

# Voice & Communication Change for Transgender/Gender Non-Conforming (GNC) Individuals

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# First things first!

- Terminology is critically important for this population – language and identity are related
  - Transgender/trans – an adjective, not a noun
    - Trans man, trans woman
    - Transfeminine, transmasculine
  - Cisgender/cis
  - Gender non-conforming (GNC), non-binary, genderqueer
  - AFAB/AMAB (sex assigned at birth)
  - And many more
- Respect names and pronouns (not “preferred”)
- This might be new or uncomfortable for you, but the bottom line is to listen to what an individual wants and just DO THAT without question – this is about someone’s identity and humanity!
  - Yes, you’ll make mistakes. Own them and correct them.
  - Fluency comes with experience.
- Necessary disclaimer: I am cisgender and I do not speak for this community. I have gained experience and some fluency but I still make mistakes!

# What's the importance?

- “The overall purpose of voice and communication therapy is to help clients adapt their voice and communication in a way that is both **safe** and **authentic**, resulting in communication patterns that clients feel are **congruent** with their gender identity and that reflect their sense of self” (WPATH Standards of Care 7 and Adler, Hirsch, & Mordaunt, 2006)
  - Gender dysphoria: distress caused by mismatch between gender identity and sex assigned at birth
- Increases personal safety and access to professional/educational/social opportunities for a community that experiences violence and discrimination at much higher than average rates
  - Per National Center for Transgender Equality (2011):
    - 26% experience job loss and 50% experience job harassment
    - 20% are evicted or denied housing
    - 50-80% experience verbal, physical, or sexual abuse
      - In 2018, 369 murders in 72 countries
    - 50-67% prevalence of depression compared to 9.1% in US overall
    - 21-41% prevalence of suicide attempts for youth (highest among non-binary youth)

# What's the evidence?

- Nobil et al (2018): voice-related QoL is worse for trans people than the general population, especially for trans women
- Watt et al (2018): vocal congruence is related to well-being
- Hancock & Garabedian (2013): training aligns voice/communication gender markers
- Gelfer & Tice (2013): training aligns voice/communication gender markers
- Hardy et al (2018): acoustic predictors of gender in voice are starting to be identified
- Gallena et al (2018): there are resonant features that are predictive of gender
- Hancock et al (2014): intonation is important
- Kawitzky & McAllister (2018): visual-acoustic biofeedback is helpful (but far off in the future)
- Hancock et al (2011) and Watt et al (2017): improving voice improve quality of life!
- McNeill et al (2008) and Paltura & Yelken (2019): surgery only changes pitch and this might not correlate with satisfaction
- Dacakis et al (2012): we need more evidence about efficacy of treatment
- Schwartz et al (2017): currently better evidence for voice therapy than for surgery
- Nolan et al (2019) and Kelly et al (2018): but evidence is growing for surgical intervention



# Who might be seen?

- Many different identities, including people who are:
  - Transfeminine
  - Transmasculine
  - Gender non-binary
- Any age
  - Child, adolescent, or adult
- Individuals in different stages of exploration of identity
  - E.g. before irreversible intervention, in preparation for coming out, after phonosurgery, after putting it off, etc.

# Assessment

- ENT assessment (maybe)
- Case history
  - Pretty much the same as what we're used to in the clinic, but may need to delve deeper into psychological and medical topics
  - Information about vocal hygiene, health, transition, social support, voice training history, voice use/expectations
  - Information about identity, social life, work
- Quality of life measures
  - Transsexual\* Voice Questionnaire (TVQ) - trans women only
  - Transgender Self-Evaluation Questionnaire (TSEQ) - all clients
  - Transgender Congruence Scale (TCS) - all clients
- Acoustic assessment
  - Mean F0
  - Frequency range
  - Optimal pitch
  - Maximum phonation frequency range
- Baseline audio recordings

