Note: this guide is a bit outdated, and was made in 2018, but still has decent information and exercises to try. I will likely create another one in the future.

Fem voice is overcomplicated. This article strives to use the most sure-fire methods to feminize your voice. No abstractions, no visualizations. Just targeted exercises. This article covers two things:

- 1) Transvoice theory: why we do the things we do, why they work, and things that don't work or aren't necessary.
- 2) How to perform and do the targeted exercises and drills needed and apply them.

Terms you need to know:

Larynx: This is also known as your voice box. Your vocal folds are located inside here. Pronounced Lair-incks. You can tell the relative position of your larynx from your adam's apple.

Open Quotient: How frequently the vocal folds are open during a vibrational cycle. Essentially, having a high open quotient makes you sound softer. (Not to be confused with breathiness) Abbreviation: OQ

Closed Quotient: How frequently the vocal folds are closed during a vibrational cycle. Having a higher closed quotient makes you sound buzzier. Note that open quotient and closed quotient are opposites: the higher the one is, the lower the other. Abbreviation: CQ

Register: There are many different registers. These are often based on sound quality or where you feel vibrations when producing them. Many people have different definitions for the same name, so for reliability I will avoid using them, and instead opt for laryngeal vibratory mechanisms. When describing mechanisms though, I will use the register they *generally* correlate to. Keep in mind some registers span across multiple mechanisms (Not at once! Only one mechanism can be used at a time!). That is too complicated for me to go into in one post, so for simplicity's sake I will only address registers that always appear in one mechanism.

Laryngeal Vibratory Mechanism (M or Mechanism for short): There are 4 LVMs: <u>https://cramdvoicelessons.blog/encyclopedia/laryngeal-vibratory-mechanisms/</u>

Mechanism	Mechanism	Mechanism	Mechanism
M0	M1	M2	M3
Fry Pulse Strohbass Voix de Contrebasse	Modal Normal Chest Heavy Thick Voix mixte Mixed Voce finta Head operatic (M)	Falsetto Head Loft Light Thin Voix mixte Mixed	Whistle Flageolet Flute Sifflet

Classification of Registers Depending on the Laryngeal Mechanisms Involved

- M0: Vocal Fry/Strohbass. Go down to the bottom of your range. Try to go even lower. If you start hearing a "pulse" or deep creak sound (Think a creaky door, but lower and fuller), you are in M0. This is the mechanism many Basso Profundos and Russian Oktavists sing in for their lowest notes.
- M1: Chest Voice/Modal Voice. This is the mechanism the majority of people speak in. Some people speak in M0 (Basses commonly speak in M0), and some people speak in M2 (Even more rare). Generally, people who speak in M2 are doing so unintentionally, and it is usually considered a disorder if the patient is unable to go into M1, has hoarseness and difficulty communicating and projecting. You can make M2 usable, but for 99% of people, it is not going to be ideal.
- M2: Female Head Voice / Male Falsetto. In daily speech, it is commonly used to shriek, or can be used to quote someone in a mocking way. In M2, only the outer layer of the vocal folds are vibrating. It often doesn't sound as full.
- M3: Whistle/Flageolet. This is the least important mechanism for fem voice. I wouldn't even really think about this for now. It can be useful for incorporating shrieks though. Some singers, like Mariah Carey and Ariana Grande make extensive use of M3. It is essentially when the vocal folds aren't vibrating, but are close enough together to whistle in the same way your lips can be used to whistle.

Resonance: Anything that changes sound quality or texture without changing the actual pitch of a note.

Sympathetic Vibrations: When you phonate and feel tingly vibrations in an area of your body, like your chest, face, or nose.

Phonate: To create sound with your vocal folds.

