

1. What is Voice Training? [VT]

Broadest definition: Voice training is learning how to change your voice, so that it sounds like you want it. It can also include the process by which we use our 'newly found voice' and make that our default. Though there is no rule that you need to stick to just one voice.

The process in broad strokes: Learn what stuff sounds like --> Have a go --> think about how that went --> try more stuff out. ~~~> somewhere along the way get confused/stuck~~~> listen to stuff ~~~> try more stuff etc etc. Sometimes you just need to play around with stuff, sometimes you need feedback, and sometimes you need to look at more resources to figure out exactly where you're at and how to move forward.

Tl;dr Step 1: Learning to hear Step 2: Gaining control Step 3: Exploration and iteration. Step 4: profit.

Note: voice training isn't always linear, it might involve jumping back to things you've already explored and learnt about as you get better at other stuff!!

Let's get more specific & how passing (mostly) works: There are some differences when it comes to voice training depending on your starting point and where you want to end up.

'Sex Linked' Features: These features are the sorts that we'd expect to change because of testosterone-driven puberty. Pitch might lower the voice might get 'buzzier' or more intense and size/resonance might change. If you don't know what those things sound like this clip should help clear that up: <https://whyp.it/tracks/170889/demos-quick-pitch-weight-resonancesize> These variables come together to form your "vocal-sex."

Gender/Stylistic Features: These features are 'the other stuff.' There are so many things you could put here, but here's a list of a few: Pitch variation, word choice, speech pattern/rhythm, how 'smiley' someone sounds.

When people get started with voice training it's usually the sex linked stuff that takes a while to learn and control. Doing that creates a good setup and makes passing easier.

The gender and stylistic stuff is important but easy to neglect. Of course, you could decide to talk like a robot, and I promise not to judge myself, but if passing is the goal, then it is useful to have both sides working in tandem. This topic is talked about further in the misc section.

Are they truly separable from each other?: Short answer: No.

Longer answer: No, but you could maybe.

When someone hears a voice, they don't break it down into sections and try to understand it. Instead they take in the whole thing at once and make a snap judgement. By separating voices up like this we give ourselves a framework through which to understand the steps to make and the things we need to take into account.

It's okay to keep this framework in our heads as we do voice training, but it can be useful to know that they aren't entirely separable in the back of our heads.

Let's take these two voices: <https://youtu.be/V1bEAbDRWmM?list=PL054AsyPIr1a027-oUYLJwW6DN54-jvv5> and <https://youtu.be/BcUtJn9yHyo?list=PL054AsyPIr1a027-oUYLJwW6DN54-jvv5>. Both of these voices sound feminine, and we could also label them as "different flavours" of voices.

You might notice that the exact mixture of vocal weight and resonance/size, is different in these voices and you might also notice that the way the stylistic elements play out is a bit different. There are some useful to connect dots here: 1. The stylistic elements that fit with a voice can depend on the underlying mix of sex linked features. 2. It would probably sound weird if you swapped the stylistic elements from one of those voices to the other.

Aka the mixture you use of sex linked features and gender linked features can either work together or against each other. This is also why introducing things like 'valley girl' features into any random voice won't always make it sound more feminine, sometimes it just makes it sound weird or clocky.

How long does Voice Training take?: Honestly? It varies a ton.

Some people never get to a point where they feel satisfied. For some people, it clicks almost instantly. More commonly people fall somewhere between these two points.

Usually, voice training will be faster with a teacher, if you don't have much dysphoria, if you have good vocal health and if you have a more organised approach to practice---this list could go on. The more things in your favour the more quickly you'll see results. But there's no way to know for sure.

"Is voice training impossible for me?" Fraught question for sure and like - maybe?

I think it depends on your goals. For most trans-masc people, it's possible to get to "a voice that would be read as masculine most of the time." (But if you're unable/unwilling to go on t that might mean you're limited to a teenage boy vibe). For trans-fem people, it's a similar-ish deal. Most will be able to get to a voice that passes most of the time.