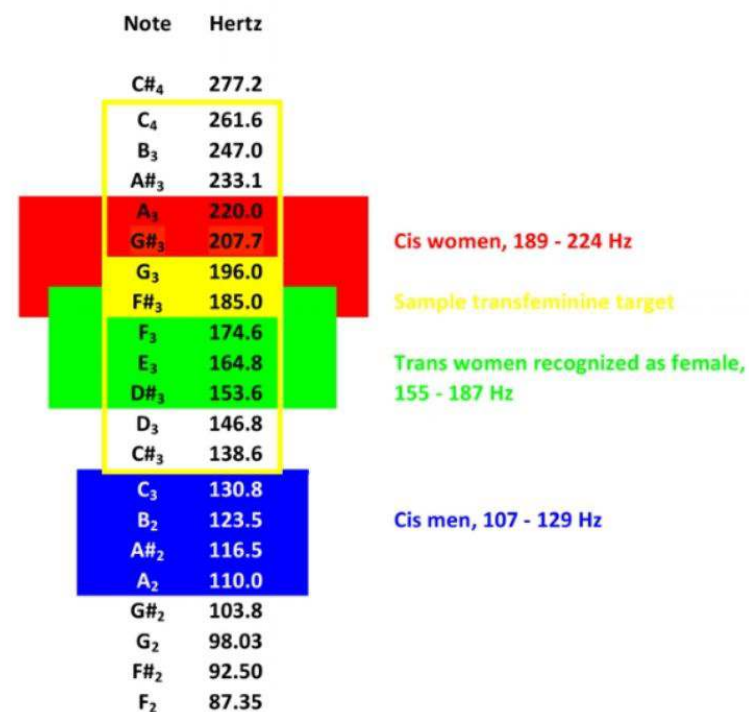
# Training Targets

- Pitch
  - Usually where the work starts because it's the primary voice marker of gender, but it is not the be-all and end-all
  - Increased pitch does not by itself lead to a feminine voice, and vice versa
- Resonance
- Intonation and stress
- Speech
  - Articulation
  - Loudness level
  - Rate
- Language
  - Word choice
  - Number of words
  - Communication style
- Non-speech vocalizations
- Non-verbal communication

# Voice Feminization

## ○ Pitch

- Need to think about both optimal pitch and range (leave room for intonation)
- Use the average speaking pitch chart to choose a pitch, or start around 165 Hz
- Often work on resonance at the same time to help get comfortable at a particular pitch
  - Work through hierarchical levels (tone, single word, short phrase, etc)
- Can either step up in increments (12 semitones) or choose a particular pitch and work from there
- Materials needed
  - Good ears
  - Monitoring software (computer or phone apps like Voice Analyst)
  - Tune to match (digital or manual, instruments)
  - Recording/analysis software (e.g. Praat, Audacity)



Average Speaking Pitch; Copyright New York Speech & Voice Lab PLLC;  
Based on Baken et al (2000), Gelfer et al (2000), Gelfer et al (2012),  
Spencer (1988), Wolfe et al (1990)



# Voice Feminization

- Resonance
  - The reverberation of sound in a space – for your voice, that means your chest, neck, head
    - On average, if you're AMAB you'll have a larger head/neck and this affects the resonance of your voice
    - Cello vs violin analogy
  - Forward resonance
    - Makes the voice sound smaller, brighter
    - LMRVT approach
- Techniques
  - Smile
  - High-front, spread vowel /i/ overlap
  - Semi-occluded vocal tract exercises (Kazoo, bubbles, straw phonation)

# Voice Feminization

- Intonation

- Assess using spontaneous speech and reading passages

- Look for rise and fall of pitch vs. volume for stress

- Feminine characteristics

- More overall pitch movement
  - Mix of upward and downward intonation
  - “Legato” movement across words
  - Stress using higher pitch and slightly longer vowels

- Techniques

- Start by practicing with two-syllable work, move into multi-syllabic and everyday phrases
  - Pick some phrases the client actually uses and work on those, adding more pitch movement and “gliding on vowels”

# Voice Feminization

- Speech
  - Articulation of consonants
    - More precise; crisp
    - Lighter contacts
    - Tongue forward
  - Articulation of vowels
    - Longer
  - Easy onsets
  - "Legato"
  - Rate
    - Generally, slower with lengthened vowels
  - Volume
    - Generally quieter
    - Difficult for some to maintain pitch when yelling

