THE TEMPLATE IS NOT A UNIT: THE MINIMAL WORD IN ADULT AND CHILD HEBREW

The Minimal Word template, consisting of two syllables or moras (i.e. a binary foot), accounts for two types of word size restrictions: (a) the minimal (but not maximal) size of content words in languages like English, and (b) the minimal and maximal size of hypochoristics (Bat-El 2005) and denominative verbs (Bat-El 1994, Ussishkin 2000) in Hebrew. For these two cases, the Minimal Word can be viewed as a fixed template, i.e. a unit.

However, the templatic approach to the Minimal Word cannot account for cases where words are sometimes (1c) or always (1d) monosyllabic. Surprisingly enough, such cases are formally expressible (PRWD < MW and $PRWD \le MW$ respectively), although the role of Minimal Word template is not surface true.

- $\{[MW]\}_{PrWd}$ Formal expression MW restrictions $\{[\sigma\sigma](\sigma...)\}$ Minimally 2 syllables (moras) $PRWD \ge MW$ a. English b. Minimally & Maximally 2 syllables $\{[\sigma\sigma]\}$ PRWD = MWHebrew hypocoristics Hebrew denominative verbs Maximally 2 syllables **{[σ]}**, {[σσ]} $PRWD \le MW$ c. Hebrew verbs & nouns Child Hebrew phase II (Minimally &) Maximally 1 syllable d. PRWD < MW{[**σ**]} Child Hebrew phase I
- (1) Minimal Word restrictions

In the talk I will provide data from Hebrew for cases (b), (c), and (d) above, with emphasis on the two phases of acquisition, where children produce monosyllabic words. I will argue that these data support the claim that the role of the Minimal Word in grammar must be expressed in terms of constraint interaction ((McCarthy and Prince 1993, Ussishkin 2000).

The analysis will be couched within the framework of Optimality Theory, where the following relevant constraints will be assumed:

- (2) Constraints
 - a. ALIGNL/R(σ , F): Every syllable must be aligned with an edge of its foot (Ussishkin 2000).
 - b. ALIGNL/R (F, PrWd): The edge of a foot must be aligned with the edge of the prosodic word (Ussishkin 2000).
 - c. FTBIN: A foot is binary (Prince and Smolensky 1993)
 - d. ALIGNL/R(Head, Foot): The head of the foot is aligned with the edge of the foot (Adam 2002).

Note that the alignment constraints consist of two constraints each, one for the left (L) edge and another for the right (R).

When words are minimally disyllabic (1a), FTBIN must always be respected. The other constraints are violated in longer words (head syllable underlined).

(3)		FTBIN	ALIGNO	ALIGNFT	ALIGNHD
	{[σ <u>σ]</u> }	\checkmark	\checkmark	\checkmark	* (L)
	$\{[\sigma \underline{\sigma}]\sigma\}$	\checkmark	** (L, R)	*(R)	* (L)

When words are minimally and maximally disyllabic (1b) FTBIN, ALIGNO, and ALIGNFT must be always respected, including both members of the two alignment constraints.

(4) FTBIN ALIGN
$$\sigma$$
 ALIGNFT ALIGNHD
 $\{[\sigma \sigma]\}$ $\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{(L)}}}}}$

The constraint ALIGNHD (2d), independently motivated for the analysis of stress, accounts for monosyllabic productions in acquisition (Adam 2002). During phase I (1d), where all productions are monosyllabic (e.g. da for dag 'fish', to for δto 'car'), both members of ALIGNHD are undominated, as the stressed monosyllabic word is aligned with both edges of the foot.

(5)		ALIGNHD	FTBIN	ALIGNO	ALIGNFT	
	{[<u></u>]}	\checkmark	*	\checkmark	\checkmark	

During phase II (1c), where words are mono- or disyllabic (e.g. *da* for *dag* 'fish', *óto* for *óto* 'car'), only one of the ALIGNHD constraints remains undominated, where FTBIN is above the other one. However, given the target-production relations, DEP must outrank FTBIN, such that target monosyllabic words will not be expanded via epenthesis (or reduplication).

(6)		ALIGNHD-R	Dep	FTBIN	ALIGNHD-L	ALIGNO	ALIGNFT
	{[<u>σ]</u> }		\checkmark	*	\checkmark	\checkmark	\checkmark
	{[σ <u>σ]</u> }		\checkmark	\checkmark	*	\checkmark	

Since there are cases where only some of the constraints defining the template are violated, in particular FTBIN in (5) and (6), the Minimal Word cannot be regarded as a unit in grammar.

- Adam, G. 2002. From Variable to Optimal Grammar; Evidence from Language Acquisition and Language Change Linguistics. Ph.D. dissertation, Tel-Aviv University.
- Bat-El, O. 1994. Stem modification and cluster transfer in Modern Hebrew. *Natural Language and Linguistic Theory* 12:571-596.
- Bat-El, O. 2005. The emergence of the trochaic foot in Hebrew hypocoristics. *Phonology* 22:1-29.
- McCarthy, John and Alan Prince. 1993. *Prosodic Morphology I: Constraint Interaction and satisfaction*. Ms., University of Massachusetts, Amherst and Rutgers University.
- Prince, Alan and Paul Smolensky. 1993. *Optimality Theory: Constraint interaction in generative grammar*. Technical report RuCCSTR-2. Rutgers Center for Cognitive Science.

Ussishkin, Adam. 2000. The Emergence of Fixed Prosody. Ph.D. dissertation, UC Santa Cruz.