Frequently, even if you struggle to bring them all the way to female, you should be able to get your sex-linked features to an androgynous enough point that stylistic behaviours pull your voice into something that is perceived as female. Even if it weren't to the extent you hoped. An example of this might be something like Shohreh's voice: <https://youtu.be/cmRQXpbeA-0>

2. How do I Voice Train? [HOW]

Right now I assume you're just starting so you probably want to get the ball rolling while you learn more, but don't go too far so you get overwhelmed. Remember you can always come back to this post later to continue reading more.

Note the following isn't the only way you can go about voice training, or the only way to conceptualise it, but it might give you some direction.

Secondary note, it's never really too early to start speaking with your "new voice" but I would recommend you treat it as temporary and not be afraid to mix it up because that can help instead of hinder, and if a voice hurts or feels unsustainable try not to internalise that habit.

Getting started, suggestion 1:

Listen to stuff, lots of stuff.

And here's a few similar things from me:<https://clyp.it/xyicoz4b> pitch <https://clyp.it/5louwkkw> weight <https://clyp.it/xno2ua0r> size/resonance <https://clyp.it/f0oyal3f> and some other stuff.

For now it's okay to focus mostly on the sex linked stuff. So in these clips things like: Pitch, vocal weight, size/resonance and fullness might be the most relevant.

If you're interested in the gendery/stylistic features then I'd probably recommend you spend some time listening to voices in general. You don't need to have terminology to label these with but you could have a go doing things like humming along. Saying something of your own and speaking with the same pattern etc.

Getting started, suggestion 2:

If you want to leap right in and do something you can start building some generally useful foundational skills/habits/icebreaking.

Pitch Matching. You can use something like this tone generator to make a pitch. <https://www.szynalski.com/tone-generator/#196,v0.05> But if you're struggling with matching in general what I might suggest you do is play around a little. First up try opening two copies of the tone generator and set them 1hz apart. Listen to what you hear. Then vary the gap between them. What do you notice happening? Can you try matching the tone and induce a similar sound effect. It won't be as obvious but you should be able to find it. From there try playing around hum little melodies around the tone and explore. Try matching different pitches and get a feel for them.

Vocal Warmups - There is more info on this stuff in the older post, but vocal warmups can be a good habit to play with during/before practice. I'm going to include a little sound clip with this to make it easier to know what I'm talking about, but here are some suggestions for your warmups. SOVTE Types: Humming sounds, oo sounds, v sounds, lip trills and blowing bubbles in water. Warmups: Slow glides, fast slides, sustaining sounds, pitch to the limits, weight to the limits, mixing and pitch wiggles. Important note: when you do warmups it shouldn't hurt and we should strive for smooth and comfortable sounds. The voice clip: <https://whyp.it/tracks/170898/warmup-and-sovte-examples>

Silly Voice Mimicry - Sometimes it's super easy to get caught up in your head and that can make voice training difficult. That's why I'm suggesting you seek out some silly voices to mimic and recreate. The goal here isn't really accuracy, it's more so to get comfy with attempting to make unfamiliar sounds, even if you aren't totally sure how to get there. Bonkers! But you might even have some fun along the way. Any silly voice is acceptable for this---or even normal ones if you want to---but if you're unsure of places to look then something like this <https://youtu.be/QIW4d7N8qpo> might be especially useful as there's lots to try out.

These are simple starting points. I encourage you to think of them as just that, starting points that you can work on while you learn more. If you get done with/bored with one then you can always swap over to the other.

Note: SOVTEs are mentioned here. SOVTEs stand for Semi-Occcluded-Vocal-Tract-Exercises, they are basically sounds/exercises that involve resisting the airflow at some point in the upper portion of the

vocal tract with the intent to reduce the pressure difference over the vocal folds. More variants exist, but the ones I mentioned are the ones I'd suggest personally.

I've tried them. What do I do next?

It might be time to consider joining some voice communities. They're a great way to keep voice training on the brain and they can also be good places to find practice partners.

Practice and try things out. There's a bit more direction in what that might involve below.

