

## Abstract

Several recent socio-phonetic investigations have sought to answer the question of how sexual orientation is encoded in the speech. This research has gleaned two major results: for example, naïve listeners are able to judge the sexual orientation of male talkers (Linville, 1998; Smyth, Jacobs & Rogers, 2003; Munson, McDonald, DeBoe & White, *in press*) and female talkers (Munson et al, *in press*) from read speech. Secondly, research has suggested that systematic acoustic differences exist in both vowels (Pierrehumbert, Bent, Munson, Bradlow & Bailey, 2004; Munson et al, *in press*) and consonants (Linville, 1998; Smyth et al, 2003; Munson et al, *in press*).

The acoustic differences particular to gay/bisexual men and lesbian/bisexual women's speech patterns do not imitate the acoustic differences described in women and men's speech, respectively (Pierrehumbert et al, 2004; Munson, *in press*). That is, mounting evidence suggests that the speech of gay/bisexual men is not an imitation of heterosexual women's speech and the speech of lesbian/bisexual women is not an imitation of heterosexual men's speech. Most recently, research on the sexual orientation and speech has indicated that judgments related to the sexual orientation of talkers correlate with other more global talker characteristics like speech clarity and talker height with single word stimuli (Munson et al, *in press*).

This paper examines global talker characteristics that correlate with judgments of gay-sounding speech. This paper distinguishes itself from previous research in using stimuli several sentences in length. By using sentential stimuli, listeners are given a task that resembles talker judgments assumed in real-world situations. The stimuli used in this current set of experiments were passages previously recorded by Smyth et al (2003). The stimuli had been employed in Smyth et al's (2003) investigation of listeners' ability to determine the sexual orientation of a talker. The results of the current experiments are compared to the judgments of sexual orientation collected in Smyth et al (2003).

Two experiments are discussed. In Experiment 1 listeners ( $n=20$ ) were asked to rate the reading ability of 25 male talkers. Listeners were presented with a 25 second sample of a phonetically-balanced read passage over headphones. Listeners were instructed to rate the reading ability of each talker on a five-point equal-interval scale ranging from [1], indicating a very good reader, to [5], indicating a very poor reader. In Experiment 2 listeners were presented with the same stimuli and asked to determine whether there was a listener in the room at the time of the recording of the passage.

The results of both current experiments were significant. Analyses of Experiment 1 suggest a strong positive correlation between good reading ability and a gay-sounding voice,  $p < 0.01$ . Analyses of Experiment 2 indicate a relationship between perceived audience presence and judgments of sexual orientation,  $p < 0.05$ . These results support the general finding in Munson et al (*in press*) which suggests judgments of gay speech are related to listener assumptions about talkers that are unrelated to sexual identity. This investigation supports the notion that perceived gay-sounding speech styles are a socially-constructed category associated with other listener stereotypes of talkers.

## References

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