# Voice Feminization

- Language
  - Word choice, amount of words, and conversational style
  - Stereotypical language patterns for women:
    - More descriptive
    - Use of more words overall
    - More tag questions (...wasn't it?)
    - Less direct or assertive
    - More polite
    - Understanding
    - Sharing for sharing's sake
    - Relational/nurturing/intimacy
    - Agreeable
    - Express more emotion
  - Aren't these all just gross stereotypes? Yes – more on that later

# Voice Feminization

- Non-Speech Vocalizations
  - Cough, throat clear, sneeze, burp, laugh
  - Need to think about these things too as incongruence with new speech and voice can be problematic
  - Modification is all about pitch and resonance
    - Higher, wider, quieter, cover
    - Don't want to add length to the vocal tract
    - Using high front vowels like /i/ (hehe vs haha, ahem vs ahum)



# Voice Feminization

- Nonverbal Communication
  - Not all clients want to work on this, but can be helpful in immediate first impressions, etc
  - Generalizations (Adler et al 2012, 2016):
    - Head moves side to side
    - Head movements mimic those of conversational partner
    - Expressive face
    - Eyes "speak"
    - Arms move from elbow vs from shoulder
  - More generalizations (Hirsch, 2016):
    - Fingers talk
    - Movements are fluid
    - Hand shake from wrist and elbow
    - Smaller, narrower gait
    - Back leg lingers
    - Posture more S-shaped than A-shaped
  - Need to think about all of this from head to toe (head, face, trunk, hips, legs, feet, overall posture/stance)

# Voice Masculinization

## ○ Pitch

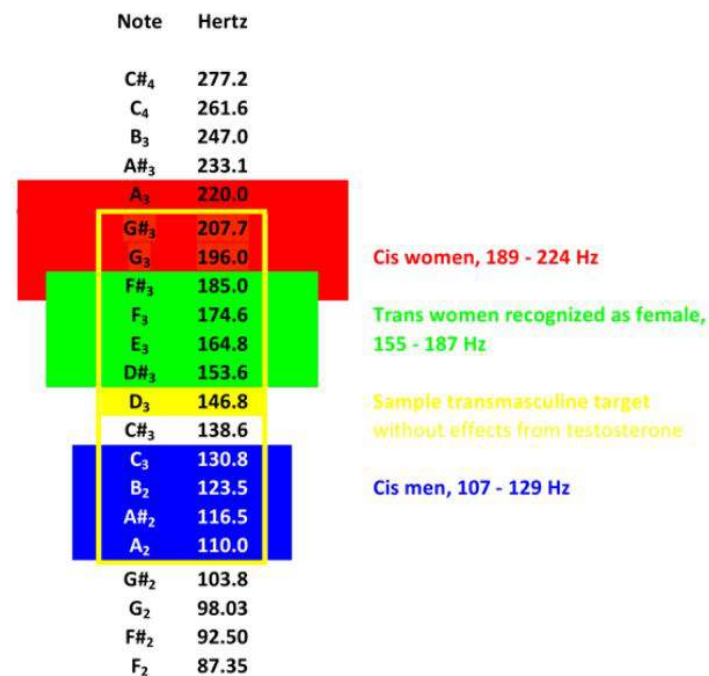
- Many clients are taking testosterone (T) or plan to in the future
  - This usually decreases pitch by ~1 octave in the first 6 months
  - In this case, pitch work may not be needed – but again, pitch is not everything and resonance may be more important

## ○ Techniques

- Same general principles as with feminine pitch
- Pick a target average pitch to hammer in and practice using chant-to-speech, step down with counting, etc

## ○ Materials

- Same tools for monitoring pitch



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# Voice Masculinization

- Resonance
  - Aiming for bigger, darker, heavier tone
  - Some basic principles
    - Tongue more back and low
    - Jaw lower
    - Soft palate higher
    - Lips more rounded
  - Techniques
    - Still LMRVT to avoid hyperfunction
    - Yawny voice
    - Imagine holding ping pong ball in back of throat

# Voice Masculinization

- Intonation
  - Common complaint is feeling unable to sound expressive without sounding feminine
  - Masculine characteristics
    - More staccato – think Obama
    - Provide stress/emphasis by lengthening or increasing volume, rather than increasing pitch (more feminine)

