PERCEIVED SEXUAL ORIENTATION AND GENDER NORMATIVITY: WHAT DO GAY MEN, NERDS, AND FEMALE-TO-MALE TRANSEXUALES HAVE IN COMMON?

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OUTLINE

- Brief overview of previous researchers’ explanations for gay-sounding voices, which have often focused on sexual orientation as a matter of identity
- I argue that gender normativity also needs to be taken into account in explaining this phenomenon
- This is supported by the results of a perceptual experiment using the voices of gay men, female-to-male transsexuals & nerds
- Further support is provided by acoustic analyses of these voices

GAY-SOUNDING VOICES

- The perception of certain men’s voices as “gay-sounding” has received growing attention over the past 15 years (e.g. Gaudio 1994, Linville 1998, Smyth Rogers & Jacobs 2003, Pierrehumbert et al. 2004, Munson 2007, Podesva 2007)
- While these authors have focused most often on identifying the acoustic characteristics of gay-sounding speakers, there is another question that is usually addressed briefly and sometimes indirectly: why do some men have gay sounding voices to begin with?
- This final question is the focus of my project

GAY-SOUNDING VOICES & IDENTITY

- Many early studies treated gay-sounding voices as stemming from the speaker’s sexual orientation (i.e. people sound gay because they are gay) in a rather direct way
  - E.g. Gaudio (1994) argued against the stereotype of gay men as socially and linguistically ‘effeminate’, instead emphasizing that gay-sounding voices were acquired as markers of gay identity
  - Linville (1998) suggested that contact with gay community led to the adoption of a gay-sounding style
- This approach has evolved alongside theories of identity
  - Podesva (2007) shows how gay identity can be made salient through the construction of a diva persona
THE ROLE OF GENDER CONFORMITY

- A number of authors (Smyth et al. 2002, 2003; Renn 2002; Avery & Liss 1996; Heffernan 2006) have suggested that gender normativity may be a better predictor of whether a man sounds gay than sexual orientation.
- There are a number of reasons this makes sense:
  - Most phonetic features linked to gay-sounding voices among men are also linked differences between women & men
  - Not all gay men *sound* gay
  - Not all gay-sounding men *are* gay
- Smyth et al. suggest childhood gendered language socialization may be key (i.e. children may attend to different role-models for speaking)

BUT GENDER ALONE IS NOT ENOUGH

- Munson points out that we can’t simply say gay-sounding men are imitating or talking like women
  - If this were so, we would expect more similarities between gay-sounding men’s voices and (presumed straight-sounding) women’s voices
  - E.g. difference in overall F1/F2
- Instead, gay-sounding men use only a select few of the phonetic characteristics associated with female voices, leading Munson to argue that these features index gay identity

MULTIPLE STYLES, MULTIPLE SOURCES

- Zwicky (1997) suggests that any man who fails to live up to heteronormative expectations of appropriate masculinity may be perceived as gay, regardless of orientation.
- Just as various kinds of non-normative masculinity might be lumped together and derided as “gay” (e.g. straight cross-dressers), different linguistic styles may also be conflated in the same socio-perceptual group.
- If, as Zwicky suggests, there are multiple gay-sounding styles, it’s not a stretch to imagine that these styles have arisen in different ways: some may be driven by gay identity and others may be driven by gender non-normativity.

RESEARCH DESIGN

- Analysis of speech read by men from three groups: straight men with straight-sounding voices, gay men with gay-sounding voices, and female-to-male transsexuals, or trans men, with various sexual orientations
  - Trans men often make use of testosterone therapy, which causes a drop in pitch alongside other physical changes
- Questions:
  - Are trans men perceived more like the straight-sounding or gay-sounding non-trans men?
  - If trans men are perceived like gay-sounding non-trans men, what features do (or don’t) their voices share?
  - How can we explain this similarity, if it exists?
RESEARCH DESIGN CON’T.

- Speakers, who read the Rainbow Passage, included:
  - 3 straight non-trans men
  - 4 gay non-trans men
  - 6 trans men, most of whom identify as queer
- (Building on pilot with 3 straight, 2 gay & 3 trans men)
- Perceptual experiment asked 20 listeners to judge each speaker as gay vs. straight sounding (along with other characteristics) on a scale of 1-5 based on ~30 sec. segment
- Analyzed features based on previous investigations of gay-sounding voices
  - Sibilants (Praat’s moment analysis): Mean, SD, skew & kurtosis of /s/ (17 tokens/speaker)
  - F1 & F2 for stressed vowels (52 tokens/speaker)
    - Overall mean F1 & F2
    - Vowel peripherality (overall & /i/ to /u/ distance)
  - Pitch & voice quality (across vowel tokens)
    - Mean F0 & F0 range
    - Mean creakiness

