How kids do and don’t make U-turns: The nature of regressions in phonological acquisition
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Children’s acquisition of their L1 phonological grammar is typically assumed to progress from an initial universal state towards a language-specific one, as learners change their grammar hypotheses incrementally to better approximate the target language. One well-known challenge to this view comes from the many reports of ‘U-shaped’ phonological development (e.g. Stemberger et al 1999), in which a child’s production temporarily regresses, moving further from the target rather than closer. This talk has two main claims to make about the nature of phonological regressions, and their consequences for theories of learning.

The first part of the talk reports several case studies, building from existing and novel analyses of longitudinal data (Menn, 1971; Macken, 1978; Bleile and Tomlin, 1991; Inkelas and Rose, 2007), to obtain some generalizations about the scope and variability of U-shaped phonology. Based on these data, I will argue that U-shapes should not emerge directly from the phonological learner’s automatic workings, i.e. just by its methods of processing errors and building new grammars (construed here via constraint re-ranking). The data suggest that the kinds of phonology on which children regress show both lexical and child-specific quirks, which combine to suggest that they are derived outside the learning ‘core’ in ways I will define. Part of this argument comes from the empirical observation that regressions do not usually demonstrate ‘trade-offs’: in particular that as more complex syllables are acquired, other previously-learned structures do not regress (data primarily from Smith, 2010; also discussing dissenting claims as in e.g. Donahue, 1986.)

Given this assumption that a phonological learning algorithm should not create regressions on its own, the remainder of the talk demonstrates that an OT learner which builds grammars incrementally and restrictively from its accumulated errors can in fact easily regress to create trade-offs of the unattested type. From this unwanted result, I conclude that an error-driven learner must be somehow more cautious in its acquisition strategy, and I will briefly sketch how learning via a more derivational grammar like Harmonic Serialism (McCarthy, 2007 et seq.) will avoid making regression-prone errors in the first place. Taking altogether, this study of U-shapes aims ultimately to shed some new light on the possible pathways for child phonological development, and on the mechanisms by which that development might be achieved.