# Voice Masculinization

- Speech
  - Articulation of consonants
    - More dull, tongue back
    - Less crisp, not too sloppy
  - Articulation of vowels
    - Avoid hard onsets
    - More staccato
  - Speech rate
    - Generally faster
    - If speaking more slowly, lengthen with pauses rather than longer vowels



# Voice Masculinization

- Language
  - Again, word choice, amount of words, and conversational style
  - Stereotypical language patterns for men:
    - More concrete
    - Fewer words
    - Fewer tag questions
    - More direct/assertive
    - Less polite
    - Giving advice
    - Share for information
    - Independence
    - Focus more on content
  - Again... aren't these all just gross stereotypes? Yes – more on that later

# Voice Masculinization

- Non-Speech Vocalizations
  - Cough, throat clear, sneeze, burp, laugh
  - Need to think about these things too as incongruence with new speech and voice can be problematic
  - Modification is all about pitch and resonance
    - Lower
    - Louder
    - Low/back vowels (haha vs hehe, uh-hum vs ahem)

# Voice Masculinization

- Nonverbal Communication
  - Not all clients want to work on this, but can be helpful in immediate first impressions, etc
  - Masculine generalizations
    - Movements more static
    - Full hand gestures
    - Movement from shoulders
    - Wider gait with A profile
    - Seated legs often open
    - Conversational posture leaning away from partner
    - Staccato movements (think of placing a glass on a table)

# Working with Gender Non-Binary/Genderqueer/ Gender Non-Conforming Clients

- Working on the same parameters of voice and communication, but a mix of masculine and feminine characteristics as desired
  - You can work with varying degrees and combinations of feminine vs masculine speech/voice features to create a unique communication profile, whether the goal is more feminine, more masculine, both, or neither.
- Most people communicate with a variety of feminine, masculine, overlapping, or gender-neutral speech/voice features every day
- Pitch
  - 145-165 Hz range might be considered "androgynous" as it is within the speaking pitch ranges for both cis men and cis women

# Working with Pediatric Clients

- Very similar approaches, but keeping in mind things like maturity, puberty, stage of transition, etc.
  - Potential use of hormone blockers
  - If puberty occurs, helpful to wait for voice to settle
  - Emotional turmoil and identity discord on top of the typical adolescent struggles
- Also dealing with parents, which may get complicated depending upon their level of understanding, acceptance
- Rapid-Onset Gender Dysphoria – not a scientifically accepted concept, very controversial and transphobic
- Possibility of servicing on an IEP
  - Of course there's an adverse educational impact (don't forget that means more than grades!!!)
  - Not currently a standard way to proceed
    - Active area of advocacy within ASHA
  - If gender dysphoria diagnosis, that falls under ED



# Discharge Considerations

- Course of treatment is generally on the shorter side, although individualized of course
  - Something like 2-6 months, 12 months at maximum
- If you're at the point of tweaking/finetuning and the client has the skills to "play" with their voice, might be time to discharge or start doing maintenance sessions
- Look at basic outcome measures again at discharge
  - Same measures as pre-treatment (mean F0, F0 range, etc.)
  - Quality of life measures (TVQ, TCS)

# Miscellaneous Info

- Phonosurgery
  - Pitch raising surgeries do exist
    - Evidence is iffy and per our presenter, most fellowship-trained surgeons won't perform them because the evidence isn't there yet
    - There are risks of breathiness, poor vocal quality
    - Nonetheless it's a choice some clients will make
      - For some, a feminine voice with poor vocal quality feels like the better alternative ("at least I sound like a woman")
      - We need to be advocating to be involved pre- and post-surgery
- Growing evidence about possible ASD/gender dysphoria connection
  - Higher prevalence of ASD in the GD population vs. the general population (5.5-7.8% vs. 0.5-2%)
  - Implications for social program?!