Keep up the good work! But don't burn yourself out. Remember to take breaks. And know that it's okay to save this and to come back to it later!

Practice Length - There is no right or wrong way to practice if it works for you. But my suggestion would be to make sure that you do find something that works for you. If your practice looks like practising for four hours and then getting super burnt out and not practising for a month, then that's probably not very productive.

My typical suggestion is try to aim for little and often at the very least, but try to work in some big chunks of practice time if you can. The quality of your practice will make a big difference in the rate of your progress, so try to spend a bit of time thinking about how you're practising rather than just falling into an autopilot mode!

But remember as well that autopilot is better than no practice at all! So basically try your best. But be aware that if your practice isn't the best it can be then it's going to be harder to make progress. Remember to explore and try new things.

Are there any differences between transmasc/transfem voice training I need to know about?

Yes and no. The fundamental knowledge is the same, you need to explore 'vocal sex' and the stylistic/gendery stuff, but the common issues are a bit different.

For transmasc ppl I'm going to split this into never been on T (testosterone) and /been on T.

Never been on T:

The most immediate change you can introduce is probably on your size/resonance. This will typically result in a big change to how you sound, but if you change it without changing the rest of the stuff, you'll probably sound off due to fullness not being where you expect it to be.

Over time you're going to want to work on your pitch and vocal weight. Doing warmups and pushing the range in terms of how low/heavy you can go.

Been on T:

If you're seeking voice training it's possible you're seeking to spruce things up, but it is probably because T didn't bring all the changes you wanted.

Most typically this is going to be a resonance/size thing. Maybe your voice sounds extra buzzy or androgynous. Though it might be because it didn't change all that much in general. The underlying mechanics likely did, but your habits probably made it not drop much. In this case, warmups and exploring resonance, then trying to speak in different configurations is probably the goal.

Transfem (and I guess detrans FtMt? people):

This isn't a hard and fast rule at all, but for most people it's worth focusing on vocal weight (and by extension pitch) first. Think of it like laying a bit of a foundation.

Often times when people seek to reduce size/raise resonance they accidentally introduce issues with sound production e.g. roughness.

Essentially for this reason I'd recommend you explore higher and softer sounds while focusing on smooth and comfortable sound production. If you can sustain and speak with higher pitches (even if it doesn't sound totally feminine yet) that would probably be the time to start looking more at size/resonance when you know quite a few of the sounds you want to avoid. (Nasality might also be a sticking point, this is talked about a bit more later).

Vocal Weight 'Exercises' to try:

Notes: 1. Don't confuse Vocal Weight with Breathiness. 2. You don't really need exercises if control is the goal. Usually its better to try and explore things as a part of your voice in a more varied way.

You should have already seen examples of vocal weight before, so here are a couple of ways to explore it if you're unsure.

Imagine talking to the person you're sitting next to at a funeral vs yelling to a person across the street outside. Try saying the same thing and see if you do it any differently. Can you try moving in a gradient from those two versions. (you might find that other stuff changes with it, but that's okay because vocal weight will still be the most likely thing to change. Voice clip: <https://whyp.it/tracks/170900/quiet-place-vs-street-exercise>

Transfem exercise:

If you're a bit more comfy with the idea of vocal weight as a concept it might be time to up your game. This exercise is going to involve sliding from a heavier sound at a lower pitch to a higher pitch and then sustaining. For bonus points you can move from the hum into some entirely monotone speech. Voice clip: <https://whyp.it/tracks/170902/slide-and-sustain-transfem>

Transmasc exercise: This exercise is going to involve sliding down and increasing weight as you go. There isn't a set pitch or weight for this, but the goal is to go towards your limits and to practice sustaining that weightier state. If you want an 'advanced' version you can try taking it from a hum into speech. Voice Clip: <https://whyp.it/tracks/170903/slide-and-sustain-transmasc>

Resonance/Size

What is it?

Well in physics in general you might hear people say something like "it's the natural frequency of the system" but well let's be honest that doesn't mean much to people when they hear it applied to voice. If we made it a bit less obtuse then we could translate that as, different spaces make different frequencies stand out and it's the mixture of those frequencies that we hear as resonance.

