroid running, try to imitate the video and say "uhh" in a relaxed voice and then gradually slide into a harsh, twangy "ehh" like a duck quacking, and back down to a relaxed voice again. Watch the spectrograph and try to get that yellow band as bright as possible when you add the vocal twang. Then pinch your nose shut too, so you don't accidentally cheat by using nasal resonance instead of twang! You should be able to do this just as easily with your nose pinched shut - otherwise you'll end up sounding like Squidward, as in this video.

Then try adding different degrees of twang to your speaking practice, to see how it feels and sounds. You could go all the way and sound like SpongeBob SquarePants, take it out completely like his friend Patrick, or add just a hint of it and sound, well, more feminine. See what you like!

Vocal twang is also really great for feminizing your singing, if you're into that. Skillful use of vocal twang can turn a weak falsetto into a powerful head voice, and increase your upper range by an octave or more. It's also the secret behind CeeLo Green's distinctive singing voice, combining a dark oral resonance with a lot of bright vocal twang and a bit of nasal resonance, as you can hear in this video. If you start there and then brighten your oral resonance with a raised larynx and tongue, you can sound like a female singer. Seriously.

9. Throat Closure

So far you've learned almost all of the little levers you can use to change the sound of your voice. But there's one (or two!) more to get familiar with, at the back of the throat. You want to learn to move your *soft palate* and your *pharynx* to shrink the space in your throat, just like you've used your tongue and lips to shrink the space in your mouth. The effect is subtle, but it can often make the difference between an authentically feminine voice and one that just sounds... off, somehow.

You can see a very brief overview of the technique in <u>this video</u>. But to make it easier, you'll want to start with just the soft palate. Look in a mirror and say "ahh" and then "ung" and watch how the back of your tongue comes up, while the very back of the roof of your mouth (the soft palate) comes down slightly to meet it. When they touch, the air is blocked off from your mouth and forced through your nose instead, creating a hypernasal sound. Try the exercises in <u>this video</u> to learn to control your soft palate, and

by extension, your nasal resonance. Generally, you want to reduce this nasality for a more feminine sound.

The next thing you want to learn is how to constrict your pharynx, or close your pharyngeal wall. Doing this will bring in the sides of your throat just below the soft palate (oropharynx), pushing your tonsils against the back of your tongue. How do you do it? Gargling. Say "ahh" while you tilt your head back and gargle, then tilt your head upright again and try to keep the sound going. Or say "ahh" from the top of a swallow-and-hold, or even a whisper siren. Eventually, you want to be able to say "ung" while sticking your tongue way out - the only way you can do that is to push in the walls of your oropharynx, because your soft palate can't reach the back of your tongue while it's stretched out of your mouth. If you talk at the same time, you will sound like Meatwad, as in this video.

If you start with a Meatwad voice, and you bring your pitch up into a falsetto with a fair amount of nasal resonance and vocal twang and a lot of open quotient, what do you get? You get an Elmo voice, as in this video. The reduced space in the back of the mouth and throat is what gives Elmo's voice its child-like quality. Of course, if you take that Elmo voice and bring the pitch down while constricting your pharynx as much as possible, you get a Smeagol or Gollum voice, as in this video. For Smeagol, you want to constrict not only the oropharynx but also the *hypopharynx*, further down the throat, to create a dampened sound like a sob or an old man.

You don't have to take it that far, but if you add just a hint of oropharyngeal throat closure, you can make your voice sound younger and more feminine. This is most clearly demonstrated with a "loli" voice, as in <u>this video</u>. If you whisper with a feminine vocal posture and then squeeze in the back of your mouth and throat a little, you can sound like a cute anime girl. Try it!

Your homework is to spend some time every day trying to talk like Meatwad and the other characters, by playing with your soft palate and pharynx position. And be sure to try whispering too, especially for the loli voice. You can download the Android app Echo (or Voice Back on iOS) and use it to record and play back your character voices, to hear how they actually sound. Don't worry about whether they match a specific character exactly, just see what sort of funny voices you can make!

Then try adding a hint of throat closure to your speaking practice, to see if you can use it to sound more feminine. If you're feeling brave, you can even record and play back your feminine voice experiments to help guide your practice. Good luck!

These are also important elements for singing feminization, especially for a voice like Britney Spears, which combines a fair amount of oropharyngeal constriction with a very *hyponasal* sound, as if from a stuffy nose. You can hear it exaggerated in <u>this video</u>. Imitating that sound is a great way to learn to achieve throat closure while simultaneously eliminating nasal resonance.

```
(continue to Level 4 - Mastery...)
```

L's Voice Training Guide (Level 4) for MTF transgender vocal feminization

.

L's Voice Training Guide

Level 1 - Foundations

- 1. Inspiration *
- 2. Vocal Tract Length ***
- 3. Pitch **

Level 2 - Intermediate

- 4. Resonance ***
- 5. Open Quotient *
- 6. Intonation **

Level 3 - Advanced

- 7. Articulation **
- 8. Vocal Twang *
- 9. Throat Closure ***

Level 4 - Mastery

- 10. Exploration
- 11. **Polishing** **
- 12. Performance ***

Level 4 - Mastery

10. Exploration

Congratulations. You have learned to manipulate every single element involved in vocal feminization! Now for the fun part - you get to play around with all these knobs and dials on the control panel of your voice, and find the configuration that you like best. You get to *explore* the possibility space of your voice!

A great way to do this is with a *mantra phrase*. The idea is to say the same phrase over and over again while tweaking different aspects of your voice, so you can easily compare the sound without thinking about what you're going to say. Watch <u>this video</u> for an overview of the concept and some great example phrases that you can use yourself.

Now, try one of my own mantra phrases, which I designed specifically to help you practice and get a feel for your brightest, most feminine sound:

^{*}easy **medium ***hard

[&]quot;Keep it cutesy!"

Try saying it a few times in a feminine voice, then whisper it a few times. If you break it down and stretch it out, it sounds like "keee-p ihhh-t keee-yooo-tsss-seee!" Try it.

When you say "k" the top of your tongue presses against the roof of your mouth to block off the air, and when you say "ee" your tongue drops down to let the air through. Try whispering "kee" while keeping your tongue pushed up toward the "k" position, so it moves as little as possible to get to the "ee" instead of dropping down so much. That will create your brightest possible "ee" sound.

Try saying "keep" with that bright sound - your tongue should hardly move at all. Then try saying "cute" by starting with that "kee" sound and then pushing your tongue slightly down into a "yoo" sound. Whisper it first, and then say it, moving your tongue as little as possible, so the brightness of the "kee" carries into the "yoo" because your tongue is still pushing up toward that "k" position.

Then whisper "tsss" and try to move your tongue as little as possible from the "t" to the "s" sound. That will create a brighter, sharper "s" which will come across as more feminine. At the same time, keep pushing the back of your tongue up toward the "k" position to brighten it further. This applies to all your sibilants, by the way - "s", "z", "sh", "zh", "ch", "j" and so on! Then try whispering "see" - sliding from the "s" back to the brightest possible "ee" that you can make.

Now put it together. Say "cutesy" - stretch it out like "keee-yooo-tsss-seee" - first in a whisper and then spoken in a feminine voice. Say "keep" and for the "p" sound, really tighten your lips into a small but narrow opening, and keep them tight as you touch your lips together briefly for a subtle, unobtrusive "p" sound. This applies to all your labial consonants - "p", "b", "m", "w", "f", "v" and so on - and you want to keep your lips somewhat tight even for your other consonants and vowels, because it will make them brighter. So use the word "keep" as a reminder of the posture of your tongue and lips that will produce a bright, feminine oral resonance.

Whisper and then say the whole thing, at a pitch that is about as high as you can comfortably speak without going into your falsetto. "Keep it cutesy!" You can stretch out all the sounds to really get a feel for them and find that brightest position. As you say the vowels, practice pushing the brightness to a buzzy, brassy extreme, raising your larynx, pushing the back of your tongue up, and layering on the vocal twang to find that harsh edge. The only thing you want to avoid is nasal resonance. So also try saying it while pinching your nose shut - it should sound almost the same, whether you pinch your nose or not. Practicing this will help you access and lock in your brightest, *cutest* vocal posture and pitch, just by saying the phrase!

Once you get comfortable with that, you can also try some of my other mantra phrases:

"Keep calm and carry on."

