

Schwa Epenthesis and *R*-sound Lengthening within Optimal Theory  
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Abstract

This study examines two research questions about the surface forms *carash* and *crrrash* under emphatic pronunciation (Cassidy 1983) within framework of Optimal Theory. The research questions are: under what ranked constraints do the target phenomena arise? Under what ranked constraints is stress assigned in the surface form (*carash*) with schwa inserted in the word-initial bi-consonantal onsets (henceforth, WBO).

The author proposes the following ranked constraints to account for schwa epenthesis in the surface form (Kager 1999): \*COMPLEX<sup>ONS</sup>, ONSET, ANCHORING-IO >> DEP-IO, \*EFFORT. \*COMPLEX<sup>ONS</sup> bans two onsets. ONSET requires the syllable to have onsets. ANCHORING-IO requires a segment at the right edge of the output to have a correspondent at the right edge of the input. DEP-IO requires output segments to have input correspondents. \*EFFORT demands less effort be expended in the articulation.

Tableau 1 shows schwa epenthesis in the WBO of the target word under emphatic pronunciation. The output candidate (a) is the winner because it violates the lower ranked constraints without violating the higher constraints.

Tableau 1: Schwa epenthesis in the WBO of *crash*

Input /kræʃ/	*COMPLEX <sup>ONS</sup>	ONSET	ANCHORING-IO	DEP-IO	*EFFORT
a.  /kə.ræʃ/				*	*
b. /kræ.əʃ/	*!	*!		*	*
c. /krə.æʃ/	*!	*!		*	*
d. /kræ.ʃə/	*!		*!	*	*
e. /ə.kræʃ/	*!	*!		*	*

The author proposes the following ranked constraints to account for *r*-sound lengthening in the other surface form (*crrrash*): \*CODA/*r* >> DEP-IO, \*EFFORT, DEP- $\mu$ -IO. \*CODA/*r* is undominated in the ranking since it excludes the output candidate /kʀ.æʃ/ in the Tableau. The anti-lengthening constraint DEP- $\mu$ -IO must be dominated in the ranking since *r*-sound will not lengthen otherwise (Kager 1999). The candidate (a) is optimal since it only violates the lower ranked constraints (See Tableau 2).

Tableau 2 *R*-sound lengthening in *crrrash*

Input /kræʃ/	* CODA/r	DEP-IO	*EFFORT	DEP-μ-IO
a. $\leftarrow$ /kr:æʃ/			*	*
b. /kər.ræʃ/	*!	**	**	

The author proposes the following ranked constraints to account for stress assignment in the surface form (*carash*): \*COMPLEX<sup>ONS</sup>, UNEVEN-IAMB, GRD=PRWD, FT-BIN >> NON-FINALITY, DEP-IO, \*EFFORT. UNEVEN-IAMB indicates that a canonical iamb (LH) is better than (LL) or (H). GRWD=PRWD requires a grammatical word to be a prosodic word. FT-BIN requires that feet be binary under moraic or syllabic analysis. NON-FINALITY requires that no foot be final in the prosodic word. Tableau 3 shows ranked constraints for stress assignment in *carash*! \*STRESSED-SCHWA excludes one possible candidate, (kə.ræʃ) where schwa receives stress. The parenthesis indicates a parsed segment that consists of a foot (Kager 1999). The winner is the candidate (a) since it contains the perfect quantitative shape of disyllabic iambs (LH) (de Lacy 2002).

Tableau 3 Stress assignment for *carash*

Input /kræʃ/	*COMPLEX <sup>ONS</sup>	UNEVEN-IAMB	GRWD = PRWD	FT-BIN	NON-FINALITY	DEP-IO	*EFFORT
a. $\leftarrow$ (kə.ræʃ)					*	*	*
b. kə.(ræʃ)		*!		*!	*	*	*
c. kə.ræʃ		*!	*!			*	*

This present study proposes the two ranked constraints to account for the target emphatic phenomena and the one set of ranked constraints to assign stress in the surface form with schwa epenthesis for emphasis.

#### References

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