And again nah... I suggest you think of resonance as it relates to voice as having two bits. Size and Shape. If you move from one vowel to another you might notice that your tongue throat jaw etc move around and alter the mixture of space/the shape of the space.

So we can kinda equate the mixture of space or the shape to the vowel we hear. And then we can think of any of those vowel sounds existing on their own scale from big to small. Voice clip that talks about this: <https://whyp.it/tracks/169484/big-small-vowels-etc>

Note there is some confusion around the term more than this even. I address this a bit later too.

A Couple of Things to Try

This isn't guaranteed to work for everyone, but its a thing to try. If this doesn't work for you I'd suggest looking at the resources section at/near the bottom as it has more things to look at. If my suggestion doesn't work out.

This might not be what you'd expect but a lot of the time when we try the thing we can just jump straight into it(its super easy to over think and a surprising amount of the time just having a stab at it even if we dont have a clue how actually nets the right result). So the first thing I'm going to suggest is to try sliding up in pitch a bit and just talking. And then try yawning and try "talking through the yawn."

Ideally, with that you should have found two different sizes. From there you can have a go at seeing if you can hear the difference. If you can then you can try more specific sounds and exploring the extremities.

That is where something like vowel scaling might come in. aka choosing a vowel and taking it from big to small while keeping the pitch the same. Voice Clip: <https://whyp.it/tracks/170907/resonancesize-exploration>

I think I get what they are, but like what do I do now?

Spoken exploration. There isn't a correct or wrong thing to do here, but if you still want to explore control free-form exploration might be the way from here. It allows you to improve your control and awareness, plus it lets you try out different mixtures to see how they feel and if they appeal to you. Example voice clip: <https://whyp.it/tracks/170908/freeform-exploration>

Explore your limits. If you have baseline control of your weight, pitch and resonance/size, then try taking them to their extremes, see when stuff breaks down, when your voice goes wonky or when you have issues with purity etc. This isn't a necessity but sometimes its helpful to explore extremes because occasionally we want extreme things from our voices.

Mimicry:

Mimicry involves hearing something and then trying to recreate that. And may just be listening to a pitch and copying that, but more typically it's going to be something more in depth, like copying an accent, some specific stylistic features or a voice as a whole.

Mimicry is something you might want to try for quite a few reasons but there are two main ones in my mind. 1. Mimicry for exploration purposes, trying out new sounds, trying out different voices, seeing if you can get to any new states and if they are better than what you've been able to find before. 2. Mimicry for the sake of emulating stylistic/gender features of a voice. They both serve potentially useful purposes.

Mimicry tips:

Throw yourself in without trying to hold anything back. Don't worry about your accent, or anything else in that vein, when you're doing mimicry because it holds you to a certain state and may prevent learning.

If you're interested in mimicking a certain voice, then it might be good to practice mimicry on other voices first, so that you have the skills built up for when you want to attempt one you're especially interested in. (It's quite common to form habits about how you approach a certain voice, so it's good to get it right the first time if it's especially interesting to you)

If you're interested in a certain voice have a go at different sections throughout them talking. It's much easier to get closer to the voice if you listen to more of it.

Don't be afraid to play with a mimicked voice. Can you get the vibe down? Can you sustain the vibe while making little changes to the voice e.g. changes in weight or pitch. Think of it as a way to test your skills, but also to find new permutations you might like.

Refinement/iteration/maintenance:

At some point, you'll probably reach a point where your voice is good, but you feel it's slightly off and it's confusing what's right or wrong and you might even get conflicting advice from people.

A not insignificant amount of the time it's the stylistic and gender stuff, so that's worth checking.

It might also be things like: surprise nasality, roughness/instability, inconsistency, an errant cartoony quality, Schrodinger's Resonance or sometimes it can just be dysphoria talking. Despite conflicting feedback from people it can be good to ask multiple people, preferably from different contexts and see what they think. Because if one or two people notice a common problem then it might just be a them thing. If multiple people mention it then you have a lead.

