

# Queer and Trans Sociophonetics Webinar

Saturday, October 24, 2020, 3:00-5:00pm Eastern

Presented by:

*Linguistic Society of America Committee on LGBTQ+ Issues in Linguistics [COZIL]  
Culture, Language, and Social Practice [CLASP] Program at University of Colorado*

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## Introduction to Queer and Trans Sociophonetics

*Jeremy Calder, University of Colorado Boulder*

The sound of the queer voice has captured the intrigue of the popular and sociolinguistic imagination, spurring a wave of research investigating what makes someone “sound gay”. While much research has sought to uncover the phonetic markers of the (cisgender, White, male) “gay sounding” voice, only recently has a wave of research begun to investigate the myriad ways that queer speakers of other gender, sexual, and racial identities articulate their identities. This panel continues this trajectory, aiming to: (1) explore how understudied and marginalized queer identities— including transgender, non-binary, and non-White identities— are articulated using phonetic, variationist methods; (2) discuss the implications that the phonetic patterns of these speakers have on theories of sociolinguistic variation that are based on White, cisgender, heterosexual speakers and often taken for granted as if they apply universally; (3) to explore the consequences of the ways that dominant theories and methodologies in sociolinguistics don’t account for the full range of queer experiences.

## Tran/s/gender: assessing the effects of the social construction of gender on speech. A focus on transgender /s/ realisations

*James Parnell-Mooney, University of Glasgow*

This study aims to gauge how much speech is conditioned by one’s gender identity rather than their sex. On a fine-grained level, fricatives have been shown to index speaker sex, which was initially attributed to biological sex differences; ‘larger’ males have a physically larger vocal tract and thus lower peak frequencies. However, studies have indicated that gender identity also impacts peak frequency; speakers actively alter their /s/ production in order to index their gender. Female speakers produce ‘fronter’ articulations of /s/ resulting in higher peak frequencies, while males have ‘backer’ articulations and actively lower peak frequencies. While these show /s/ indexes speaker gender, it has also been found that /s/ varies depending on conversational context - females in same-sex conversations raise their peak frequencies.

Little sociophonetic study has been carried out on transgender voices, however, it has been found that peak frequencies of transmasculine speakers pattern based on their gender identity and the length of time they have identified as such (Zimman 2017), rather than the sex they were assigned at birth. This study analysed data from six participants; four transmasculine and two non-binary, across three conversational contexts; conversation with a cisgender male, cisgender female and transgender interlocutor. Peak frequencies of participants /s/ realisations were measured and analysed across conversational context. This study found that most transmasculine participants’ peak frequencies pattern with their gender identity while non-binary speakers behave differently in a unique way. Transmasculine and some non-binary speakers also vary their peaks across conversational contexts but non-binary speakers are not systematic in this variation.

## Variable vocal tract length as sociolinguistic feature

*Lily Clifford, Stanford University*

With vowel data from 19 trans women participants, each of whom self-identifies as having feminized their voice, e.g. can produce forms of speech that would be perceived as both ‘physiologically male’ and ‘physiologically female’, I find evidence of wholesale vocal tract manipulation in nearly every dimension. I focus in particular on more robust, i.e. less sensitive to the area function, indicators of vocal tract length, namely the higher formants, including F4. Linear mixed effects analyses of the relationship between formant frequency and what I am calling ‘register difference’ were performed, demonstrating a significant effect of register on each formant F1-F4. The effect of register on frequency of F1-F4 was successively higher, suggesting an overall manipulation of vocal tract length apart from variable articulatory setting. These patterns have bearing on vowel normalization techniques, automated speaker identification, and theories of style within variationist study.

## **Pajara/s/ in wigs: bilingualism, latinidad, and gendered sociophonetics in Miami's Queer Barrio**

*Christopher Mendoza, Florida International University*

While previous studies associated with fronted /s/ production and perception — reporting higher center of gravity and lower spectral skew — have consistently reported [s+] as an acoustic correlate to femme-coded gender expression, much of this work has focused on predominantly monolingual, white-majority settings (Campbell-Kibler 2011, Hazenberg 2012, Zimman 2013, Podesva and Van Hofwegen 2014). In this talk, I focus on an examination of cross-linguistic /s/ production amongst Latinx drag queens in the Wynwood art scene of Miami, exploring how Latinx identity and multilingualism complicate our understandings of [s+] as indicative of femme-coded identity performance. Adopting previous methodologies on the interplay between visual drag transformations and vocal identity construction (Calder 2019), I also explore the relationship between Latina embodiment and acoustic production as it pertains to this queer Miami context. Acoustic measurements will be read through queer of color critique, to disrupt hegemonic understandings of what it means to “sound” queer, or otherwise part of any community, when descriptions of those identities become essentialized through the white g(ay)ze.

## **Ér-Change: shifting from “smooth operator” to “sexual modern” in Beijing Queer Media**

*Andrew Ting, University of Colorado Boulder*

Qing Zhang's previous research (2005, 2008) identifying the social salience of rhotacization (the phonological r-coloring of syllable codas) in Beijing Mandarin examined the variable's indexical link to the “Smooth Operator,” a local male persona historically linked to oiliness and fluidity of conversation. This investigation examines the popular 2015 Chinese web series “Counterattack!” (noteworthy for its viral success despite its overt depiction of homosexuality and queer censorship in China), where characters of the series use rhotacization to evaluate each other's sexual knowledge and practices (Hall 2019) and position themselves as modern individuals. My analysis suggests that the use of this rhotic variable in “Counterattack!” stylistically incorporates the imbued meanings of the “Smooth Operator” persona (savoir-faire, urban versatility) into a new social persona (Agha 2003, Eckert 2003): the “Sexual Modern.” Thus, Beijing rhotacization—previously discussed as indexing a local urban male persona—has now also become indexical of sexual modernity.

## **Normativity in normalization: Methodological challenges in the (automated) analysis of vowels among non-binary speakers**

*deandre miles-hercules and Lal Zimman, University of California Santa Barbara*

Despite recent increases in the voices of trans and gender non-conforming speakers, sociolinguistics has not kept pace in (re)formulating its tools and models for analyzing gender more inclusively. At the same time, (socio)linguists have been increasingly relying on automated analytic tools such as forced alignment and automatic transcription. This paper explores how the automation of vowel formant analysis on the basis of binary gender shapes the results obtained. Utilizing interview data from multiple studies of non-binary individuals, we find that the F1 and/or F2 of several vowels varied significantly depending on the binary gender selected during the extraction and plotting phase. While their existence is unsurprising, these differences raise questions regarding the best analytic procedures in cases where binary gender cannot be unproblematically assigned. We conclude our talk with practical recommendations for studying non-binary voices and creating automated tools for phonetic analysis.