This mantra phrase is similar, but with some darker vowel sounds like "ahh" in "calm" which you can practice saying while still clenching your tongue up toward that initial "k" position. There are also "r" and "l" sounds to practice brightening, again, by pushing your tongue up at the same time. Practice whispering it, stretching it out, and saying it with the brightest sound you can make.

"We're beautiful creatures."

This is my favorite mantra phrase. It starts with a "w" to remind you to keep your lips small and tight, then an "ee" sound to remind you to keep your tongue up, then dips into an "r" sound to help you practice saying "r" without dropping your tongue. Then the "b" tests your lips again, and the "bee" to the "yoo" helps you practice keeping that "ee" position with your tongue even while saying the darker vowels. And there is a great diversity of consonants and vowels to practice throughout the rest of the phrase, but no nasal sounds, so you can easily test for nasal resonance by pinching your nose shut. Plus, it's true - and don't you forget it!

"Breathe and smile, smile and breathe."

This is another one of my favorite mantra phrases, both for its message and for its phonetic properties. It starts with a bright "ee" vowel for the first word, but has a number of more complex combinations of vowels and consonants that are helpful to practice. And it's a good reminder!

Positive psychology and neuroscience tell us that the easiest way to feel good is simply to smile - the neural connections that make you smile when you're happy also make you happier when you smile! And a slow, gentle, deep breath through your nose is the easiest way to calm down your nervous system. Whenever you say this mantra phrase, take a moment afterward to make a subtle, almost imperceptible smile with your lips and then slowly fill your lungs as you inhale through your nose, spreading that smile throughout your whole body. Savor the feeling of peace. Then gently let the breath go, exhaling through your nose as you slowly relax your smile. Do this whenever you remember, as many times as you want. It's free!

Your homework is to practice these mantra phrases, and any other mantra phrases you like, to lock in your most feminine voice before your regular speaking practice every day, after warming up. You can also say them throughout your practice as a reminder, or even throughout your day! Try whispering them, too - not only so you can stealthily practice even with other people around, but so you can focus on the resonance, without worrying about pitch! Ideally you want to get in the habit of whispering to yourself in different voices, whenever you can get away with it - this will really accelerate your progress.

Also, use these mantra phrases to experiment with different feminine voices, to see what you like - bringing the pitch higher or lower, adjusting your larynx and tongue position, using more or less open quotient, or vocal twang, or throat closure, and playing with different patterns of intonation and articulation. Record and play back each experiment

with the Echo app, and see what sounds better to you and what doesn't. The goal is not perfection, it's exploration! Then try practicing those voices while speaking for longer amounts of time - reading out loud or just saying whatever comes into your head. And whenever you get discouraged or frustrated, take a moment to *smile and breathe!*

11. Polishing

Once you feel comfortable playing with the many possibilities of your voice, you can start honing in on the feminine voice that you actually want! It's time to *polish* your voice.

Remember that voice clip you chose in the beginning as the female voice you'd like to imitate? Hopefully you've been listening to it regularly this whole time, but if not, now is the time to start!

Find that clip and play back a sentence or two. Then use the Echo app to record yourself saying the same sentence. Listen to the reference clip and then your own recording, and without judging it as good or bad, try going through each element of your voice and noticing where it is similar or different. How does the pitch compare? The resonance? The intonation? And so on.

If an element is different, try playing around with it a few times and then record yourself again, doing your best to match the reference clip. Do that for each element. It's not going to be perfect in one pass, but it's the polishing process that counts. And of course, you don't have to sound exactly like your inspiration voice - it's just a beacon that can help you find your way to the voice you want. And this is just another exercise to practice.

Still, you might find that it's difficult to deconstruct the differences in a voice clip just by listening to it. But don't worry! It's a skill you can practice, just like anything else. And fortunately, there's a great way to practice it...

Every day, people post voice clips on <u>r/transvoice</u>, looking for feedback. And you are going to train your ear by listening to those clips, analyzing them, and responding with your kind and honest feedback. When you are ready, you will join them by posting a clip of your own voice! But first, you will need to create an account on <u>reddit.com</u>, if you haven't already. Do it now - it's free!

Then, go to r/transvoice and find a voice clip that someone has recently posted. First, listen to the clip and just think about pitch. Does it sound to you like the pitch is in the male range, or the female range, or somewhere in between? Open up Vocal Pitch Monitor and play the clip again, and see where the pitch actually falls. Then listen to the clip while just focusing on the resonance, the timbre of the voice. Does it sound hollow and masculine, or bright and feminine, or more ambiguously androgynous? You can watch this video for reference - where would you place the sound on the diagram?

Once you've established the pitch and resonance, you can listen again for the other elements of the voice. Listen for the intonation - the way the pitch rises and falls. Is it monotone or musical? Listen for open quotient - is the voice soft, or hard and strained? Listen for vocal twang - is there a bright, piercing edge to the sound? And is it too little or too much? How is the articulation? Does the resonance drop or sound fake on certain vowels or consonants? Is there too much nasal resonance? Would it sound better with a little pharyngeal constriction?

As you analyze the clip, make note of all your observations in a comment on the post. You don't have to say whether the voice sounds *good* or *bad* - just describe what you hear, starting with pitch and resonance, and then any other details that you notice. If you're not sure about something, you don't have to say anything about it. Then, if the person who posted the clip is actively soliciting feedback on voice feminization, and there are one or two elements that you think they could work on next, share a link to this guide and tell them which sections they should check out. Don't worry about whether your feedback is perfect! Just be kind and honest, and the community as a whole will benefit.

Your homework is to find a new voice clip on <u>r/transvoice</u> every day (ideally one with no comments yet, or very few) and leave a comment on it with your analysis and suggestions. If you do this daily, not only will you develop a very discerning ear over time, you will also help the community thrive!

Also, spend some time every day listening to and imitating your female voice reference, along with all your other exercises. Use Echo to record and play back your attempts, and analyze them just like you analyze the clips on <u>r/transvoice</u>. You may find that a voice that seems too exaggerated in your head actually sounds naturally feminine in a recording - and to other people. Be kind to yourself, and trust the process. Polishing takes time.

When you are ready to share a clip of your own voice with the world, create a free account on <u>clyp.it</u> and record yourself speaking at least a few sentences in your feminine voice, and perhaps a mantra phrase or two. If you're up for it, record the same thing in your starting voice as well, for comparison. Make sure to set the clip to *Public*, then post the link on r/transvoice and ask for feedback!

Regardless of what people say, the important thing is to craft a voice that *you* are happy with. And you are the only one who gets to decide what that means for you.

12. Performance

Eventually, there will come a time when you are pretty happy with your voice, and you want to be able to start using it in front of other people. It might not be perfect, but you feel compelled to tackle what may be the most challenging step of all: going from practice to *performance*.

There are two parts to this. One is learning to launch into your feminine voice whenever you choose, even when you haven't warmed up. And the other is getting over the performance anxiety of using your voice in front of other people - which is totally normal! You just have to take it one step at a time.

To start with, you want to train your brain to experience your feminine voice as the default, not the exception. One way to do this is by *bookending* your day with your voice, by practicing a few mantra phrases in your feminine voice immediately after waking up, before using your voice for anything else, and then again as the last thing you do before going to sleep. The morning is often the hardest time to feminize your voice, so this will allow you to practice that worst-case scenario right away and prime the rest of your day with the voice you want. Also, whatever you practice just before sleeping will be given higher priority when your experiences are consolidated into long-term memory.

Then, take some time every day to practice *alternating* between your masculine starting voice and your feminine voice. Read a book out loud and switch voices on every paragraph, or read reddit comment threads and use one voice for the original poster and another for the replies. If you tend to drift from your feminine voice into a more androgynous voice over time, you can also practice alternating between your feminine and androgynous voices to help differentiate them in your mind.

To make it easier to shift into your feminine voice, you can start with a mantra phrase to help you lock in the sound. This is something you can even do in front of other people, if you whisper it or practice a *stealth mantra phrase*, like "ummm, let's see..." or "ummm, so..." You can use the "ummm" to find the pitch, sliding upward until you reach the right range, and then use the "let's see..." or "so..." to find your resonance. Sneaky!

Your homework is to practice these exercises every day, in addition to any of the previous exercises that you still find helpful. Then, you want to slowly start pushing your comfort zone when it comes to performing your voice in front of other people.