Placement: Using sympathetic vibrations and visualization exercises to attempt to create a certain sound. Everyone has different craniofacial structures, so not everyone will feel

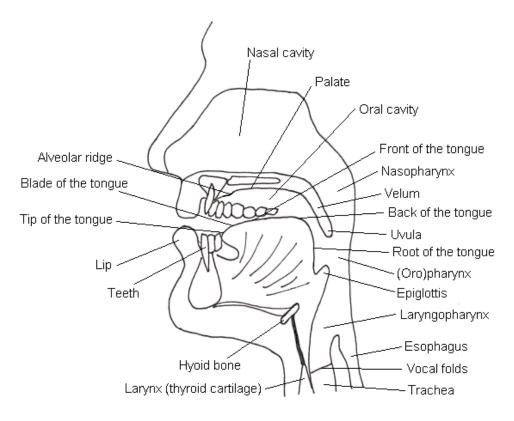
sympathetic vibrations in the same way, making placement not as effective as other methods in transvoice therapy. Example of placement: "Speaking in 'The Mask'", "Feeling vibrations in the chest", "Feeling vibrations on the face". Resonance is often falsely equated as being placement. Resonance is the change in sound quality, not the physical feeling certain sounds give you.

AMAB: Assigned Male At Birth. Preferred term over "Biological male" because the latter implies some level of invalidation. In the context of this article, all AMABs have gone through puberty and had their voice changed.

AFAB: Assigned Female At Birth. Preferred term over "Biological female" because the latter implies some level of invalidation. This article, when saying AFAB, refers to AFABs who have not taken testosterone to masculinize their voice.

Embouchure: The opening of your mouth. Includes the width, opening of your mouth, shape of your lips, etc.

Vocal Tract: Everything that the vibrations created by your vocal folds travel through before exiting your mouth.



VTM: Vocal Tract Modification

AES/Aryepiglottic Sphincter: AES constriction results in a bright, twangy sound often confused with nasality. An example of extreme AES constriction would be Spongebob. An example of nasality for context would be Squidward.

BDSD: Big Dog, Small Dog exercise. (Covered after the theory bit)

Passaggio Break: Your passaggio break (in this context at least, there are several passaggi) is the note that when you go high enough, you have transition into M2.

Apps I recommend to follow this guide:

- Vocal Pitch Monitor (Android)
- Literally any free guitar tuner that shows you every note and octave.
- Any spectrogram software (Advanced, optional.)

Apps to STAY AWAY from.

Voice Pitch Analyzer. This is an app that tells you what gender your voice supposedly sounds like based on pitch. It is incredibly inaccurate and potentially damaging to the progress of your voice because it leads to an obsession with what pitch you are at and how high you go. I've seen too many trans girls with passing voices get gendered male on it, and cis women as well.

Transvoice Theory

I'm starting this bit by going over the most common myths, and then I'll cover my pedagogical approach to fem voice, both in theory and practice.

Myth	Why it's wrong
1) You must speak in M2 / head voice (Or falsetto)	1) The main issue with telling trans women to speak in head voice is the vast number of definitions it has. In the definition we are using here (the most common one), while possible to sound fem with, it is easy to make yourself sound artificial. It is much more difficult to project, yell, and scream in this mechanism (Example of someone speaking exclusively in M2, a disorder called puberphonia: <u>https://youtu.be/DKPH1-RLAQ8?t=21s</u>).

	There are some cases of using M2 in voice feminization though. (<u>https://www.youtube.com/watch?v=8XnZpAE</u> - <u>4U</u>)
2) You do not need to raise the larynx to feminize your voice.	2) Without raising the larynx, you cannot reverse the effects of testosterone on your voice. When you go through puberty, your larynx descends and your vocal fold mass increases. Without this change, you will have a dark, masculine sound, unless your larynx never dropped that much to begin with, in which case you would be more than likely already have a passing or androgynous voice.
3) Raising the larynx will cause strain and damage your vocal folds.	3) While it's true that raising your larynx can cause your vocal folds to adduct (bring them closer together), it can be easily mitigated by having a higher open quotient to avoid pressed phonation (which is a possible side effect of too much adduction and can be potentially damaging). Raising your larynx can also cause strain if you are not targeting the right muscles with the correct exercises because you end up tensing muscles not needed to raise it. (The way I define it, Strain ≠ Tension, strain is tension + pain in this context) Temporary tension however is normal and needed to build up the strength to hold the larynx in place.
4) Inflection/Intonation changes are needed for your voice to pass.	4) There are cis butch women with passing voices, and there are cis effeminate men with passing voices. Vocal gender is determined by the space in your vocal tract and vocal fold mass, not intonation. Intonation changes are a great tool for changing secondary vocal gender characteristics though and morphing your personality to your voice, but should never be mandatory. Especially if we focus on stereotypical white american female intonation which excludes people of other dialects.
5) Some people can never get a passing voice without surgery.	5) There are incredibly few people who can't get a passing voice while doing everything correctly to get a passing voice. Your vocal