Another thing you can try is to go for another voice entirely, aka a passing voice that gets there in a different way, a different accent, a different mix in terms of sex linked features etc. This can help eliminate some issues or at least get you out of your head if it does turn out to be a dysphoria thing.

3. Myths/Misc [MM]

Falsetto - Okay so this is a big one that people panic about a whole bunch. So what is falsetto? Generally speaking, people use the term in a whole bunch of ways. But it might be associated with a voice that sounds high, weak, reedy, airy, rough, unstable. The list could go on and on.

But here's what we need to know about falsetto. Typically you wouldn't want a voice that sounds like it's in falsetto all the time, but we shouldn't be afraid of using it in practice because there are situations when speaking that it's perfectly natural to dip into it.

Seeking Androgyny: This is going to have a small section, because it's mostly going to get covered by the other bits but... To begin with when seeking androgyny it's probably useful to train past it, learn to control stuff to the extent that it's possible to overshoot. From that point you want to be thinking about what androgyny sounds like. Hopefully coming to the realisation that androgyny sounds super diverse in that lots of voices can sound androgynous, but equally that often it shifts around depending on the listener. Essentially this is where you want to start looking for examples of the type of androgyny you want to find. Here are some potential examples https://www.youtube.com/playlist?list=PL054AsyPIr1ZS18DKdw_5r3MhsO1fhgTP

Should I try to pass when I practice? - The main thing to understand about this is yes that passing is a valid goal to strive for in general. But it's not something you should aim for at all moments of time in practice. Especially right at the start. If you don't allow yourself to make sounds that don't pass during practice then it becomes incredibly difficult to pick up the skills you need to get to the point you pass.

Swallow and Hold and physical focuses in general - Typically speaking we want to avoid this. Mostly because sound is the ultimate arbiter of success and secondarily because it's super super super easy to pick up the wrong thing. Whether that's over-engaging muscles or getting an incorrect impression of your voice due to what you're feeling.

Comfort/Ease - Most important thing to note here is that voice training shouldn't hurt. It shouldn't leave your voice sore and it shouldn't make you feel like your throat is tensed up.

That's not to say that it's doom and gloom if you feel a bit sore after exploring something. The main point is that you shouldn't internalise and continue doing something that does hurt or feels sore/tense. If it's fleeting it's okay. But if it becomes a habit it's a problem.

Side note if you want to look after your voice, I'd recommend you look at the old version of this post and at its vocal health section.

Breathiness - Breathiness is a feature that some outdated guides suggest you should lean into if you're looking to make your voice more feminine. Much like pretty much everything else in voice it's the way you use it and how it mixes in with the rest of the voice that matters. If you just slather in breathiness usually it makes the voice sound less natural and potentially sultry or performative and tends to get you to miss the feature that we would generally consider more important (vocal weight). Explore breathiness and see if you like it but don't just make it default, it's usually not what you're looking for.

Feeling Vibrations/Sympathetic resonance/forward resonance and nasality - So this is a big one and a whole mess. Lots of older guides suggest that you want to try to focus your resonance somewhere, or feel the vibrations in your mask, or in your chest or throat etc etc.

There are quite a few problems with this. 1. It doesn't encourage you to focus on the sounds you actually want to produce. 2. It frequently teaches you to do the wrong thing. 3. It's highly inconsistent from person to person.

I'd highly stress that this approach rarely does you favours. If you do want to explore it then do it with a teacher around who can correct you when they hear you doing making a sound different to the one they're looking for.

Nasality nasality nasality. Some older guides advocate for this, similar to how they advocate for breathiness. Nasality is a feature present in some voices and some accents. However, just throwing it at your voice tends to produce less than desirable results because it's really easy to conflate with behaviours you're actually looking for, so separating it out can be extra hard once it's in there and because it rarely sounds congruent with your voice unless you delicately explore it. So basically. Explore it if you want to. If nasality pops up (do a Yzma and smash it with a hammer) actively work to become aware of it and only include it on purpose. Uncontrolled nasality tends to be undesirable and can reduce the naturalness of your voice.