First, find a supportive friend or two, and tell them that you'd like their help in practicing your voice. If you don't feel comfortable asking anyone you know, you can try finding an anonymous friend on the <u>TransVoice Discord</u> or the <u>Scinguistics Discord</u>. Tell them that you would like to be able to call them up and have a conversation in your feminine voice, without having to explain yourself, and without them commenting on whether your voice is good or bad. You just need them to listen and be patient with you.

Then, when you have warmed up by practicing your voice in private, call your friend and speak to them in your feminine voice. If all you can do is say a mantra phrase before lapsing into your starting voice, that's awesome! You've overcome the biggest hurdle. Next time you feel up for it, you can try speaking a little longer, whether you're just reading out loud, or having an entire conversation. And don't worry about whether your voice sounds perfect or not - you can work on that by yourself. Just focus on getting comfortable using your voice with another person.

Once you feel comfortable calling your friend from the middle of a practice session, start challenging yourself a little more. Try meeting up with your friend in person and then, with your backs turned to each other, say a mantra phrase in your feminine voice. Then try doing it while facing each other. Eventually, you can work your way up to having an entire conversation in person, not only in private, but in a public place like a restaurant!

Of course, when you are out in the real world, it's often difficult to be heard over all the background noise. The important thing is to use more vocal twang instead of straining, while keeping your voice soft with open quotient. You can practice this on your own by playing this video and trying to speak over it.

As you get more confident, you can start using your feminine voice more and more throughout your life - even while coughing and laughing, as in <u>this video</u> or <u>this video</u>. Love yourself, and enjoy the journey!

 \sim L

8. Since we're talking about pitch, here's why pitch analysers do not work for trans women.

Hey, so today I want to talk about pitch analysers, uh, they are tricky. And we really don't want to be using a pitch analyser when we're going through uh voice training. We really kind of want to be relying on our ear and how others perceive us as I'm going to demonstrate right now with this pitch analyser that I downloaded from the app store it was the first one that came up on Android. Okay, so let's see, alright I'm going to tune in here (brrrrup) and give you a nice little, a nice little view, bingo. Alright so, this here is my voice right now. This is where its sitting. It's in an androgynous kind of place. Now if I bring it down here you can kind of see how if I bring it way down into the male range, what's going to happen here is that I can keep it down to this place and kind of bring my nasal resonance forward and I'm still down here in the male range and more or less its sounds female, right? So, if I bring it up now into the feminine range, umm you're going to hear the voice take on a slightly different quality of course and it's going to be more feminine, if that's what you want to call it, uh, but listen to what happens if I bring it up into the feminine range in a different way, so here we go. [demo] So now I'm up here in the feminine range and I'm way up at the top of it, but does this really sound that feminine? Probably not, because this is really really...this is a thick thick voice right here. This is nowhere near a feminine sounding pitch or a feminine sounding voice, it's just painful, is what it is. So don't use these, right? Same thing we can do down into the feminine range or...down into the masculine range and make it more feminine, we can go up into the feminine range and make it more masculine. This (gestures to the phone) does not help you, at all, like doesn't help. Okay, that's my rant. I'm done, bye.

10. The Art of Voice Feminization: Part 1

Hi, Z here from trans voice lessons.com and today I'm going to tell you everything you need to know about the source filter model the harmonic series and what resonance actually is okay now I'm working on a lot of videos at the moment but I have to make this one first because it's so so so important now first off you have to understand that your voice is split into three parts you have the power source which is essentially your airflow you have your actual source tone which is the actual sound that your vocal folds make you're never going to hear this and then third the filter which is what your body actually does to the source sound okay now we blow air up our lungs and then we open and close our vocal folds like this [demo] now because of that airflow is let through and airflow is stopped which creates columns of air molecules (1:00) vibrating through pressure okay now the source tone is actually what we call the harmonic series in acoustics the harmonic series is one of the most beautiful and universal concepts in nature it literally is everywhere every single vibrating string every single vibrating reed, umm even an airconditioner that's like oscillating in a stable rate anytime something in this universe creates a periodic waveform motion it generates the harmonic series now the harmonic series sounds a lot like this so I'm gonna go ahead and sing a note here ahhhhh okay perfect now this is what the overtone series looks like okay each of these little lines are what we call a harmonic or a partial or an overtone and each of these is a multiple of the lowest one that I sing so I'm gonna go ahead and sing a note here at 220 Hertz ahhhhh now this is 220 so if I count up ten of these one two three four five six seven eight nine ten this will be exactly at 2200 Hertz okay because it is the tenth harmonic so it is ten times the frequency of the lower one everything we do with our voice is just a modification of these different sounds the last part of our voice is the filter now our vocal tract is nothing but a set of tubes in fact if you look here we have what's called the the rich model we have the lungs and then we have the tracheal column we have the larynx here where the voice actually begins the source starts and then we have finally the pharynx area the nasal passageway and the oral cavity now we can actually reduce this into nothing more than a set of tubes which we should mentally we have the pump of the air coming up from the lungs we have the vocal folds which essentially open and close allowing air to pass through or not we have the pharynx area here and then we have the fork off for the nose and then we have the oral cavity okay now our filter modifies the source we can actually see a small model of this if I go ahead and I take this right here and I play it [demonstrating how modifying length of tube creates change in voice] ah so that's me that's me extracting the first seven or eight harmonics of the overtone series okay now essentially what I just did is what voice feminization is you have all this extra frequency inside your voice all these different frequencies and depending on the length of your tube you will bring out a different one okay a female voice is nothing more than a voice which has a smaller tube and therefore higher harmonics are brought out okay it's very important that you understand that the source that that buzzing sound is universal for everybody whether you are male or female or intersex that is the sound you make unless you have a vocal disorder okay now every other change of your voice is simply the modification of the filter that comes after it okay so let's combine the source with the filter here is a very accurate approximation of the vocal fold source [buzz] it's the harmonic series with the amplitude of each harmonic decreasing and for our filter we can use this graphic equalizer the filtering behavior of the vocal tract is identical in behavior to this equalizer you'll notice that as I drag this resonant point around across the different

parts of the source the sound changes brighter or darker [Music] this is what is occurring to create the human voice in fact it's fairly simple to create accurate human voices from scratch let's try it so first we're going to take a source tone and then we'll apply parts of the filter to it first we'll go ahead and make a male voice and now we'll make it say a few different vowels [Music] now let's do the same thing but for a female voice [Music] now I'm sure you're wondering how we figured out where those resonant peaks were supposed to be at well the human voice is essentially a cylindrical tube with one end open and one enclosed so the vocal tract resonances manifest in a fairly predictable way if we reduce the whole vocal tract to just one tube the formula for finding the first vocal resonance is very simple it's R1 equals the speed of sound over four times L now we can plug in length and by calculating this we'll be able to find the first vocal tract resonance okay and then from there due to the behavior of standing waves in a closed tube such as the vocal tract you can just multiply by odd numbers and get the next couple resonant frequencies previously we made a male and female voice so let's look at the difference of these with the two formulas outputs if we plug the male vocal tract length average in which is about 17.5 centimeters we get this now if we plug a female vocal tract length in will plug in 14 centimeters we get this okay the vocal tract length and the behavior of the vowels determines the behavior of the resonance this highlights the most salient difference between a male and female voice. the unique configuration of space and length can be altered by the tongue larynx height, mouth, pharyngeal constriction whether the nose is active, lips, and other elements which cause the resonant peaks to move and shift around, depending on the shape and size of the vocal tract the reduction or addition of any geometric space within the vocal tract behaves consistently, more space and length will shift the resonances lower which will make your voice sound darker and more masculine. less space and length will shift the resonances higher which will make you sound brighter and more feminine okay let's take a look at some more examples of resonance in action let's take a look at the way vowels behave A-I-O-U and now let's look at the influence of the lips U-U and now let's look at the reduction of larynx height by raising the larynx which creates a uniform change in resonance U-E-U mm okay good and lastly male versus female voice um heat from fire, fire from Heat, heat from fire, fire from heat, now in summary the voice is a three-part System: power source and filter, the air comes up from your lungs transferring energy and the vocal folds open and close this energy so that you have pressure waves that move across the air molecules and that sound of the vocal folds is the harmonic series then which it is deformed by the tubing that you have the tube length thus in consideration of everything that I've said the actual goal of trans voice is to eliminate as much geometric chamber space in as many places as possible in a way that is as healthy and sustainable for your body and voice in the long run as possible by rooting and conceptualizing our voice through the lens of acoustic physics it gives us a predictable model which allows us to alter our voice with Consistency, now if you have any questions whatsoever or any interest in studying or working with me in any capacity please feel free to email me at trans voice lessons at gmail.com I look forward to hearing from you and I am so overwhelmed by the amount of feedback and support and just I'm just yeah I totally can't even talk about it so thank you so much for watching and listening and I hope you the best and stay tuned for my future videos bye bye