2 NOTES: NORMALIZATION & STATISTICAL SIGNIFICANCE

- Normalization
  - It isn’t clear whether these judgments are based on relative vowel distances or absolute formant values
  - Listeners take gender normativity into account in normalization (Strand 1999)
  - So are people normalizing by gender and then judging sexual orientation or using sexual orientation perceptions in the process of normalization?
  - To allow for either possibility, I analyzed both normalized & unnormalized formant values
- Statistical significance
  - I’m including statistically “suggestive” results (p < .1)
  - Upon broadening my subject pool:
    - Perceptual findings increased in statistical significance
    - But links between acoustic features and gayness ratings decreased in statistical significance
  - I will return to this point at the end of my analysis

PERCEPTUAL RESULTS

- Gay men sounded significantly more gay than the straight men (p < 0.0006)
- Trans men sounded significantly more gay than the straight men (p < 0.0021)
- The problem of nerds:
  - 2 speakers, one straight and one gay, who strongly identified as nerds, were more difficult to categorize on a gay/straight continuum
  - The nerds got “don’t know” ratings more often than other speakers
  - The straight nerd was rated as the most gay sounding of the straight speakers (2.65 vs. 2.25 and 1.95 for the other 2 straight speakers on scale of 1-5)

SIBILANT, F0 & VOICE QUALITY FINDINGS

- No statistically significant differences for /s/
  - Suggestive positive correlation between kurtosis & gayness rating (p < 0.0974)
  - Pilot found that trans men had significantly higher centers of gravity for /s/, not replicated with larger speaker set
  - Near significance for gay men being creakier than either straight men or trans men (p < 0.0577)
  - Suggestive correlation between creakiness and gayness rating (p < 0.0774)
Vowel Findings

- F1 for /ow/
  - Unnormalized, trans men had lower mean F1 for the nucleus of /ow/ than either straight (p < 0.0106) or gay (p < 0.1285) men
  - Normalized, trans men had lower mean F1 for the nucleus of /ow/ than either straight (p < 0.0135) or gay (p < 0.0737) men

- F1 for /ʊ/
  - Unnormalized, more gay-sounding speakers had significantly lower mean F1 in /ʊ/ than less gay-sounding speakers (p < 0.0219)

- F1 for /a/
  - Normalized, more gay-sounding speakers had suggestively lower mean F1 in /a/ than less gay-sounding speakers (p < 0.0999)

- F2 for /æ/
  - Normalized, gay men had lower mean F2 for /æ/ than either trans (p < 0.0234) or straight (p < 0.1496) men

- Distance between /i/ and /a/
  - Normalized, more gay-sounding speakers had a greater distance between mean F1 for /i/ and mean F1 for /a/ than less gay-sounding speakers (p > 0.0921)

Looking at Individuals

- Previous research has linked negatively-skewed energy in the spectra of /s/ with gay-sounding voices
  - Straight speakers had positive skew
  - Three out of four gay speakers had negative skew
  - Two out of six trans speakers had negative skew

- Center of gravity
  - Straight speakers’ mean center of gravity were 4523, 4839, 5273 (Hz)
  - Gay speakers: 3201, 3201, 4489 & 5618
  - Trans speakers: 2105, 4796, 6399, 6424, 6523, 6762

- Two gay men and one trans man (all gay-sounding) had far more creak than other speakers
- Two gay men and two trans men (also gay-sounding) had twice the F0 range of the other speakers

Different Styles

- Put differently, these speaker groups may be similar perceptually, but they are different acoustically
  - Gay men had less fronted /æ/
  - Trans men had higher nucleus for /ow/
  - Gay-sounding speakers (gay, trans, or otherwise) had higher /a/, /a/, and greater distance between /i/ and /a/

- Furthermore, looking at individual speakers, it becomes clear why so many features fell just short of statistical significance when the speaker pool was expanded:
  - Not all speakers used the same phonetic style

Conclusions

- Different acoustic styles can be perceived similarly
- Speakers perceived as gay-sounding may or may not be gay
- So what do these speakers have in common?
  - Those who reject or fail to live up to hegemonic masculinity may sound gay regardless of their sexual orientation
  - Gay identity is gendered
  - Nerd identity (also gendered) (e.g. Bucholtz 1999)
  - Trans men’s experiences being raised as girls likely has some influence on their speaking style; members of this group also often reject machismo
- We need to take a more holistic view of identity that incorporates sexuality, gender normativity, and other facets of the self
THANK YOU!

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REFERENCES


REFERENCES CON’T.