	folds have to be massive , and your larynx has to naturally descend all the way under your feet. You can do this. Stop trying to self-sabotage. If you are a lower voice type, it will be harder for you, but not impossible. Here's an example of me, a bass, going from masculine to feminine voice: (https://clyp.it/xavctl0s)
6) When doing fem voice correctly, you will stop feeling vibrations in your chest.	6) Everybody's bodies are built differently. Some people will still feel vibrations in their chest, others won't. Sympathetic vibrations are not an indication of whether or not you are doing something correctly.
7) AFABs have more nasal airflow than AMABs.	7) Some AFABs speak hypernasal (Lots of nasality), some AFABs speak hyponasal (Little to no nasality), some speak somewhere in between. The amount of nasality does not affect vocal gender.
8) Your voice must stay above 200 Hz.	8) There are plenty of cis women who pass going as low as 140 Hz. The amount of space in the vocal tract is much more important than any set pitch.
9) You need to pull the larynx "Back", not just up.	9) Sometimes twang can feel like you are pulling your larynx back (for some people), but this isn't accurate to what's actually happening inside of your vocal tract.
10) Teaching yourself fem-voice is dangerous	10) Unless you have pre-existing vocal damage, this is not true. If another transvoice teacher is telling you this, they just want your money. For example: It's not dangerous to learn how to do cartoon voices, it's not dangerous to learn how to imitate people, and it's not dangerous to do things that make you sound different than your "natural" speaking voice. Your current speaking voice and vocal habits were heavily influenced by who you hang out with, and who raised you. These are your main vocal models. We change the way we sound throughout our life all the time, especially as children.

The Bare Essentials

I like to start off explaining my methodology with the following starter question: "What makes a voice sound male, and what makes a voice sound female?"

The first thing that usually comes to mind is pitch.

"Women's voices are higher, and men's are lower"

While this isn't entirely wrong, it is a mistake to think of it as the most significant difference. By focusing on pitch, we are ignoring the cause of this change, and the reason why AFABs tend to speak higher and AMABs tend to speak lower: vocal fold mass.

When you start going through puberty, the vocal folds increase in mass. They become longer and thicker. This results in two main things:

- 1) Lower pitch (The most obvious change most people pick up on)
- 2) A higher closed quotient, or more perceived vocal weight.

Now, I know you are wondering, especially if you didn't read the glossary, "What the heck is a closed quotient?" (Psst, if you didn't read it yet, this would be a **really** good time, otherwise you are going to be extremely confused.)

Essentially, the closed quotient measures how often the vocal folds are "closed" per glottal cycle. Without getting too scientific, a higher closed quotient makes you sound buzzier. Here's an example clip:

(https://clyp.it/dqov40wx)

In fem voice, what we are basically doing is trying to reverse-engineer our anatomy to emulate what we would sound like had our voices not changed.

So the first step to addressing the effects of increased vocal fold mass is to increase your **open quotient**, which, as I'm sure you've guessed, is the opposite of the closed quotient. With a higher open quotient, you sound softer (as shown in the previous clip).

Okay, so now we've addressed the first part about what makes a voice sound male. But surely there's something more, right!

Yup! There is. (Unfortunately; it would be better if it were easier) Another thing that happens during AMAB puberty is that your larynx descends, consequentially more for AMABs than for AFABs.

So what effect does this have? Simply put, it makes your voice sound darker. With more space in your vocal tract, you sound darker. With less space in your vocal tract, you sound brighter (<u>https://clyp.it/azd4mjvf</u>).

Raising your larynx reduces the space in your vocal tract, and lowering it increases it. That is why AFABs sound brighter, and AMABs sound darker. A descended larynx is probably the most significant change that happens during puberty. Without that change, you would have a lower voice, but very bright and really, really buzzy, due to the vocal fold mass.