12. How to brighten oral resonance and lift the larynx with one simple movement.

Hey, so, today I want to talk about larynx height and what larynx height actually means. Uh, so, y'know we've all heard of that, um, that idea of like swallowing and I mean, it kind of works, but its also really tense and its difficult to hold up for long periods of time, even for myself who is a professional voice teacher. Uh, so, I want to show another way that you can keep this larynx in a higher position, keep the pitch up, without necessarily sacrificing the feeling of being relaxed. If we look at the tongue, tongue connects, it's a..its a huge muscle, it connects all the way back here, down to the...down to the throat. So, we want to take the tongue and move it forward and you'll notice that the larynx lifts and lowers as I move the tongue forward and backward [demo] right? So, this solves two issues. One, if our tongue is in a more forward position, we get a tighter oral resonance, which creates a smaller voice and if we have a more forward tongue it lifts the larynx. So, what we want to do is kind of say "key" K-E-Y, three points of contact: one, two, three [demo: key, key, key] and now if we hold our tongue in this sort of like forward position, everything is sort of in this nice, , relaxed place, as opposed to, when I'm swallowing and I'm trying to keep everything all up and tight and its like, kind of painful. So don't do the swallowing method. That doesn't help ya. It just creates painful voice and I don't know, I don't like it. But its bsxh bhsx it's just preference. Anyway, if you wanna hit me up in the comment section below with more questions, I'm happy to answer, or shoot me a message for voicemail. Voicemail? Voice lessons. Peace, happy pride!

13. How to cough cute in two minutes

Hey there it's your girl Z, from transvoicelessons.com and in this short video I'm gonna teach you how to feminize a cough now first off you have to understand that the human brain interacts with sound in three dimensions time, amplitude, and frequency in fact every sound that you've ever heard in your entire life can be perfectly recreated with some values of time, amplitude, or frequency now when your brain hears a sound it quickly decomposes and deconstructs that sound into a few key events: the attack, the decay, the sustain, and the release we call this an envelope okay now each sound has a slightly different behavior throughout all of these variables but your brain weighs the attack of a sound much heavier which means it's much more important than the rest of the sound okay and you can feminize your coughs very easily by simply replacing the attack on your coughs with a short burst of high pitch like so [demonstrates] and then you just put that in front of a cough [coughs] do you hear it yeah it doesn't matter how I cough if the attack of it sounds cute and feminine then the rest of the cough will be rendered in a way that sounds cute and feminine to the ear because the brain weighs the attack of a sound so heavily okay so here's the simplest way that you can start doing this first let's just take a very high-pitched kind of sound and just go eh eh eh now then do that and then cough very gently after it eh cough eh cough eh cough and then slowly work on decreasing the time between the two so the sounds are one [demonstrates] [laughs] now that was a bit over exaggerated of course right like I'm not going to be coughing like that in person but even which is the softest amount of alteration to the attack of a cough you

can quickly reprogram the person's brain who hears you and to understand the ear cough is feminine and cute and wonderful okay I hope this helps you all if you have any questions please just let me know down in the comments if you would like to work with me one-on-one please email trans voice lessons at gmail.com if you'd like to support me check out my patreon below in the description everything helps thank you all so much this has been such a crazy journey and I feel like it's just beginning so I can't wait to help you even more take care bye

17. The easiest way to find nasal resonance.

Alright so today I'm going to talk to you about nasal resonance. Nasal resonance is one of the easiest things that we can do to find a feminine voice regardless of pitch. That's why I speak at a lower pitch and my voice is a more feminine place because I have a lot of nasal resonance. So, the easiest way to find nasal resonance is through this hum method, umm. First of all we want to start with breathing through the nose, mouth closed, tongue flat. [demo] Feel the air flow going into the nose, feeling the soft palate come forward and allow the air flow to be present in the front of our face. Forward-facing resonance. The next step is to take in a hum. So, exact same thing, adding a hum with that air-flow. [demo]. We should feel some vibrations happening here (gestures to nose), vibrations happening in the lips (gestures to mouth). Pitch does not matter in this case. We could be at any pitch and still find nasal resonance. The third step is to open the mouth, we want to have a slight "ee" sound, that'll give a nice bright sound and add in that nasal resonance. [demo] You should still feel this forward facing resonance. I feel it like right about here (turns head and gestures to cheek area beside lips), kind of like right where, right here where my canines? Are is that what...I can't remember that tooth. Fourth step is to take that hum and the open mouth and add actual words to it, or a passage of sorts. So, I like to use the rainbow passage. Treat it very monotone, elongate each vowel. The focus here should just be the forward facing resonance, words don't matter, just putting this into the front of our mouth with different sort of consonants. [demo "when the sunlight strikes raindrops in the air" Everything is forward, everything is...has a nice bright sound. When you do that you're going to start opening up this place in a much more frequent way, umm and you can start letting go of the more monotone voice and start incorporating just everyday sort of speech. Elongate those vowels, no matter what rate of speech you are at, its also a more feminine way of speaking, is to elongate those vowels. So, you can focus on that nasal resonance and elongate those vowels and you're going to have a much more feminine voice overall. So, if you want to take lessons from me, uhh you can do so in the uhh in the comments, I have a... I have a little note down in that place and uh let me know if you have any questions as well, in the comments and I'll be answering them throughout the day umm trickling off sometime tomorrow. Okie, bye, have a great day.

24. Voice Feminization Guide for any Voice Type

Hello, today I will be covering the core fundamentals of vocal feminization I do not have any formal training and all of this is self-taught through various guides and resources found online. However, I've been getting a slew of requests and figured may be explaining it the way that I learned will help someone this guide is meant for anyone who's looking to feminize their voice out of necessity is curious to the process or simply for voice acting purposes and for those of you who believe you have too deep of voice or don't have what it takes to pass successfully allow me to demonstrate this is my old voice or at least as close as I can get it now and this is as deep as I can go now while still sounding believable which apparently now to even get to that point I have to throw an accent on which is strange I quite literally got a job at a radio station simply because of my deep neutral voice so don't think you can't make it you definitely can. the vocal component is divided into two separate parts: movement of the larynx or Adam's apple and mouth space. Raising your larynx changes your pitch and slightly changes resonance whereas mouth space greatly changes resonance and is usually the difference between sounding, for lack of a better term like a flamboyant man or a woman. Now there are muscles in your neck that control the upward and downward movement of your larynx these muscles are used almost entirely just for swallowing and as such you won't be able to flex said muscle without first training it. Let's say you want to be able to flex your abdomen but don't have enough muscle built in the area to do so so you do a bunch of crunches and boom suddenly you can tense that muscle to flex but as hard as you tried previously it just didn't happen every muscle works in that same respect and muscles we're dealing with here are no different so how exactly do you train muscles that are only used for Swallowing? simple you hold a swallow what I mean by this is you swallow and while it's at its peak you tense your neck and hold your larynx up you stop yourself from finishing swallowing. To demonstrate let's see if I can do this properly without raising it like on my own [shows Adam's apple moving up and being held] it's important to note that by doing this you won't be able to breathe or speak this is just how the process works this technique is purely for building the groundwork and allows you to flex those neck muscles at will. You'll want to do this strange process several times a day when I first started this process I was working at a dollar store I'd stock shelves and any time I remember to I would hold a swallow for a few seconds release wait a bit and do it again it's a boring process but one of the only ways to build upon that muscle just make sure not to overexert yourself if it starts hurting or aching stop give yourself breaks every now and then it's going to take a while before you're able to flex on your own but once you can you'll never have to do this process again and trust me you won't want to so how do you actually flex your neck muscles I originally had to kind of push my lower jaw forward slightly to flex them everyone's different I assume in a sense of what works for them but the muscle you can feel comes from around your Adam's apple to the end of your jaw towards your ears when I purposely flex my neck I hear a very slight subtle sound in my ears I can quite literally hear myself flexing this may not be the case for you but hey if it helps it helps this sound doesn't happen when I'm speaking though probably because I'm not exerting the muscle as much to the point where it's you know audible. from there you'll want to try raising your larynx with those muscles simply flex a bit and speak it may take a little while but keep trying until you notice improvement it's important during this stage however that you utilize speaking this way as much as possible otherwise you