But what is nasality? - sometimes people use words like "nasally" to describe other things, but when I say nasality here I mean it more specifically as "hyper nasality" whereby the path to the nasal cavity is opened up when we wouldn't expect it to be. You might also come across the word nasality in reference to colds or when you have a stuffy nose and that would be "hyponasality" aka air can't go through the nose when we'd expect it to. Examples might include m sounds turning into muffled b like sounds etc etc

More on gender - As we acknowledged before when we listen to a voice we tend to hear the whole thing at once when we're determining the speaker's gender. But passing can get a bit more involved with the rest of your presentation too. For example, if you were 6ft 6 then a super cutesy high pitched 'fem voice' probably wouldn't seem the most congruent with your general presentation and it does get more nuanced than just height, things like your age, where you live and even socioeconomic context can shape the voices that would be most congruent and therefore likely to pass.

Non-gendered stuff can gender a voice?

If we take things like: false fold engagement, nasality, tongue root engagement, instability or breathiness. Then there are specific ways these things tend to manifest in a cis voice. E.g. if there were common failure modes, and then a new one shows up on the block.

E.g. in cis speakers often the introduction of things like roughness will be age/(lack of sex hormone) related. In cis women this often comes in a package, maybe some more roughness, a lowering in pitch, a slight increase in weight. And in cis men it might be that increase in roughness, a reduction in weight and a raising in pitch.

These particular vocal 'tropes' are associated with these groups and we hear them enough that our brains start to align these specific mixtures with ageing, even if conceptually some of these things might seem like they fall in line with what we might expect to bring someone closer to passing.

Other things like nasality where it's unexpected or certain manifestations of roughness etc can also influence gender perception and a lot of these times its because the presentation doesn't fall in line with expectations of how they might show up.

In these instances it's partially because perceived naturalness/familiarity and the overall congruence of a voice with itself can signal how 'put on' vs 'it's their voice' a voice comes across. To an extent this is because it can trigger a bit of an uncanny valley effect in the listener and because when things don't line up how the listener expects then it can invite more scrutiny onto a speaker's voice.

This is why a lot of the time there isn't any one easy answer to "fix" a voice because what needs to happen is a bit of polishing and to make sure that the voice fits in a bit.

Alternately if your voice is outside the listener's familiar range that can make passing easier e.g. often if people hear an unfamiliar accent they might be more generous with the gendering of the voice. "That's just what the Europeans sound like." But that's not really a secret trick so much as an extra thing to be aware of when seeking feedback from other people.

So, gender presentation is often specific.

The way someone presents gender is different depending on where they live. e.g. British <https://youtu.be/q3vdvwwU3U> vs <https://youtu.be/KsqFIBPhA7Q> American. example of women <https://youtu.be/BcUtJn9yHyo?list=PL054AsyPIr1a027-oUYLJwW6DN54-jvv5> American vs <https://youtu.be/V1bEAbDRWmM?list=PL054AsyPIr1a027-oUYLJwW6DN54-jvv5> british.

In these four clips we can hear lots of divergence in both the sex-linked factors, depending on gender presentation, but also in stylistic elements based on accent. In both of the British examples, we see a comparatively lower resonance/size as well as differences in vocal weight.

But those differences aren't the only ones we see. Forgive the potentially cursed vibes but if we presented the women's voices on a scale from 'hyperfem, excited, smiley, etc'. to 'calm, relaxed, refined, etc'. we can also see differences in how they 'perform'/exist with their femininity in everyday speech. Two voices that are very feminine but with divergent presentation.

These sorts of differences are especially pronounced here, but also differ with any accent, age group or person. This mesh of things comes together to inform the way someone speaks, and on top of that there's going to be personal quirks to how someone speaks.

There isn't one singular neat takeaway from all of this, but hopefully, you find this information useful!

