Generating Control Languages with Abstract Categorial Grammars

Errata

September 29, 2008

1. The statement of Theorem 2 was not adequate because the third condition does not make sense when k = 1. It should be corrected as follows:

Theorem 2 (Palis and Shende). Let L be a level-k control language. There is a constant n such that for every $z \in L$, if $|z| \ge n$, then z may be written as $z = u_1 v_1 u_2 v_2 \dots u_{2^k} v_{2^k} u_{2^{k+1}}$ in such a way as to satisfy the following conditions:

- $$\begin{split} &(\mathrm{ii}) \ \, \sum_{j=1}^{2^k} |v_j| \geq 1; \\ &(\mathrm{iii}) \ \, u_1 v_1^i u_2 v_2^i \dots u_{2^k} v_{2^k}^i u_{2^k+1} \in L \, for \, all \, i \geq 0; \\ &(\mathrm{iii}) \ \, |v_{2^{k-1}} u_{2^{k-1}+1} v_{2^{k-1}+1}| \leq n. \end{split}$$