

GENDER AND THE VOICE

Lal Zimman is a visiting assistant professor of linguistics at Reed College, where he teaches a variety of courses on language and society and conducts research on the relationships between language, gender, and sexuality in transgender and LGBTQ communities.

The voice is an important cue in the process of categorizing people by gender. Speech-language therapists have a long history of training and doing research on trans women aiming to feminize their voices. Fewer studies exist on the voices of trans men, in part because the changes brought about by testosterone are usually seen as overriding any need for speech therapy. However, research from the field of linguistics shows that biology cannot explain all of the gender differences in the voice and there is tremendous diversity among people of the same sex or gender.

Anatomy puts some limits on our voices, and exposure to testosterone is known to enlarge the larynx (or voicebox), which generally lowers vocal pitch. But even pitch, which is strongly linked to biology, is also influenced by social factors. Speakers of some languages show much more dramatic differences between women's and men's pitch than speakers of others. Most children learn to sound male or female before sex differences in the vocal anatomy develop at puberty.

In addition to pitch, the shape of the vocal tract determines which frequencies will resonate most strongly, and women's vocal tracts tend to be shorter than men's. Smiling causes the vocal tract to shorten, while rounding the lips makes it slightly longer. There is also the option of raising or lowering the larynx within the throat, which is something children begin to do early in life.

There are also significant gender differences in the pronunciation of particular sounds. Among American English speakers, women tend to pronounce [s] at a higher frequency than men by placing their tongue closer to the upper teeth while making this sound. The other ways that women's and men's voices have been shown to differ tend to relate to the notion of clarity, with women generally speaking with greater precision than men—"mumbling is macho," as one linguist puts it.

Some trans people may wish to change their speaking styles as part of a shift in gender expression, and the fact that many gender differences are learned rather than innate suggests that kind of change is possible, if challenging. Others may prefer a nonnormative voice, in order to signal a queer or distinctly trans identity.

FINDING OUR VOICES, LITERALLY

Christie Block, MA, MS, CCC-SLP, is a clinical speech-language pathologist specializing in voice-speech-communication training/rehabilitation for transgender people in New York City, a trainer of other speech-language pathologists in transgender care, and a member of the Columbia University-based Working Group on Gender and the World Professional Association for Transgender Health.

How exactly is gender conveyed when we talk? Pitch is usually what we first think of. However, many other aspects of speech come into play, including intonation, resonance, articulation, vocal quality, stress, loudness, and speech rate. A combination of some or all of these elements can result in a more feminine voice that sounds higher, smaller, lighter, and/or more expressive, compared to a more masculine voice that sounds lower, bigger, heavier, and/or more matter of fact.

In addition to how we sound, other aspects of communication can display gender. These include word choice, the number of words used, conversation topics, and conversation style (such as the degree of politeness or directness). Gender can also be expressed in nonverbal communication or body language, such as eye contact, facial expression, hand gestures, or head movements.

Some of these aspects of communication are based on biological sex differences of the vocal mechanism, for example, the length of the vocal folds. Many other aspects are based on sociolinguistic norms that we have learned since childhood and that depend on language, dialect, region, socioeconomic class, and other factors.

To explore and learn authentic and effective communication skills, a person can seek help from a qualified specialist in transgender voice and communication, typically a speech-language pathologist. Feedback is an essential benefit of working with a specialist, as new skills are practiced, employed in real life, and established over time. Voice and communication change requires patience, like learning a new language or adjusting to other aspects of transition.

Transmasculine people who take testosterone almost always experience a welcome effect of lower pitch within the first year of treatment, with an eventual permanent drop of up to an octave or more. Hoarseness sometimes occurs in the initial months of therapy. In contrast, feminizing HRT has no known effect on the adult voice. Pitch-raising voice surgery has resulted in widely varying degrees of satisfaction and long-term improvement; pitch-lowering surgery is rare and results are not generally observed at this time. Voice and

