

## The Comprehension of 3<sup>rd</sup> Person Subject-Verb Agreement by Low SES NYC English-speaking Preschoolers Acquiring Different Varieties of English: a Multidimensional Approach

Isabelle Barrière<sup>1&2</sup>, Sarah Kresh<sup>2&3</sup>, Katsiaryna Aharodnik<sup>2&4</sup>, Géraldine Legendre<sup>5</sup>, Thierry Nazzi<sup>6</sup>

<sup>1</sup>Communication Sciences & Disorders, Long Island University, Brooklyn ; <sup>2</sup>Yeled V'Yalda Research Institute, Brooklyn

<sup>3</sup>Linguistics, Graduate Center, CUNY ; <sup>4</sup>Speech-Language-Hearing Sciences, Graduate Center, CUNY

<sup>5</sup>Cognitive Science, Johns Hopkins University, Baltimore ; <sup>6</sup>Psychology of Perception, CNRS-Paris Descartes, France

Subject-verb agreement marking for 3<sup>rd</sup> Person Singular –s differs across varieties of English. Five and six-year old users of Mainstream American English (MAE), but not younger children, understand sentences that rely exclusively on the 3<sup>rd</sup> Person –s to indicate the singular subject (e.g. *the duck~~ø~~ swims in the pond* vs *The ducks swim~~ø~~ in the pond*) (Johnson et al., 2005). Five to seven year olds speaking MAE rely on 3<sup>rd</sup> person –s as a generic tense marker and a verbal suffix, but younger children and those using a variety that greatly differs from MAE do not (De Villiers & Johnson, 2007). The present study investigated three issues:

**(i)** Whether the results obtained by Johnson et al. (2005) would extend to sentences in which the verb in sentence-medial position is followed by an adverb rather than a prepositional phrase and/or sentences in which the agreement marker is sentence final, given that the latter fosters better performances on younger children's perception (Sundara, Demuth & Kuhl, 2011);

**(ii)** Whether children speaking MAE would perform better in a video matching task than those acquiring a variety that combines features from MAE and non-mainstream varieties (Some Variation), who in turn would perform better than those speaking a non-mainstream variety (Strong Variation);

**(iii)** Which properties of the input best account for similarities and differences across children acquiring these varieties.

**STUDY 1-COMPREHENSION:** Twenty-six monolingual English preschoolers between 3;1 and 5;5 (Mean age: 4;4) were administered a video-matching comprehension task that included verbal stimuli such as *the boys spin~~ø~~ (freely/in the hall)* versus *the boy~~ø~~ spins (freely/in the hall)*. They were categorized as users of MAE (N=8), Some Variation (N=9) and Strong Variation (N=9) based on the Diagnostic Evaluation of Language Variety (Seymour et al., 2003) and attended three preschool programs in NY, each of which enrolls a majority of children from ethnically diverse (African-American, American-African, Asian, Caribbean, Caucasian and Hispanic) low SES background speaking different varieties, in contrast to De Villiers & Johnson (2007) where speakers of MAE and Strong Variation were recruited in different schools tied to different SES. Our analyses of the results considered both accuracy and sensitivity scores that neutralize possible bias towards singular or plural responses (Johnson et al., 2005):

**(i)** Position of the agreement marker and nature of the post-verbal phrase (PP or Adverbial) did not impact the results: across groups, there was no significant difference between these conditions (fig. 1, 2), which reveals that in this age range the saliency of the marker does not have the same effect on comprehension as it does in earlier stages on perception.

**(ii)** Only MAE users performed significantly above chance across conditions (fig. 1, 2). However there was no significant difference between users of Some Variation and Strong Variation (fig. 1, 2).

Chronological age only impacted the results obtained by MAE users (fig.3), extending the results obtained by Johnson et al. (2005) and De Villiers & Johnson (2007) to sentences with sentence-final agreement markers and post-verbal Adverbials and to children acquiring Some Variation.