will not gain any ground if you aren't out of the closet yet you could always utilize this voice for things like drive-throughs, phone calls, video game coms, etc. I know a lot of people who have dysphoria over their voice making it difficult to practice and trust me I was the same way. my advice to you is to sing in your car whenever you drive anywhere alone: just put on some music loud enough that you can't hear yourself and sing along every once in a while turn the music down and see how you're doing get terrified of how you sound, turn the music back up and continue. The second component is a very difficult abstract concept that I'm going to do my best to try to explain it's known as mouth space mouth space is utilizing your tongue jaw etc within your mouth to create a smaller sound in a sense so try this say he now try saying it again but while doing so suck in more air than putting out more vocal component um I guess the way to explain it would be it's a [slurp noise] like everyone does the little [slurp pop] sort of noise just do that without the pop at the end while you're doing this you'll want to take note of the position at which your tongue is umm you'll notice that it is closer to the roof of your mouth and maybe even pulled back a bit this actually changes the resonance of your voice you may not think it does but it's actually really important the way umm this works for your voice is you want to try and raise your tongue toward the top of your mouth at the same time that you raise your larynx it's very it's very hard for me to separate these two aspects from each other now but I'll try to do so let's see. you can see it's still moving but and doing both and then speaking should change the overall sound of your voice mess around with it a bit eventually come to understand what I mean hopefully as I said it's a very very difficult abstract sort of concept to explain but if there was a more concrete way of doing so I would definitely be explaining it to you in that way I hope that this helped in any small way please let me know if there's anything I can further elaborate on or demonstrate I would love to help as many people as I can because this is voice is so important in your day to day life and having the voice that you can be confident in is huge and it was really really big for me so if you have any questions please leave them below and I'll try to answer as many as I can either way have a nice day and thank you for watching

27. The Art of Voice Feminization Part 2A: Larynx

Ey there, it's Z from trans lessons.com and in this video we'll be learning all about the larynx we'll be discussing it in several parts. first basic knowledge then we'll be listening to it then I will walk you through it and I'll teach you how to raise your larynx. we'll go over common issues and then we'll start to wrap up okay um I strongly recommend watching the previous art of voice feminization video if you haven't it will be a very important primer to this process um and so yes without further ado let's get started. the larynx is a muscular mucosal chamber in which your vocal folds reside in the position of the larynx can be altered through various muscle groups when the lyrynx is raised the vocal folds are positioned closer to the lips which shrinks the overall length of the vocal tract which makes it sound a lot brighter and more feminine when the larynx lowers the vocal tract extends and the resonances shift a lot lower and so it sounds a lot more masculine and dark okay let's go ahead and listen to some examples of larynx alterations umm okay so this is like with absolutely nothing going on it's a little hard for me to maintain but this is with nothing umm and now I'm going to slowly lower the larynx right

and you can hear how it's much darker it's kind of puffier it's goofy sounding it sounds a lot like the typical dunce voice like uhh duh like that kind of thing right um now let's listen to this sound of a raised larynx umm I'm gonna start, [lowered sound] I'm gonna start here [lower sound] and then I'm just going to slowly start to raise the larynx right until I'm all the way up here [raised voice] and you can hear that when I raise the larynx the sound gets a lot brighter it sounds a lot brassier kind of more metallic and sort of crisper okay um now I'm going to speak and I'll shift from low to high low to high umm okay so here I am I'm speaking and I'm just going to slowly start to shift the vocal tract resonances and I'm going to lower the larynx and in fact uh if you look carefully you can even see this ss I'm slowly doing it right and so it's getting brighter and brighter and then I'm going to I'm all the way at the top now and then I'm just gonna slowly start to lower it again alright so you can hear that and you can see that very clearly I'll give you another demonstration of it okay um so [lowering and raising larynx on ooooouuuh] so first off you have to understand something before we get into this and that is every single sound that ever enters your vocal tract gets influenced by your resonance it doesn't matter what it is mechanical toothbrush [altering larynx height with toothbrush in mouth] if it's noise [altering larynx height with shite noise in mouth] anything that goes in there sound wise gets affected by your resonance and that is absolutely true of your breath okay so the breath is the easiest way for you to learn how to alter your larynx height, breath, or noise which I would recommend so first off I just want you to mimic me and listen very carefully and do what I do okay [breathing sounds] okay your turn okay good and now try and do this okay [breath low, breath high] Okay did you manage to get that I'll do it again [breath low, breath high] you can hear it kind of sounds like I'm saying haa right that's what you want it to say you don't want it to he or hee hu or none of that it must be [breathing high] work up slowly [breathing low, medium, high] okay now what you're hearing there is your actual resonance okay because your air is just a flat noise signal and when it gets passed through your resonant chamber you can hear the sound of the chamber better than you can when you're actually producing a pitch okay so I want you to try this again you know think like a vampire sound like this [breathing high] okay that is actually optimal resonance for what you're trying to do at least stuff back here we, we can still control and influence a lot at the front of our mouth but this is controlling the back of the mouth okay and the larynx and the back of the tongue so I'll give it to you again [breathing low, breathing high] okay try that a few times and rewind if you need to after you have done that if you successfully feel like you've got that correct sound seamlessly turn that air into a singing note like so [demonstrates] okay so I'll do the whole thing from the beginning [breathing, note] heat from fire fire from heat and that's what my voice sounded like if I use that particular resonance that I was testing okay now there's a reason why we do this for the overwhelming majority of people I've worked with if they try and jump straight to talking after they've raised their larynx they will just immediately drop their larynx and get no effect so what we are doing first we use the air sound to hear exactly what our resonance is doing then we take that resonance shape and we simply turn it into a note that we're comfortable with so that we make sure that we're creating sound with the proper resonance then you can try and talk so in full the exercise would look like this [demonstrates breathing, note] heat from fire fire from heat okay good give it a shot and rewind if you need any clarification on this and you know there's lots of variations that you can do with this experiment with your larynx using external

noise you can take brown noise or white noise play it on a phone put it up to your mouth [manipulating larynx into noise, then into sound] and you can practice your residence that way in fact I would argue that that is by far the best way to do it so do that if you'd like and you can also do that fluid version with your breath - like so [gliding with resonance] heat from fire fire from heat okay some people find that easy and some people find this step easy some people find the noise easier you should try all of these and see if one of them sticks for you okay now after you do that you'll want to make sure that you avoid a few common issues okay so the number one common issue is flipping into falsetto when they go to sing the note and that would sound like this and then they're a period and it doesn't quite sound right don't go into your falsetto I recommend starting with a comfortable pitch for you not something crazy high typically I would say anywhere between a hundred and sixty to two hundred and fifty Hertz when you're doing this exercise otherwise you can just pick something that feels comfortable for you make sure that you avoid your falsetto. Two: a lot of people will alter the resonance with their tongue instead of the larynx anytime that you change anything in the vocal tract it will actually change your resonance and so what a lot of people do is they go and they try and do this exercise and their tongue starts coming forward and starts changing that so it'll sound like this if that occurs and you can hear that it sounds higher it sounds like your resonance has gotten brighter because the oral cavity resonance has but that's not targeting the larynx which is the goal of this exercise okay so you want to make sure that you don't go [demonstrates] no heh's no nee's none of that try and keep it hah that actually ensures that the tongue is in a somewhat neutral position which is allowing all the change to come from the back of the tongue and the larynx okay good the third most common issue is raising the larynx too high and getting a very choked or fluttery sound it sounds like this if you do it like that right. what that is, is the back of your tongue lifted so high that it's actually sort of bouncing against the top of the palate or the back of the throat either one and it's sort of opening and closing, creating the sort of friction-y, fluttery sound if you hear that that indicates that you're actually too high with your larynx and you'll want to go lower okay just a little lower than that area there fourth most common issue is tensing the neck muscles instead of allowing the correct muscles to perform the motion I see this pretty often some people they think it's in their neck that believe it or not even though we're raising the larynx it's not really like a neck phenomenon it's much more like a tongue phenomenon make sure your necks not tense in fact if you look at mine it barely does anything there's no extra muscles there's no extra tension that's it okay so make sure you don't have that. the fifth most common issue is squeezing the vocal folds too hard some people when they go to do this they have all this vocal hold closure and it sounds like this right like they're like fighting or straining we don't want that we want to stay very calm very relaxed no choking off the sound okay good. the sixth most common issue when people try to raise their larynx using these techniques is they don't listen okay listening is the single most important thing you can do in this entire process you literally have to use your ears critically, you have to think very critically and ask yourself what am I hearing, am I creating that how is it different? how can it be closer let your ears guide you and really listen okay. But the key to this process isn't how it feels it's not what muscles you're using it's what it sounds like it's using your ears and this is something a lot of people don't seem to quite understand sound is literally a picture okay when you hear someone's voice or when you hear a vowel or