Accent (oh no I lost it) - The topic directly above touches on this but so does this clip <https://whyp.it/tracks/169484/big-small-vowels-etc>

Frequently if you lose your accent it's because you are allowing the "wrong" things to change. Usually, this is because you're mixing up your vowel pronunciation, but it may include more gendery things too. Basically, don't worry too much. Try scaling some vowels from big to small and make sure you're starting with your pronunciation and not blurring it and that should fix the problem. If it doesn't then look for inspiration in the voices you run into in your day to day. If those don't apply because you don't share the same accent as the people around you, then it's more difficult but the first step is figuring out what you want. Assimilate? or explore until you find what you like?

Myths/Misc Cont.

Surgery

But wait there is a case for surgery actually. The main issue with surgery is that many people don't know what they're getting into when they go for it.

For the vast majority, voice training is a more appropriate first step to take, and maybe second, third, fourth and fifth. Typically speaking Voice training grants you more agency and has lower associated risks however, that doesn't mean it's the right choice for everyone.

Surgery guidelines:

Don't go for it on a whim (there are multiple instances of people jumping into surgery as an add-on from things like FFS or a tracheal shave and then their voices getting wrecked by cosmetic surgeons aka go with a voice surgeon if you're seeking voice surgery). Know your surgery goals. Understand that most surgeries target the vocal folds and therefore tend to impact pitch and vocal weight the most. Understand the risks associated with the surgery you're going for. Ask about them and don't get blindsided.

Who is surgery for: typically it's for people who can't engage with voice training effectively. Whether that's due to excessive dysphoria or something else.

Surgery isn't inherently bad, it carries greater risks and doesn't cover everything. Basically, if surgery is something you're seeking get properly informed and don't let it turn into a moral debate. Equally don't allow yourself to be pressured into it and never go with the flow into it.

Measuring stuff, spectrograms and the science

Okay to be fully real with you. If you go down this path you're probably wasting your time. Most likely you are using it to procrastinate even if you don't realise it. There is a reason most teachers try to encourage a focus on the sound over alternate methods.

Using spectrograms or over-relying on measuring things tends to go the same way as the dodo/swallow and hold. It tends to encourage you to look out for the wrong things and make you form bad habits.

Unless you specifically have hearing issues that prevent you from hearing sounds(not processing them) then you're probably shooting yourself in the foot by relying on measurement tools.

There are two ways it tends to go. 1- you don't learn the sounds you need to be able to identify to judge your success. 2- you rely on measurements and develop a dependence.

Science - look into it if you're interested, but think about this.

If my friend said they wanted to learn to dance and then they pulled out anatomy diagrams I would tell them that they are procrastinating and not learning to dance.

The science can be cool and interesting, but it's rarely, if ever, relevant. It's enough---and significantly more relevant---to know the sounds you're looking for.

Keeping voice where you want it

A super common issue people have is that their voice slips towards their baseline. There are two main manifestations of this. Either pretty much instantly, or over the day/hour/conversation.

For the first kind, I'd recommend a few things. 1. evaluate vocal weight, is it too high, does it feel like you're pushing to maintain pitch. 2. is your control bad in general, maybe try some monotone speech where you just practice staying stable, maybe try pitch first, then try focusing on other features.

Second kind is more of a habits issue. You need mindfulness and to be able to identify when it happens.

For general extended conversation issues, I'd recommend using something like a tone generator. Have it playing in the background as a guide you can drift back towards if you notice you've deviated from it too much until that becomes habit.

For codeswitching issues, I'd recommend a mixture of mindfulness and trying to create a plan from the get-go. e.g. if you talk to a customer and then you often fall into a customer service voice where you suddenly go feminine then go in with a plan to compensate/compensate during the conversation. Try doing do mock customer service interactions with a friend or by yourself, deliberately overshoot the other way so you have a plan you can put into place.