If you've caught on to the pattern by now, you might be guessing what to do now. We raise our larynxes, and by doing so, make ourselves brighter, and therefore more feminine. We only have one last step remaining now to complete our fem voice essentials toolkit: Embouchure (Mouth shape). Embouchure is probably the *easiest* thing to cover. Another difference between AMAB and AFAB vocal tracts is oral cavity size. Typically, AMABs have more space in the oral cavity, making consonants sound darker, or sound like they are lower-pitched. A really simple, easy way to do this is to reduce the size of your mouth when you speak. Now, there are other ways to reduce oral cavity space by focusing mainly on the individual consonants themselves, tongue position and vowels, but for the majority of people speaking with a smaller embouchure is adequate. (https://clyp.it/duqbu2f0)

What about inflection, intonation and pitch?

Everything I listed above are what I consider to be the essentials of fem voice. These are the three primary things that determine vocal gender. However, there are other vocal tract and behavioral modifications that you can use to "spice up" your sound.

- 1) Pitch: Generally, you can talk from C3-F#4 and still sound afab. It is not advised that you average at either end of the extremes, but dipping that high or low is okay and won't clock you. You can average at something really high (like A4) in m2 with all the VTMs mentioned before for a cutesy, anime-girl fem voice. If you try to average at something low, like an E3, make sure you pay extra attention to the height of your larynx. This could be a pitch you pick for a stereotypical butch lesbian sound.
- 2) Vocal Fry/Creak: Vocal fry doesn't masculinize or feminize. Stop policing the way women speak. You are valid whether or not you use vocal fry. Not all vocal fry has to make you sound like a Kardashian, either.
- 3) Twang: Twang is created by the constriction of the AES (Refer to glossary). It can be helpful for projection but isn't 100% needed. An example of extreme Twang would be Spongebob, but not all Twang has to be that piercing and bright. It can help feminize as well, but isn't necessary for all voices. Here's an example of twang (<u>https://clyp.it/zrnm1q4d</u>)
- 4) Breathiness: Some AMABs are breathy, some AFABs are breathy. It does not have an effect on perceived vocal gender. Many people often sound breathy when they are just trying to increase OQ.
- 5) Intonation: You can change intonation and inflection based on personality type and dialect, but it's not needed. You don't need to use upspeak to pass.

Now that we've covered most theory topics for feminization, we can move on to the fun stuff.

Exercises

These exercises are going to be divided by each of the three primary VTMs. Each of the secondary vocal characteristics will get their own exercises, but the purpose of this article is to focus on the fundamentals. I will eventually write another article about stylizing your voice with secondary mods once enough people have read this one.

MASTER EACH OF THESE EXERCISES BEFORE MOVING ON TO THE NEXT! IF YOU DO THEM ALL AT ONCE, UNLESS YOU ARE EXTREMELY EXPERIENCED IN VOICE ACTING AND/OR SINGING, THERE IS A VERY, VERY HIGH CHANCE YOU WILL BECOME OVERWHELMED AND MAKE PROGRESS TAKE LONGER. YOU CAN DO THESE IN ANY ORDER YOU WANT.

Larynx Height

To modify the height of your larynx, we will refer to the BDSD (big dog, small dog) exercise. Essentially, you need to pant like a dog. Imitate the pant of a big lab. Then, try to imitate the pant of a tiny chihuahua. You want your pant to sound smaller, brighter, and like it's higher in pitch. (https://clyp.it/nbq5tamr)

Once you have completed this, we now need to work on holding the larynx in place. To do this, in "Small Dog" position, we use go through our vowels, dark to bright. Example clip and vowel sequence: (https://clyp.it/giewhvev)

"Ho, Hue, Who, Heh, Hah, He."

Then, try and hold a vowel longer. Hoooooooooo. Hueeeeeeeee. Whooooooo.... etc

Once you can hold a vowel for a long time, try and go through a sentence that starts with an "H".

"How are you? My name is ____" "He's a really nice person."

Open Quotient

Increasing your open quotient is fairly easy. Pick the highest note that you can comfortably hit without going into m2. This is usually anywhere from A3-F4. Hit that note, and drag down to the pitch you plan to center and speak in. This is usually anywhere between E3 and D4. Stay at a relatively quiet volume, do not get louder to hit higher notes (for this exercise).

The end result is that you should sound softer. Try this exercise a few times.