when you hear a sound you are literally hearing a blueprint, a guide and a diagram of what the inside of that person's body looks like okay so if you're trying to learn to feminize your voice and you're trying to do these exercises maybe it will help you to think about muscles, maybe it might help you to think about feelings, but I guarantee it will help you if you use your ear and you really listen and ask yourself what does this sound like how different is this how am I different what's different about mine and you really start to get critical with your ears okay the ears should be the guide for the voice. in conclusion the larynx is a chamber which contains your vocal folds the height of this area and the sort of proximity of it can be altered when the larynx is lifted upwards it brightens the sound making you sound more feminine and when the larynx moves downwards it darkens the sound making you sound more masculine. review the exercises given in this video and listen very carefully to the samples I want you to experiment with all of the different techniques and let me know if this works for you or if you have any issues there's honestly so much more to know and explore and to fully digest but I wanted to keep this video somewhat simple, clear, and easy to follow feel free to ask any questions in the comments below and if you have any interest in working with me in a one-on-one setting or you have any other questions please email trans voice lessons at gmail.com don't forget to Like and subscribe and if you would like to support me I do have a patreon which lots of exciting things go on for each month and you can find that link here and if you have any other questions just reach out and uuh I I love you all so much and thank you so much for allowing me to continue doing this and for me to get ffs and just honestly thank you and I love you and I can't wait to help you all more and expect more instructional videos like this in the future and yes bye that's all for now Cheers

32. Y'all need to quit using the voice pitch analyser app.

Yes, it's an easy way to see where your *pitch* is, but the fact of the matter is that pitch doesn't really matter when it comes to having a convincing female voice. Yes, it can *help*, but it shouldn't be what you're focusing on, especially since straining your voice to make it a higher pitch can really really damage your vocal chords. It's *dangerous* to focus on that. My partner's AFAB, and their regular speaking voice is only about 10 Hz higher than my guy voice is, and is almost fully in the range of "male" according to that app (lil bit into androgynous on the high end), but it sill reads as female. Why? *Resonance*.

I'm not the best source of info on this, so go to <u>this video</u> for better info. Basically, the short version is that you need to have your voice being used in a smaller space for it to read as female. It's possible to have a deep voice resonating in a small chamber that sounds female. How do you make the resonance chamber smaller? It's simple in theory, but it takes a *lot* of practice to do.

The basic two things you need to focus on, resonance wise, are raising your larynx and having a smaller space in your mouth. There are exercises and videos and all that on this sub; just check the sidebar and/or sort the sub by top of all time.

Just, please, for the love of god, stop with the VPA app. Chasing a "female pitch" without the other stuff is just gonna hurt your voices and set yourselves back farther.

35. Art of Voice Feminization - again

47. And I'm Still Here Struggling (How To Do The Girl Voice Youtube)

Hi, I'm Matt about a year and a half ago a co-worker of mine, Ryan took a video [train sound] hey now and people really liked it or hated it either way they watched it a lot a lot of times people watched it so many times so a lot of people have emailed me asking about how to do the girl voice so here it is how to do the girl voice. I'm gonna try to break it down into a few items with enough practice these items I think are pretty manageable so let's just start while the starting's good that's not a phrase that's not phrase I'm nervous all right item number one vocal posture item number two the accent subset of the accent is the musicality so we'll call that two be or not to be I tried to resist it shame on me number three is pitch here we go let's dive in make it fast quit wasting time quit wasting everyone's time Matt bullet point number one vocal posture what does vocal posture mean vocal posture is the posture of all of the things that make your voice happen here comes the train step one is a raise the back slash root of your tongue and then B. lower your soft palate if we do like a K sound or a G sound or an NG [makes /k/, /g/, /ng/] you can feel the back of your tongue coming up to meet your soft palate generally speaking that makes your mouth feel a little bit smaller and it makes more resonance in the front of your face oh also um you're going to want to close your pharyngeal wall so the pharyngeal wall is the back of your throat as it descends toward your voice box so if I make my mouth smaller right and I'm trying not to do an accent or anything but if I just make my mouth smaller and then if I close my pharyngeal wall it just changes the quality of your voice so make your mouth make your mouth smaller just do it the vocal posture accomplished item number two the accent. I would recommend picking an accent that you know if you're from the east coast your accents gonna be pretty different if you're from the Great Lakes area from the south from the Midwest if you're from another country wherever you're from the the voice that you're going to be imitating is probably going to be different than what I'm doing if you want to imitate mine I mean I can't stop you so it's your life but I think it's easier to imitate something that you know the biggest part of that for me musicality which is why I made it its own sub point two B but if I like just do the musicality and I don't do the accent at all already starts to like make a pretty big difference right and I find that it helps if I like get my body into it as well sort of like conducts it for me so there's the musicality pretty big deal find a couple things that you can really anchor your accent in for me it's the r's and the s's if I just focus on the r's and the s's then it already starts to create a sound that's a little bit different and then if I add in the musicality and I change the musicality while also doing the r's and the s's then it's like something that's like really different right so then finally pitch whatever you do don't talk in falsetto falsetto has like a hollow sound like this focus on just like pitching up as far as you are comfortable with your voice. If I just like pitch my voice up like a little bit as you'll see it's really it's really not that much higher than I talk normally if I get rid of the accent and I'm talking where I talk in the girl voice it's kind of high but not really that

high I know people who talk like this I talk like this when I'm excited. If I put my voice up in that spot as high as I would normally go if I were to have a higher voice like just slightly higher than mine I'm not trying to go like really really high. If I go just a little bit higher than the way I normally talk and I put on the vocal posture and then I put on the accent as well then you're gonna have the imitation that you're looking for [train sounds] step by step adding them all together ready vocal posture raise the back of your tongue lower your soft palate close your pharyngeal wall okay think about making your mouth smaller so then on top of that you're gonna do the accent pick a couple things you can latch on to for me it's the r's and the s's and then you're gonna want to think about the musicality think about the musicality think about the vocal posture I think about how they tie together and then on top of that you add pitch don't think about going crazy high just think about talking like as high as you can in your normal voice like what's just like a little bit higher than you might talk you don't have to talk high I know lots of girls who have voices that are lower than mine it's really not about making your voice high so that's it how to do the girl voice well that's like the beginning of it if you would like to learn more or you have any other specific questions go ahead and message me or you can go to my website and send me an email through the contact page that is probably gonna get a quicker response to be frank I'm not Frank I'm Matt be sure to subscribe I guess I don't really know what that means I assume it means it will update you on new videos but as it took me a year and a half to make this one the end have a good life I hope your life is good bye

53. Look inside my mouth! Oropharyngeal closure and tongue

Hi there it's your girl Z from trans voice lessons.com and in this video I'm gonna do something I never thought I would do show the inside of my mouth to the Internet this is something that I feel will be really beneficial for a lot of you out there who aren't so interested in the information but who still want to feminize their voice so let's take a look alright so first off to feminize the voice you have to raise your first resonance. the first resonance is inversely related to the size of the throat so if the throat is very big then the value of it will be very low in your sound and if the space of the throat is very tiny then the R1 goes higher now in order to raise R1 we do several things we retract the root of the tongue we elevate the root of the tongue we squeeze the oropharynx and the larynx also raises okay so I'm gonna show you now what that looks like when it occurs the two biggest things that you need to look for are one the walls of my throat doing this okay that is your oropharyngeal closure and it's very important to sounding female and then you will also see that once I add the rest of the technique the tongue actually elevates and comes back like that okay so let's go ahead and look [video demonstration of oropharyngeal walls coming closer together and tongue bunching in back of mouth] uhuh heat from fire now here's what it looks like when I do Oropharyngeal closure by itself [demonstration of oropharyngeal walls medializing] now notice how the tongue then elevates after that [demonstration] ah heat from fire alright so in full voice feminization should look kind of like this [demonstration] ah heat from fire and then I sound like that okay and all I'm doing is maintaining something similar to that in the back of my mouth while I'm talking and that's what makes you sound female because that space back there is being decreased by all these techniques and as the space decreases their resonances

climb higher which make you sound female okay I hope this video is helpful for you all if you have any questions comments or concerns please post below I just wanted to make a super short video that just shows that for everybody don't forget to Like and subscribe don't forget to check out my patreon feel free to post below if you have any questions and of course trans voice lessons at gmail.com if you want to contact me by email thank you all so much for watching bye love you

