

Comparative Cognition Society

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2:26 PM Lindemann, Kristy L., Reichmuth, Colleen, & Schusterman, Ronald J.(University of California, Santa Cruz)

Procedural training for a test of cross-modal symmetry in a California sea lion

The ability to solve novel problems using a rule of symmetry is common among humans but performance on symmetry tests in nonhuman animals is variable. In an ongoing series of relational learning experiments, a California sea lion named Rio demonstrated emergent one-to-many matching with auditory samples mapped onto 10-member visual categories. Rio had previously demonstrated emergent symmetry in visual-visual matching-to-sample tasks, and we hypothesized that with proper training, she would also succeed in solving visual-auditory symmetry problems derived from her baseline of 80 auditory-visual relations. The cross-modal symmetry test presented several procedural challenges as the task required Rio to match an auditory comparison to a visual sample, the reverse of her previous matching experience. We addressed these issues by incorporating additional training steps into Rio's typical training regimen. The significance of these steps will be discussed in this talk in the context of the "role of instructions" in emergent relational learning paradigms.