If this exercise hasn't worked for you, then you can also attempt to learn through imitation. Here is a clip of my voice in masc and in fem with a high OQ. Try and imitate the texture of my voice. (https://clyp.it/h0lg1yby)

You will probably be quieter. Over time, you will adapt to this new coordination and learn how to project in it. Yelling with a high OQ is more difficult, but can be done. To yell, try first in your baseline voice to re-remember the coordination, then do it in fem coordination. You can also try to hold a note and gradually increase volume by increasing the rate of air you are pushing out.

Embouchure and Vowels

Individual vowel mods may be necessary for some, but not others. Embouchure is easier to cover than vowel mods, so I'll go over that first.

Essentially, you just don't open your mouth as much. Pay attention to your consonants. Do they sound brighter? Go through unvoiced consonants: "P, K, T, S, H, Sh, Th". Try and make each one sound brighter. Compare the difference between talking with the same embouchure you usually have, and talking with it smaller. Do you consonants sound brighter? Then you are doing it correctly. If that doesn't work, you can practice brightening each consonant individually with me in this clip: (https://clyp.it/kn0kjd0e)

If after doing all this, your voice mostly passes but has moments where it's clockable, then we can work on vowel modifications. To do this, we are going to use the brightest vowel. The spanish /i/. The same vowel used in the word, "Cheese". Say, "I", and then try and hold that general tongue and mouth position and speak other sentences. Everything should now sound much brighter. (https://clyp.it/dfsruiup). Practice holding this vowel posture, even on darker vowels. (Note: Don't make every vowel /i/. You are just using that vowel posture to help you brighten other vowels.) Sorry if this is a bit vague. I'm currently developing other ways of achieving this, so this teaching tool isn't perfect yet.

When you've finally mastered all of these essentials, you can move on to secondary vocal characteristics!

Secondary/Tertiary Vocal Characteristics

1) Creak

Few things to note about Creak:

Creak is not in any mechanism, it is really just your glottis (vocal folds) rapidly pulsating and slapping together at a low frequency

Not all fry is creak, but creak is a form of fry.

You can have creak onsets, offsets, in the middle of sentences depending on what you are going for. Just play around with it. To find out how to do creak, imitate a creaky door sound, or this: <u>https://clyp.it/h5sirg5o</u>

2) Pitch:

Like I mentioned before, Pitch can generally go from C3-F#4 and still sound pretty fem, as long as you don't center at either extreme end. Anywhere between E3-D#4 is a typical center pitch. Anything higher than that and you will start to sound more child-like, and will likely have to access m2 to maintain. Shrieks and giggles can go as high as you want though, as shown in Amelia/Zhea Eroses's "The uses of falsetto in voice feminization" video.

3) Twang:

Twang can be feminizing and help with projection, but it's not entirely needed. Before incorporating twang, you need to learn how to do it at its fullest maximum state. Pinch off your nose, and try to imitate a baby's whine, or Spongebob's laugh. Do a loud "WAHHHH" with me in this exercise clip: <u>https://clyp.it/zrnm1q4d</u>, Then, try and tone it back a bit. Now you know how to use twang.

4) Breathiness:

Breathiness is completely optional (like the other things here). It's difficult to project with a breathy voice, and it can dry out the mucosa (outer layer of vocal folds) faster, so if you do this, take care of yourself and drink more water. Essentially, do a long, unvoiced sigh. "ahhhhhh". Then, try and into it. <u>NOTE: Wrong clip! (will update later)</u>

5) Intonation:

You can change your intonation in a lot of ways, but honestly the way I recommend the most is mimicry. Find a voice you like, and mimic the way they speak. If you just want to speak with stereotypical valley-girl intonation though, imitate the stereotypical effeminate gay man voice. Then, apply it to fem.

Closing Note: I give lessons! If you're interested, please contact me at <u>DakotaAmaRoseWootan@protonmail.com</u>! My rate is currently \$25/hour, but with increased demand this number will change.

For free advice, you can also visit Scinguisitcs, a voice-science server focused on transvoice, singing, and linguistics.

Thanks for reading this article! A few special thanks to people who helped me with this article (Some directly helped with information, one helped with proofreading/editing and making sure the article was easy to understand):

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Nick Grigsby : provided articles, information

EDITS - Coranna

 2018-08-15 — Proactively replaced sound clips with mirrors (even the ones that have auth tokens). Note: The Twang example clip was accidentally linked for Breathiness, and we don't know if it was ever posted elsewhere, so that clip is lost to us.