Conveying gender through speech: insights from trans men

A mixed-methods study exploring the phonetic features of trans men's speech in different contexts, and their own beliefs about vocal cues to the perception of gender. Alice Ross Cliodhna Hughes Eddie L. Ungless Dr. Catherine Lai



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Research questions

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Which features of the voice do trans men feel most impact perceived masculinity?

Do they experience difficulties with consciously controlling these vocal features?

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What are the acoustic correlates of the features trans men use to emphasize masculinity?

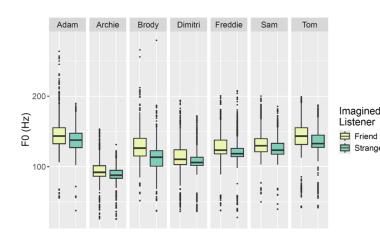
Method

Participants (n = 7): all trans men, all L1 English speakers, ages: 24-39, length of time since beginning social transition: 3-10 years. Interviews lasted 30-45 minutes and incorporated a read speech task: we asked participants to read a version of the Rainbow Passage (modified to remove generic 'he' and religious content) aloud, first imagining that they were speaking over the phone to a close friend, and then to a stranger.

Acoustic analysis

Imagined listener was a significant predictor of F0.

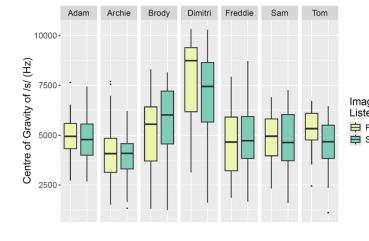
We saw no group-level significant differences in formants or CoG of /s/ across imagined listeners. But individual participants altered the features in different ways and to different extents across conditions.



F0 distribution for each participant

These names are pseudonyms!

When the imagined listener was a stranger, compared with a friend, all participants spoke with a lower median F0 and reduced pitch variation.



Centre of gravity of /s/ distribution for each participant

Median CoG of /s/ was lower for three participants when the imagined listener was a stranger, and higher for one. Three participants showed little difference in CoG between imagined listener readings.

Qualitative analysis

We asked participants what they might change about their speech in stressful contexts, if they were concerned about being misgendered.

The most frequently mentioned features match the measured differences between contexts in our reading task: lower pitch and reduced pitch variation.

Some also reported other changes when they felt self-conscious: speaking minimally, with shorter utterances and fewer politeness markers, emphasising regional accents, using informal language and a 'pally' or 'dude bro' stance.

I think it does take you out of the situation. Like, that is labour and it is a distraction from being present in a conversation.

'Brody'

Participants also shared concerns about trans visibility and authenticity. Five interviewees mentioned that 'passing' is not, or shouldn't be, the goal: people shouldn't feel pressure to hide their trans status. Several participants also commented on, and resisted, patriarchal attitudes and stereotypes about gender.

Overall, passing was seen as a sometimes necessary strategy for safety, while our participants felt that gender is complex, highly individual and personal: all gender presentations should be equally respected.

so I'm like, 'yeah bro'...
I'm trying to just assimilate,
and it feels very forced, but it
also makes me feel safe.

'Tom'

Several people described mental effort associated with trying to monitor and control the voice. As queer people, conveying a heteronormative, stereotypically masculine persona can feel inauthentic.

Some felt that undergoing voice training would be stressful, and that actively self-monitoring speech could exacerbate feelings of self-consciousness and dissatisfaction, doing more harm than good.

it's visibility versus safety for queer people, which I think is so personal.

'Archie'

Conclusions

- Trans men demonstrate style-shifting behaviour, commonly lowering and narrowing their F0 range in less comfortable speech contexts. Participants were self-aware about their own use of pitch.
- Different speakers employ different strategies, especially regarding formants and CoG of /s/. They also make other changes to their speech in pressurised situations, like emphasising regional accents or adopting stereotypically male lexical items.
- We see a great deal of individual variation, even within a small sample, in trans men's experiences, voices, and linguistic behaviour.









