How specific are child-specific phonological patterns?

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In recent research on the learnability of Optimality Theoretic grammars, child-specific 'unmarked' phonological patterns are sometimes equated with performance effects in adult speech (errors attributed to memory limitations, shifts of attention, fatigue, intoxication, etc.) and, as such, put outside the realm of phonological investigation (Hale and Reiss 1998, 2008). This makes it impossible to account for these patterns in terms of initial ranking of markedness constraints above faithfulness constraints, a stance advocated by other researchers in phonological acquisition within Optimality Theory (e.g. Gnanadesikan 1995/2004, Smolensky 1996). I will look at empirical evidence from both Polish- and English-speaking children, reported in the acquisitional literature, and argue that viewing child phonology as 'an impairment of performance system' is misconceived for several reasons. First, contrary to Hale and Reiss's contention that child phonology is immensely marked with variability (cf. Ferguson and Farewell 1975), many child-specific patterns resemble adult phonological phenomena in that they are synchronically stable and categorical rather than gradient. Crucially, they not only operate on well-defined categories but are interrelated and form 'conspiracies' (e.g. Smith 1973; Menn 1978, 1983; Macken 1992, 1995; Pater and Barlow 2003; Łukaszewicz 2007). Some of these patterns correspond directly to those attested in adult phonologies, though not necessarily in the ambient language (e.g. coda condition effects, sonority-driven cluster reduction in Polish- and English speaking children). Some of them seem to represent 'fossilization' of gradient adult-based phenomena (e.g. *e*-raising in child Polish; Łukaszewicz and Opalińska 2006). Second, children's unmarked outputs are not exclusively modelled by child-specific substitution or reduction patterns. They may result from the fact that the child has still not acquired some adult-based phonological processes (e.g. adjunction of extrasyllabic segments; Łukaszewicz 2006). In such cases, markedness constraints must outrank faithfulness constraints in an Optimality Theoretic grammar. Third, child-specific and adult-based patterns do not form entirely independent sets but can be seen to interact within a single developing grammar in a number of interesting ways; e.g. Łukaszewicz and Opalińska (2007). For example, the child's output [tɛŋgi] for adult Polish /t͡sɛgwɨ/ 'brick' gen.sg. can be viewed as a combined effect of child-specific metathesis (via which all word-medial obstruent-sonorant sequences are rendered as homorganic nasal-stop clusters; cf. /ɔknɔ/ 'window' nom.sg. [ɔŋkɔ]) and adult-based vowel/velar fronting (requiring that the ending be [i] rather than [ɨ]). Child outputs thus often reflect a compromise between child-specific and adult-based phonotactics. This, in fact, finds a straightforward account within Optimality Theory which envisages child-specific and adult-based patterns as part of an integrated developing system, and calls for a reappraisal of models of phonological acquisition which view child-specific processes as systematic distortions of adult surface forms, with no possibility of their acting as 'feedforward gates' on adult-based processes already acquired by the child (e.g. Kiparsky and Menn 1977). In short, many child-specific patterns are not fundamentally different from those attested in adult phonologies, and, thus, do not require different methodological tools. In addition, their interaction with adult-based processes precludes the possibility of placing them outside phonological computation.

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