Variation in phonation type: Distributions and meanings in a mass-mediated context

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Voice quality has been linked to the demonstration of affective states (Chen et al. 2004), has distinctive social distributions (Esling 1978, Yuasa 2010), and also serves indexical functions signaling the identity and physical and mental state of the speaker (Laver 1968; Podesva 2010). In mediated fictional discourse, voice quality has been found to index “inner” identities that fail to be concealed by the other semiotic resources a character may deploy to misdirect listeners (Teshigawara 2003; Starr and Greene 2006).

This study asks how nonmodal voice qualities are used in televised Mandarin discourse and what social meanings nonmodal voice qualities index, extending the cross-cultural envelope of evidence regarding the social meanings of nonmodal phonation types. Speech data were drawn from the Mainland Chinese TV serial Nüren hua ‘Women Flowers,’ and analysis focused on 6 characters, who play relatively stable roles in the unfolding drama. The resulting corpus was segmented by syllable and intonational phrase, for a total of 2259 syllables and 310 intonational phrases.

Stretches of nonmodal phonation were identified auditorily and segmented in Praat to the nearest 1/100 sec. Nonmodal phonation events were categorized auditorily as creaky, breathy, or harsh. Creak was characterized by overall low fundamental frequency and individually resolvable glottal pulses, breath by faint or no voicing and aperiodic noise, and the label “harsh” was used to encompass other nonmodal voice qualities. Broken down by character, the frequency of each voice quality is shown in Figure 1.

Figure 1. Nonmodal voice qualities by character, as % of time at talk

Different characters have starkly different admixtures of voice quality, and consonant with Teshigawara and Starr and Greene's findings, these patterns covery with the “true” identity of the character in the context of the show—and also with the character's gender. The more “villainous” characters (LXL and LJX) have more nonmodal voice quality overall. LXL is creaky, whereas LJX is primarily “harsh.” The “good” characters show a divide by gender as well—the women (OYX and HMR) use very little nonmodal voice quality at all, but the two do-gooder men (LQQ and WYS) exhibit high rates of breathy voice.

These findings open up new ground in the cross-cultural study of social meaning and voice quality, and indicate that mediated data are a valuable resource for investigating social meaning in general. This project is part of a larger effort to uncover the relationship between the meanings of language use in mediated contexts such as televised drama to the functions it serves in context, and it closes with some remarks in that direction.