Inhabiting acoustic spaces: The interaction of fundamental frequency and the gender/sexuality divide in female-to-male transsexuals

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Session 1 - Sexuality

Scholars have noted the way that the American transgender community divorces gender identity and expression from sexual orientation (Bagemihl 1997; Kulick 1998; and Valentine 2007). Furthermore, other researchers such as Halberstam (1998) and Rubin (2003) have described a tenuous, conflict-ridden border between butch lesbians and female-to-male transsexuals that results in identity work aimed at preserving the difference between these subjectivities. Given the salience of these borders, this paper explores the ways that variation in fundamental frequency descriptors interacts with transmen's practices of crossing that gender/sexuality divide. Taking Cameron and Kulick's (2003) claim that sexuality and gender are interrelated, we investigate the (de)naturalization of this divide (Bucholtz & Hall 2005) in transmen's speech by presenting an analysis of the speech of four transmen, who were observed and recorded between 3-4 times over a period of 3 months in interactions inside and outside the local GLBT community. Our combined phonetic and ethnographic analyses suggest that fundamental frequency mean, range, and dynamism may be significantly influenced by embodiment and visibility that determine how transmen intersubjectively construct and display their own gender and sexuality. These prosodic features were chosen for analysis both because they are considered strongly gendered while simultaneously capable of encoding sexuality (Gaudio 1994; Levon 2006; Podesva 2003; Smyth et al. 2003) and the strong awareness transmen show toward it.

As fundamental frequency demonstrably depends on physiological constraints and is further modified by conscious and unconscious behavior, it provides a laboratory to examine identity and agency, as modeled by Bucholtz and Hall (2005), in shaping the acoustic signal. Besides measuring the conversational fundamental frequency mean, range, and dynamism, after the observation was over, participants were also recorded performing pitch range exercises that mapped the extremes of their available physiological vocal range. As there is evidence of transmen's mean pitch being more “buoyant” and tied to the pitch floor less than that of cisgender males (Papp 2011), establishing the available range enables the analysis to locate speakers' production in their own available acoustic spaces.

Just as transmen's production of fundamental frequency is constrained by their physiology, so too is their visibility as (gay or lesbian) transmen affected by their embodiment. Devor (1997) demonstrated that 'female-to-male transsexuals make use of gender markers such as clothing and mannerisms, backed up by secondary sex characteristics, such as beards and deep voices, to convey the message to others that they are male' (419). However, masculinity is not always the most salient identity in a given interaction. Our findings suggest that these gender markers are simultaneously part of an indexical _eld with competing meanings (Eckert 2008) that transmen manipulate interactionally as a means to position themselves as members of purportedly mutually exclusive communities. The results, evaluated in the light of the semiotic and physiological resources available to them, illustrate how these transmen find themselves in many ways caught between their own desires to present their sexual orientations, and the dominant conceptions of transsexuality's relationship to gender that exclude the possibility of that presentation. The use of fundamental frequency provides a window into how these speakers negotiate this tension, relocating themselves in the available spaces to variably align themselves as affiliated with the standardized conception of GLB identity, and the gender/sexuality border inherent in that conception.