55. All Vocal Sexes Demonstrated. Hear and see resonance and pitch

Hey everyone it's Z from trans voice lessons.com and in this video I want to demonstrate the differences between resonance and pitch. One of the most difficult aspects of altering the voice is learning to separate your resonance from your pitch when you finally manage to detangle these two crucial elements a vast world of sound will be rewarded to you alright the way I like to think about this is with a simple x and y graph okay so on this graph the y axis represents pitch from high to low and the x axis will represent resonance from dark to bright okay so sit back get comfortable and I'm going to show your ear the difference between resonance and pitch once and for all wherever I drag the indicator that's the sound I'll do my best to make alright yeah so I'm gonna start kind of in the middle of the female average here and I'm just gonna slowly start to bring the pitch down a little bit on that bus so now I'm in the kind of bottom part of the female average here um and then I'm actually just gonna go I'm actually just gonna go all the way up into the very extreme corner of the female voice now I'm actually brighter and higher than a lot of female voices and what I'm gonna do now is I'm just gonna take this I want to keep the resonance the exact same and I'm just gonna slowly start to bring the pitch down over time but I'm gonna keep the resonance the exact same okay and now I'm all the way down here with like a lower pitch but I have really really bright resonance okay and then I'm just gonna slowly start to bring the pitch back up on that okay and now I'm back up here in the very very brightest of the possible sounds to exist and I'm gonna keep my pitch the exact same but now I'm just gonna slowly start to talk through my voice okay but I'm still here pretty high pitch put up quite dark with my voice okay no just gonna go ahead and start there brighten it back up until I end up back up here okay and I'm just gonna slowly start to darken the resonance again and now I'm just gonna slowly start to bring the pitch down while I'm also keeping it nice and dark and everything like that and that I end up with something like here okay and now I'm actually gonna just slowly start to bring this into the very middle Of the androgyny zone for me this is kind of what I interpret my own voice as androgynous with and now I'm just gonna slowly start tapering it back up into a linear area and feminine and now I am bright and feminine slightly higher and brighter than the female average okay and now what I'm gonna do is I'm just gonna start to lower the pitch a bit right and I'm gonna end up with like a kind of like richer but like brighter like female voice right um okay so now I'm gonna start right in the middle of the female average and then I'm gonna try and do a linear transform to male and back okay so this means I'll move across both axes equally so here I am and I'm just gonna slowly start to make the voice bigger until I'm here and I'm slowly just going to start to undo the exact same until I'm like back up here okay um and now I'm gonna go from like a really bright feminine sound all the way to like a really really dark and heavy sound um something to take note of is that if I keep my voice very dark but I start to go

up in pitch like this I actually don't really pass which is a wonderful example of why pitch is not the element that gets you gendered in fact now what I'm gonna do is show how if I'm very very high-pitched but very dark and then I just go across the chart all the way on the other end if I'm very very low but I'm very very bright I'll still sound female so what we can obtain from this is that what matters a lot more is the resonance okay and you can see the way the colors are orientated on this where the purple androgynous zone is it's not equal resonance strongly controls the perception of the voice and the ability to change your resonance mid-speech without actually changing your pitch is an incredibly useful tool a lot more useful than their need to change your pitch without changing your resonance um yeah and now I'm actually...now I'm actually gonna speak in like an actual like true kind of true androgynous zone like right here right and then I'm just gonna slowly start to bring the pitch up a little bit right there okay and now we start to get in something that sounds a bit female and now I'm gonna go back to the actual true and androgyny sound right here right and then I'm just gonna sort of start to bring the pitch down and then I'll bring the resonance a little bit in the section here and I'm just gonna start to do it completely linear transformation up into the slightly higher female average over here okay and then like I'm just gonna sort of expected bend the resonance a little bit darker until I'm over here and then I'm gonna go ahead and make it brighter again over here um and yeah heat from fire like now I'm like all the way up here in this like super super super bright area right and then I'm just gonna slowly start to bring it across the chart until I'm back to here and now I'm actually like back into like a true androgynous area which is sort of a neutral pitch zone with like not dark but actually I'm more like right here which is kind of bright okay so here I am like a little bit higher than the female average um yeah now I'm like definitely like in the female average okay um and then I'm just gonna kind of darken this up even more but I'm gonna try and stay female right um and then I'm gonna kind of keep going with that and then I'll end up in kind of like a true and androgyny zone where I'm not like that dark or that high and then I'm gonna slowly start to go a little bit a little bit darker with it right and then I'm gonna just keep broadening up and also moving the pitch down a little bit until I'm like all the way down here okay so this is like a very heavy section here umm right here and then I'm just going to slowly start to bring the pitch and the resonance up on this one until I'm back into like a sort of lower sort of lower female average area right here right now if you're looking for those kind, if you're looking, if you're looking for those kind of, alright so um, now if you're looking so if I start in the middle of the female average if you're looking for those sort of dark rich female voices what you're gonna do is you're gonna ah you're just gonna bring the pitch down right until you're sort of on the outer boundaries of where you would typically see like voices this is sort of a more like kind of butch female kind of sound right my pitch is pretty low I'm still bright the lower I go in order to stay female I'll need to get brighter and brighter and brighter until like here I'm at the very lowest pitch I can produce but I'm like as bright as I can possibly be right. Now this section over here is very interesting this is like a really really high pitched voice but it's quite so those are like a really interesting section it's like a high pitch voice um but it's very dark right (muffled) (I'm actually go even darker) and I'm just going to slowly start to brighten the resonance until I'm actually um yeah actually I may be like a little bit more feminine than the female average right and then I'm just gonna slowly start to bring the pitch down over Time until I'm back to here right alright I want you to understand that there are essentially four or

five primary sounds you need to get in your ear you need to get the female average in your ear um you need to get like the male average in your ear you need to get the dark Resonance but a high pitch and you need to get that bright resonance but a low pitch in your ear those four sounds are so crucial and you can troubleshoot a lot about your voice depending on how you compare it to those sounds if you start to change your voice and you feel like you sound boyish or sort of it boyish and kind of fake well that would probably mean you need your resonance to go brighter and your pitch is fine if you sound too brassy and buzzy that might indicate that your pitch needs to go up okay so I hope you enjoyed that the big takeaways from this you should start viewing your voice as a two-dimensional thing in reality it's like like an 8 dimensional thing or maybe even more I don't know I'm still trying to figure out how many dimensions we could map it to but you want to learn how to separate your resonance from your pitch okay they are entirely different elements and I hope you can use these recordings to help you hear that and further develop that capability if you have any questions whatsoever please leave a comment below go ahead and check out my Patreon too - if you have any interest in supporting my work and thank you all so much for everything that you do for me and I can't wait to keep making more videos for you I love you all good bye take care have a good day

57. "Advice" for mtf in retail

Hi, I know I'm just some random person.

But I'd like to give a little tip to my mtf sisters working in retail. I *personally* find it very hard to find time to practice my voice, but I've recently been using it whenever I speak to customers. No one bats an eye because it comes off as just a "customer service" voice. It also helps make dealing with customers more tolerable for me and keeps me in a better mood.

66. PSA: Having a deep starting voice doesn't mean you can't achieve a passing feminine voice

Not practicing on the other hand, determines without a doubt that you won't have a passing female voice.