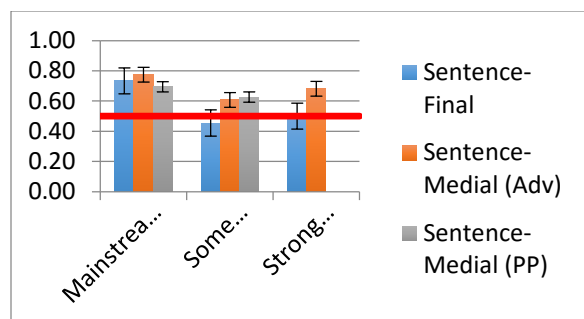


Fig. 1: Singular Sensitivity by Condition and Variation Status

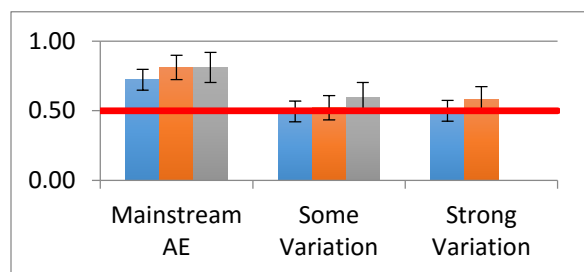


Fig. 2: Plural Sensitivity by Condition and Variation Status

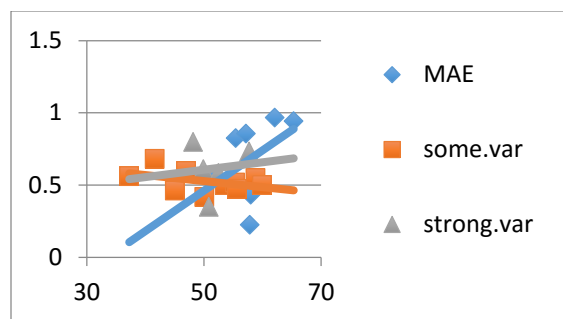


Fig. 3: Mean Sensitivity Score by Variation Status and Age (in number months)

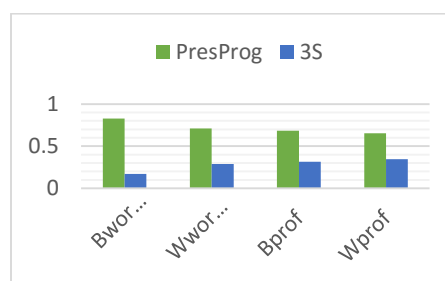


Fig. 4: Proportions of Singular Present Progressive in relation to 3<sup>rd</sup> Person Singular *-s* across users of different varieties

**STUDY 2- CORPUS ANALYSES:** Hall (1984) is the only CHILDES corpus that includes different varieties of American English used with children of the same age as our participants. Our analyses reveal similarities in the *frequency* of 3<sup>rd</sup> Person Singular *-s*: across speakers of different varieties, it occurs in less than 0.05% of utterances; and that *-s* occurs in all obligatory contexts across speakers and varieties but White and Black Working class corpora include much fewer obligatory contexts than White and Black Professionals. Secondly, we examined the hypothesis that the acquisition of 3<sup>rd</sup> Person Singular generic tense may not develop at the same speed in users of MAE and of other varieties given that non-MAE makes use of other devices (De Villiers & Johnson, 2007) (e.g. the progressive) to express the habitual (Kortman, 2013). Our results provide some evidence in favor of this hypothesis: a higher proportion of progressives (more than 80%) versus 3<sup>rd</sup> Person *-s* (less than 20%) is identified in Black Working Class than in speakers of other varieties (between 65 and 70% for the progressive versus 30 to 35% for 3<sup>rd</sup> Person *-s*) (fig.4). The analyses also reveal that while Auxiliary *do* is used as a habitual marker only by both Black Professionals and Working Class, irregular 3<sup>rd</sup> person *does* is used only by Black Professionals while Black Working Class use *do* in 3<sup>rd</sup> person Singular contexts (e.g. *if only she looks and don't touch*). Finally only these two groups use *-s* with first person singular subject (e.g. *I says, I picks him up*) which may simultaneously strengthen the association between Singular Subject Agreement *-s* and weaken the relation between 3<sup>rd</sup> Person and *-s*.

The combined results of Studies 1 and 2 suggest that *input frequency* does not account for the acquisition of features subject to variation but *variation in the distribution of related constructions* might. Future investigations should a) examine the comprehension of related constructions (e.g. whether our results on users of different varieties correlate with differences in the interpretation of the progressive forms and Auxiliary *do*) and b) lead to the compilation of corpora that reflect the diverse varieties of English to which young New Yorkers are exposed.

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