(note there are other ways but here's a few people have found to work in the past)

Non-verbal stuff/sounds

So there are a couple of ways you could read this.

is communication that doesn't involve your voice. its a bit messy and kinda based in gender stereotypes and again this differs a lot kinda like the interaction between gender and accent. I'd recommend focusing on the women/men around you and seeing how they act and taking the behaviours you want from them.

is things like laughing coughing sneezing yawning etc and uh this might sound silly to say, but its basically practice, think about the things that go into sex presentation of voice (mainly vocal weight and resonance/size, but also pitch) and try applying them to fake versions of these sounds

For laughing this could be deliberately seeking out something you think you'll find funny and then trying to mould your laughs in the direction you want.

for coughing this might include vocalising just before the exhale (though you cant always control this and its worth noting that these sorts of sounds are typically under way less scrutiny than speaking voices)

For sneezing that might be vocalising a pitch or the "achoooo vs atiew" scale. There are lots of sounds and no hard and fast rules here you need to find what works for you!!!

How to practice in tricky situations?

Dealing with family or flatmates/neighbors that may not be accepting of you voice training or may even just make you feel self-conscious about voice training is something that a lot of us deal with to

some extent. Here are some tips to work around this. Depending upon the situation you're in some of these tips may be more applicable than others.

Exercises we can do quietly:

If we use voiceless resonance manipulation with either a brown noise generator on our phone or a (very soft)whisper sound.

And of course, you could try using a mirror and playing around with oropharyngeal expansion/constriction and raising and lowering the back of the tongue.

Expanding pitch range for people looking to masculinise, when we play around with low notes we can often find that they are very quiet, if we are trying to practice lowering our pitch floor discreetly we can lean into this and just try to work on lowering pitch without caring about volume for now.

Finding soft sounds/thin vocal fold configurations: especially if we're looking at trying to feminine.

Doing exercises that are quiet can help us somewhat but we do also need to do stuff that's loud sometimes, so a mix of things can be best.

Ways we can try to dismiss other people's prying:

Passing things off as like voice-acting interests

Aligned with this might be saying its a voice for a DnD character etc

Showing an interest in and suggesting its part of singing,

Just passing it off as making noises for fun

Ways we can try to minimise the likelihood of being noticed:

Going outside/for a walk into open spaces, sound especially quiet stuff will not travel well, so if you want to practice voice work and have mobile data it could be a shout to go for a walk and then start working on voice stuff when ur in a less crowded space.

Going into a closet/small space with lots of stuff to dampen sound.

Playing white noise/music at the door to your room so that drowns out the sound, of you practising.

Trying to practice in the car, cars are amazingly soundproofed, and if you are able to drive or even just able to sit in a car without ppl asking then that's also a great time to work on your voice.

Waiting for family members to be asleep or not home.

What do Hormones do to a voice?

One thing that might be interesting to know is that in first puberty both testosterone and estrogen have an impact on your voice. However, estrogen has a much weaker impact than testosterone does. In first puberty these hormones increase the size of your vocal structures.

In second puberty estrogen doesn't seem to have a noticeable impact on voice so you shouldn't expect your voice to change if you go on E. Testosterone on the other hand does have an impact, but the extent to the change varies depending on a whole host of factors. Generally speaking the vocal folds will get bigger, this will come across as a change in pitch and the weightiness of the voice. Depending on the situation e.g. age there may also be a change in the size of cartilages so resonance/size might change and so too might the prominence of the adam's apple.

Sometimes there is a mismatch in the degree of change, where the vocal folds enlarge disproportionately to the increase in relation to cartilage changes and this may result in something called entrapped vocality. There is limited research on this, and it's unclear how far (it may be a behaviour issue and how far) behavioural modification can mitigate the impacts of it. This may also be associated with "T-voice/flu" where the voice might sound buzzier/rougher or smaller in size than you'd expect for the pitch.

As acknowledged before the removal of hormones can also do things to a voice. Though there is limited information on how this manifests in trans people, in older cis people where hormone production reduces i.e. menopause and reduced testosterone production, we know that reducing estrogen levels are associated with vocal fold swelling and thickening, while the reduction of testosterone is associated with the vocal folds thinning out slightly. The general effect of this is rougher voices, where men's voices get higher, airier and lighter and women's voices get lower and heavier.