

Phonological Learning and Phonological Learnability

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Children acquire phonological grammars from the evidence of the ambient language, and phonological learning continues in adulthood. Learning and learnability effectively constraint the adult grammar. In this talk, I will discuss some results on how learners use evidence, concentrating on segments and segmental sequences. I will cover both general (mathematical) limits on inference and experimental results. For early learning, the central issue is bootstrapping: how can abstract categorical inventories and phonotactic constraints be initiated from experience with the speech signal, which is continuous? For more mature learners, levels of representation are already in place and are updated; exactly how they are updated reveals their nature. As a case study, I will discuss in detail a recent experiment (with K. Carlson and J. German) on how American English speakers perform when attempting to learn a Glaswegian English accent.