I was really hesitant about starting practicing my voice because I felt there was no point with a voice as deep as mine. Thankfully I had an amazing MtF friend with an equally as amazing voice to push me and give me advice. And with her in-depth and honest feedback I got to a voice that isn't terrible in a couple months. It still doesn't feel completely natural but that's on me for not using it more and, if what I'm told by other trans girls is true, it actually will with time. I'm in the closet and living with my parents so I'm not able to practice that much. I know it can be hard to make time to practice, but the closer you get to the life you want the more you realize that it's all worth it.

Edit:

The video that helped me the most Really just go ahead and watch all of her videos.

A few tips I picked up along the way, aside from the common ones like pitch, resonance, etc that you find everywhere:

- I found it super helpful to practice the stereotypical gay guy voice and the valley girl voice. I don't really love the way I sound when I use them in my feminine voice because it makes me sound ditzy, but it definitely gives you feminine tone and inflection. And even when you couple this with sub-par resonance and pitch you still get a more female voice overall, which is why this should really be one of the first things you practice.
- If you're in the closet and can't find time to practice without being outed, play music while you shower and practice your voice there.
- If you don't use your voice all the time it may take a couple minutes to get back to it every day. Don't worry about it, just do some vocal exercises or sing for 5 minutes and it should come back.
- Don't practice so much that you hurt your throat when you're in the beginning stages. Your voice is a muscle to be trained. You wouldn't go to the gym for the first time and do 100 reps with heavy weight, so don't push your voice for long periods of time either when you're just starting out.
- Online gamers are brutal. If you're looking for honest feedback instead of hug boxing, launch CSGO and give callouts in your female voice. If your voice doesn't pass, they will let you know. And if your voice does pass, they will fight over each other to get your snapchat...

69. Free Voice Feminization Lesson: Vocal Registers

Hey all, so it's been quite a while since I have posted a voice feminization video and I was thinking it's due time I post one so today we are gonna be talking about vocal registers and most specifically mixed voice now before we can get into the mixed voice we're gonna talk about the four primary vocal registers okay now there are more but these are the only four that we're gonna focus on today okay and I'm gonna Structure bleh structure this just like I structure my lessons alright so first things first what the heck is the vocal register now many of you know the term may not know the term vocal register but you may know the terms falsetto, chest Voice, these are considered vocal registers now let's break that down so we have terms for you know what are known as vocal registers but like what is the vocal register what did...you know... can you define what that is now a vocal register is a span of frequencies in the human voice produced by distinct vibratory configuration of the vocal folds a span of frequencies in the voice produced by a distinct vibratory configuration of the vocal folds now the vocal folds are the exact same thing as the vocal cords okay so in simple terms a vocal register is like a gear on a stick shift car okay so way back in the day cars used to not always be automatic for... this is for my my younger viewers and used to have to switch this thing it was like a stick that you have to literally shift to change how fast your car would go and that is pretty much what vocal register is it's a specific gear right it allows for a specific sound

specific pitches you can do a lot with in a vocal register okay so let's talk about the four primary ones now the first vocal register we have is known as chest voice which, as many of you know, sounds like a guy voice right this is probably yeah kind of the most stereotypical version of chest voice now as not many people do know this especially people who will not be singers or who are not singers chest voice is not limited to downlow meaning that you can take chest voice [pitch glide on oh] and you can drag it up significantly higher right so that would be your first vocal register now your second vocal register would be head voice and that would sound something like that okay so head voice and falsetto are pretty much the same thing falsetto is just a Breathier version of head voice if you notice when I vocalize this note [Music] it's got a little bit more girth right it's not super breathy um I'm not a huge fan of falsetto umm but yeah I actually a my upcoming single um I use falsetto a little bit very brief periods but yes I do so if y'all want to check that out link will be down below but um so you have head voice and chest voice so far those are your first two vocal registers so chest voice [demo] head voice [demo] okay now we get to talk about the mixed voice now mixed voices actually split up into two separate vocal registers the first vocal register you need to know about is known as mixed voice one now what is mixed voice one? well mixed voice one in simple terms is chest voice that is taken on attributes of head voice now this does not mean chest voice and head voice combined but rather chest voice that starts to look and behave similarly to head voice okay so that is gonna sound something like this [demo] okay that would be mixed voice one chest voice that is taken on attributes of head voice so doesn't exactly sound like chest voice, it doesn't exactly sound like head voice either okay it sounds like something in between but it's not it's just chest voice that starts to look and behave like head voice and when it does that it becomes its own separate entity right it becomes mixed voice one okay now the next vocal register we need to talk about is mixed voice two now some of you may guess if the definition of mixed voice one is chest voice that has taken on attributes head voice what can mix voice two be? Exactly, the inverse: head voice that has taken on attributes of chest voice and that will sound something like this okay pretty full sound that would be mixed voice two okay now why don't we break this down further okay so we've talked about vocal registers but like how do you get into these vocal registers well in order to do that we need to understand what a vocal mechanism is okay so in your voice you have what are known as a vocal mechanisms and these are ways of categorizing similarly functioning vocal registers okay so mechanism one it's kind of like if the vocal registers are gears on a stick shift car a mechanism would be the car itself so vocal mechanism would be the car itself now the vocal mechanism is really the Way to group is a way to kind of identify how a sound is, j how its produced so mechanism one is everything in the voice before it flips now for those of you who have never experimented with your voice why not try that do uhh from the lowest note you can to the highest note you're gonna notice that there is a break [demo] right [demo] there it is that would be the breaking point right so everything before that breaking point is mechanism one now vocal mechanism one or laryngeal vibratory mechanism one if you want to be scientific about it um is everything in the voice before it flips so [demo] that's all mechanism one [demo] mkay now mechanism one is is pretty versatile but it can get

harder to stand mechanism one as you go up higher right so this is where vocal mechanism two comes in now vocal mechanism two is.. contains the vocal registers head voice and mixed voice two, head voice and mixed voice two, okay so that is everything in the voice after it flips, everything in the voice, after it has flipped, okay so [demo] that's all mechanism one [demo] okay now mechanism two would be [demo] okay that's head voice and mixed voice two okay so mechanism two is everything the voice after its flipped mechanism one is everything in the voice before it's flipped now we're gonna get back to the mixes so you'll notice that mechanism two contains high voice and mixed voice two, those two vocal registers now mechanism one contains chest voice and mixed voice one so we already know that mixed voice one and mixed voice two functionally feel different and that's because they literally require different coordinations of the vocal folds to produce those sounds so like mixed two feels, it starts off as like a falsetto like [demo] And then we had some compression [demo] and then you get this sound [demo] okay so it starts off really light in a falsetto and then we learn how to compress it More, this is something that I use in my speaking every single day the reason I have such a big range is because I'm constantly going in between mix one and mix two I'm c—[demo] do you hear that's mixed two? - [demo] constantly so "con" mix two "stantly" mix one so I'm going between both coordinations and they actually feel pretty different but you won't hear it you won't hear a difference especially you know when somebody's talking so this is what differentiates the Nat Femme voice method from other methods out there is instead of fighting falsetto we learn to utilize it selectively of course and we learn to have it so it matches mechanism one, right full voice so if you listen [demo] that's a big sound right [demo] okay now that is basically the, the gist of what mixed voice two is now mix voice one [demo] sounds like that [demo] okay so mixed voice one again is before the voice has flipped and that one's a little bit more difficult especially if you're dragging it up super high and this is something I did it in my debut single which link will be down below please check it out leave some feedback it's honestly it's my biggest accomplishment in my life in my personal opinion but mixed voice one allows for [demo] the basis of a female voice is mixed voice one now when you in [demo] when you go up higher that's where you would access mixed voice two but most of mixed voice excuse me most of the female voice is mixed voice one okay now I'm not gonna give you guys exactly a full demonstration how to do it but this is more of kind of an educational lesson on what we would be using mixed Voice one and mixed voice two in our lessons if you, you know would be learning how to feminize your voice right everyone who is successfully feminized their voice uses a mix whether it's mixed one or mixed two so one last thing I do want to say is if you somehow have access to mix two that's not what you speak in that's only what you go to inflect in higher notes like oh my god god oh my god god that high note would be mixed two but like your base speaking voice shouldn't sound like this like if you were talking and mixed two, it would probably sound a little something like this so even even if you like really try to compress it a lot to try to make it sound as normal as possible it's still not really gonna sound very normal compared to mechanism 1 mix 1 which sounds much more standard for speaking so that is your free

voice feminization lesson of 2020 I guess I'm sure they'll be more but I love you guys be sure to like comment and subscribe and I'll see you later