

# How learning and use shape languages

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Natural languages persist via a repeated cycle of learning and use, where learners learn from linguistic data which reflects communicative language use by other individuals in their community, who learnt their language in the same way. Languages evolve as a result of this cycle of learning and use, and are therefore the product of a potentially complex interplay between the biases of human language learners, the communicative functions which language serves, and the ways in which languages are transmitted in populations. In this talk I will present a series of experiments, based around artificial language learning, dyadic interaction and iterated learning paradigms, which allow us to explore the relationship between learning and use in shaping linguistic structure; I'll briefly review some older work from our group showing how fundamental design features of language like compositionality develop through these processes, then present some more recent work applying the same experimental methods to study universal tendencies in patterns of colexification, semantic extension, and morphological (ir)regularity.