

Grammar versus phonetics in perceptions of gender and sexuality

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Although a range of phonetic features has been found to be salient in the perception of gender and sexuality (e.g., Gaudio 1994; Levon 2006, 2007; Munson et al. 2006), grammatical features have received less attention (but cf. Levon & Buchstaller 2015). This paper examines the interaction of variable noun-phrase number agreement (NP-agr) and variable pronunciation of nasal /e/ (en) in perceptions of gender and sexuality in the Brazilian Portuguese (BP) spoken in the city of São Paulo (SP).

In spoken BP, (NP-agr) varies between standard redundant marking of plural on all NP elements (e.g., *aqueles caras* ‘those guys’) and nonstandard marking of number on the determiner only (e.g., *aqueles cara-ø*) (Scherre 2001). Previous perceptual studies have demonstrated that male voices in São Paulo are perceived as sounding more “masculine” with nonstandard agreement, and as “gayer-sounding” with standard agreement (Mendes 2016). The current study combines this grammatical variable with the pronunciation of nasal /e/ (e.g. *tempo* or *tejmpo* ‘time’), a phonetic variable below speakers’ level of awareness that is highly correlated with gender, with diphthongization being used more by younger, upper-middle class women (Oushiro 2015).

The current study adopts a matched-guise technique to test the effect of these features on listeners’ perceptions of gender and sexuality. Using naturally-occurring speech from one male and one female speaker from São Paulo, we designed an online experiment in which 123 listeners rated a series of stimuli that contrasted only in the presence or absence of nonstandard number agreement and diphthongization (and their combination). Listeners rated the stimuli on a variety of scales, including perceived level of education, region, intelligence, friendliness, masculinity, femininity, and sexuality. A Principal Components Analysis of the responses identifies four underlying components in the data, two of which are explored here: the combination of education and region and the combination of masculinity and femininity. Multiple regression models were built to test the extent to which evaluations of these two components are influenced by (NP-agr) and/or (en). These models reveal that (NP-agr) is the only significant predictor of perceptions of education/region: voices are perceived as more educated and as belonging to more central areas of the city in the standard NP-guise than in the non-standard guise. (NP-agr) and (en) are both significant predictors for masculinity/femininity, although the two do not interact. Rather, voices are perceived as sounding consistently less masculine/more feminine in either the diphthong- or the standard NP-guises. Listener factors (sex, age, friendship networks, among others) do not play a role.

These findings are important because they further demonstrate that listeners are attuned to the perceptual meaning of both grammatical and phonetic variables (cf. Levon & Buchstaller 2015). Moreover, the results indicate a dissociation between percepts of gender and sexuality. These results are discussed in terms of their ramifications for theories of sociolinguistic perception.

References

- Gaudio, R. (1994) Sounding Gay: Pitch Properties in the Speech of Gay and Straight Men. *American Speech* 69 (1): 30–57.
- Levon, E. (2007) Sexuality in context: Variation and the sociolinguistic perception of identity, *Language in Society* 36: 533–554(4).
- Levon, E. (2006) Hearing ‘gay’: Prosody, interpretation and the affective judgments of men’s speech, *American Speech* 81(1): 56–78.

- Levon, E and I. Buchstaller (2015) Perception, cognition, and linguistic structure: The effect of linguistic modularity and cognitive style on sociolinguistic processing. *Language Variation and Change* 27: 319-348.
- Mendes, R.B. (2016) "Nonstandard Plural Noun Phrase Agreement as an Index of Masculinity", in Levon, E & R. Mendes (eds.) *Language, sexuality and power: Studies in intersectional sociolinguistics*. Oxford: Oxford University Press.
- Munson, Benjamin, Elizabeth McDonald, Nancy DeBoe & Aubrey White. 2006. Acoustic and perceptual bases of judgments of women and men's sexual orientation from read speech. *Journal of Phonetics*, 34, 202-240.
- Oushiro, L. (2014) *Identidade na pluralidade: avaliação, produção e percepção linguística na cidade de São Paulo*. PhD Dissertation. São Paulo: University of São Paulo/FFLCH.
- Scherre, M. M. P. "Phrase-level parallelism effect on noun phrase number agreement." *Language Variation and Change*, vol. 13, 91–107, 2001.