The phonotactics of “zero-s” in AAE-speaking children: Word boundary effects

The phonological shape of bound morphemes is dependent on context. For example, the plural, possessive, and 3rd-person singular morphemes (hereafter, “-s”) in English surface as [-s], [-z], or [-əz], depending on the final segment of the root to which these morphemes attach. In both first and second language acquisition of English, phonological context also determines whether or not a bound morpheme is overtly marked (Eckman, 1987; Goad, White, & Steele, 2003; Hansen, 2004; Hawkins & Liszka, 2003; Marshall & van der Lely, 2007; Song, Sundara, & Demuth, 2009). In fact, even adult speakers of nonmainstream dialects, such as African American English (AAE), show variable marking of bound morphemes that is likewise attributable, in part, to phonological context (Labov, Cohen, Robins, & Lewis, 1968; Poplack & Tagliamonte, 1994), though numerous other linguistic, socioeconomic, as well as gender- and age-related factors also play a role (Pruitt, 2006; Rickford, 1999; Stockman, 1996; Thompson, Craig, & Washington, 2004; Washington & Craig, 2002). It is not yet clear, however, what role phonological context plays in the variable marking of “-s” by children who speak AAE.

The goal of the current study was to conduct a detailed examination of the phonological contexts in which “-s” was overtly marked or “zero-marked” by 8 typically-developing AAE-speaking children from Louisiana (aged 4;6 to 5;6), who showed occasional to heavy use of AAE dialect features (Oetting & McDonald, 2001), and who were part of a larger study of morphosyntactic development by AAE-speaking children (Pruitt, 2006; Pruitt & Oetting, 2009). Twenty-minute play-based language samples were collected, each of which consisted of at least 100 intelligible utterances. Each sample was analyzed for overt or “zero-s” forms and their corresponding phonological contexts. We predicted that zero-s would occur more often in the context of abutting consonants (e.g., runs fast [rʌnz fæst]), which would otherwise result in a complex syllable coda (e.g., [-nz]), and especially abutting obstruents (e.g., dad’s truck [dædz trʌk]), which would otherwise create a complex sonority profile (Selkirk, 1984).

Of 192 “-s” forms evaluated across the children’s speech samples, 28% (55) were zero-marked. Of those zero-s forms, 95% were in the context of abutting consonants. What is especially interesting is that preceding obstruents accounted for only 29% of zero-marked forms, and following obstruents only 33% of such forms. In fact, zero-s occurred most often following vowels and preceding sonorant consonants, which was in stark contrast to our predictions that coda complexity and sonority profile would drive zero-s. Our findings also contrast the zero-s patterns reported for adult AAE speakers. Taken together, zero-s appeared to be driven not by syllable structure of the root to which the morpheme modified; rather, zero-s was most often triggered by the cluster contexts that occurred across word boundaries. This suggests that there is a word-boundary effect on zero-s, an observation not previously made for AAE-speaking children or adults. (Refer to Figures 1, 2, and 3 for illustration of our results.)

This pattern, though not previously observed for AAE speakers, is of course well documented for other languages (most notably French), as well as other cluster contexts for other English-speaking adults and (much younger) children (Chevrot, Dugua, & Fayol, 2009; Ladefoged, 1993; Matthei, 1989; Newton & Wells, 1999, 2002). Interestingly, these latter cases for English do not involve elision of morphological content, but rather tautomorphemic segments. That is, the morphemes remain overtly marked (e.g., hands [hænz], rather than [hæn] or [hænd]). Our results illustrate that morpho-phonological restrictions in AAE-speaking children’s productions may apply at the word level, and indicate that further research on AAE-speaking adults should be conducted to determine if the same pattern obtains.
References