Stressed and Final Syllables in Language Acquisition: Which is stronger?

Avivit Ben-David (Hadassah Academic College) & Outi Bat-El (Tel-Aviv University)

Studies on language acquisition identify two strong positions – final syllable and stressed syllable (Echols and Newport 1992, Gerken 1994). This observation is based primarily on target-production correspondence, where target unstressed non-final syllables are truncated while stressed and final syllables are preserved in children's productions (e.g. Arabic *bərtəqálə* → *qálə* 'orange', Hebrew *télefon* → *téfon* 'phone', Russian *sabáka* → *bʲáka* 'dog').

In both adults and children's languages, a stressed syllable is considered a strong position, probably for the same reason: due to the acoustic prominence of stressed syllables, their segmental content is more accessible and thus resists alternation.

The difference between adults and children's languages arises with respect to the two edges (Dinnsen and Farris-Timble 2008): in adults' languages, the left edge is strong (Beckman 1998, Steriade 2001) while in children's languages the right edge is a strong. This difference can be exemplified with truncation of the name *daniéla*: an infant truncates it to *éwa* / *éla* while an adult to *dáni*.

Two questions will be addressed in this talk:

Question 1: *Which of the two strong positions in children's languages is stronger, the stressed or the final syllable?*
We will provide quantitative data from Hebrew- and Arabic-acquiring children, suggesting that the final syllable is stronger than the stressed one. We will show that children make significantly more errors in stressed (non-final) syllables than in final (unstressed) ones, where errors refer to syllable truncation (see table below), consonant deletion, and segmental substitution (harmony as well as context-free substitution).

Syllable truncation in Hebrew (disyllabic verbs)

	Initial		Final	
Stressed	**4.3%**	42/977	0.7%	7/977
Unstressed	92.9%	907/977	**2.1%**	21/977

Question 2: *Why is the left edge strong in adults' grammars while the right edge in children's grammar?*
We argue that the two edges have different functions: The left edge facilitates word recognition (Marslen-Wilson 1987, Marslen-Wilson and Zwitserlood 1989, Beckman 1998), as processing proceeds left-to-right. The right edge, like a stressed syllable, is perceptually stronger due to the extended duration of the vowel. During their early stages of acquisition, children are not preoccupied with word recognition but rather with word perception, as they still have to establish a lexicon. Therefore they attend to the right edge and neglect the left one.

We will emphasize in the talk the distinction between the two types of strengths, processing/recognition and perceptual, and highlight the difference between child and adults' languages in terms of constraint interaction.

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