Melody Dye

University of California Berkeley

Thursday January 25, 4:00-5:00 pm

Location: TBA

Design principles for a functional lexicon

Natural languages are hybrid systems, products of both a common biological endowment (shared across languages) and a particular ecological niche (specific to a particular language). That shared endowment – the architecture of the human nervous system – serves as a powerful constraint on how languages vary and evolve. Nevertheless, the world's languages exhibit remarkable diversity in sound, meaning, and structural organization. In my work, I take the view that human languages are the end point of complex processes of cultural evolution, occurring over generations, and that their features can thus be analyzed as adaptive solutions to a complex constraint-satisfaction problem. In particular, my research seeks to understand 1) how cognitive principles of learning and memory serve to constrain cross-linguistic variation, 2) how social and historical contingencies select for certain designs, and 3) how different design choices can incur trade-offs between early acquisition and adult processing. In this talk, I will report on a pair of cross-linguistic projects: one, contrasting the evolution of naming systems in the East and in the West, and the other, comparing the functional role of grammatical gender with that of prenominal adjectives across two Germanic languages. This work suggests a principled way of beginning to piece apart those evolutionary pressures on language that are universal, from those that arise in specific social environments.