# “Hold on, isn’t this just perpetuating stereotypes?”

- Well, yes.
- And it's important to acknowledge that with our clients, and make it clear to them that we don't believe a man or a woman is any one thing.
- Sure, we may want to break down walls and barriers and allow our clients to be whoever they are without regard to these stereotypes (end the binary! end gender roles!)
  - Nevertheless, this is the current reality of the world that we all live in – people WILL make assumptions about who they are on a binary of "man" vs "woman"
    - Some trans/GNC people are okay with that and just want to be who they are anyway – anecdotally, more and more adolescents
  - BUT if they want to be perceived as a particular gender they'll need to use some of these stereotypes and acoustic assumptions to their advantage
    - Sometimes an issue of safety
    - Sometimes just for code-switching

# Service Delivery Considerations

- 1:1 therapy
- Group therapy
- Combination 1:1 and group
- Telepractice
- Insurance reimbursement
  - More and more success with getting coverage!
  - No official ICD-10 codes yet for transgender voice
    - Gender Dysphoria (need medical diagnosis): F64 – F64.9
    - Other voice and resonance disorders: R49.8
    - Unspecified voice and resonance disorders: R49.9
  - CPT codes
    - Evaluation: 92524
    - Treatment: 92507

# Radical Copyediting – Alex Kapitan

The concept of radical copyediting is based on the fact that language is not neutral. Through language we communicate values, norms, and ideals. Words matter: they can be used to harm or to heal; to perpetuate prejudice or imagine a different world; to oppress or to liberate.

Copyeditors help authors and publishers make sure that the material they put into the world is clear, consistent, and understandable, by way of following grammar rules, dictionaries, style manuals, and other tools. A radical copyeditor does all that and also helps authors and publishers align their words with their values of inclusion, equity, and nonviolence, bringing forward a particular awareness and sensitivity to how norms around race, class, ability, gender, sexuality, age, and other elements show up in our language.

Radical copyediting helps language live up to its most radical potential—serving the ends of access, inclusion, and liberation, rather than maintaining oppression and the status quo.

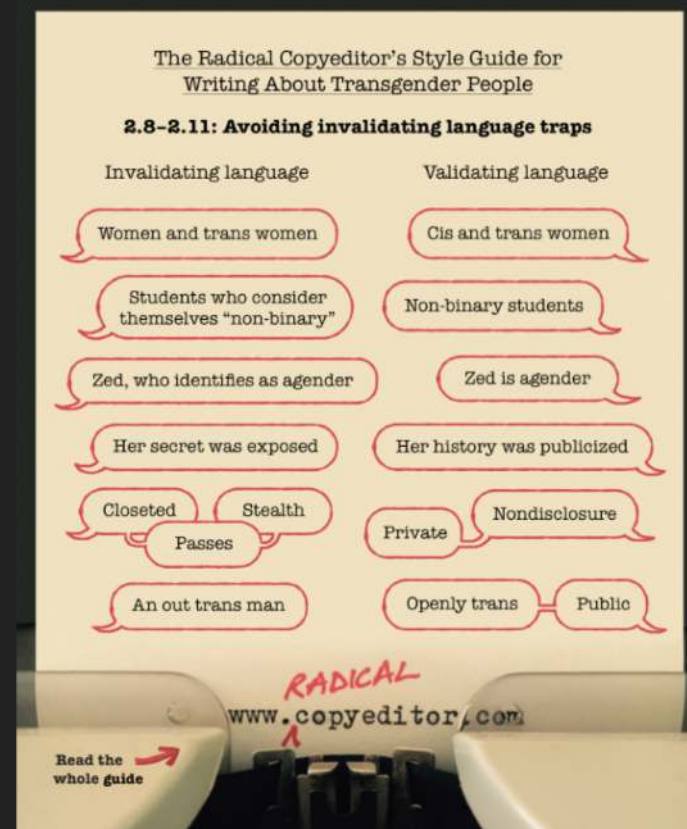
I believe that language matters, and that those of us who are working to manifest a better, more just world have a responsibility to use language in ways that describe the world we are working to create, rather than unconsciously perpetuating bias and prejudice.

Some words are intentionally used in ways that add more violence to the world and/or maintain oppression. Other words are used without any intention or active awareness, and maintain the status quo by unconsciously promoting mainstream values and norms. Still others are used in intentional ways that foster awareness, equity, and liberation. This is the way that I strive to help others utilize language.



# Radical Copyediting – Alex Kapitan

- Transgender Style Guide
  - VERY helpful for clear instructions on how to refer to trans/GNC people written by a genderqueer copyeditor
  - <https://radicalcopyeditor.com/2017/08/31/transgender-style-guide/>



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