

Towards a "virtual pigeon": A new technique to investigate avian social perception.

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The purpose of the present study is to examine the applicability of a computer-generated, virtual animal to study animal cognition. Pigeons were trained to discriminate between movies of a real pigeon and a rat. Then, they were tested with movies of the computer-generated (CG) pigeon. Subjects showed generalization to the CG pigeon, however, they also responded to modified versions in which the CG pigeon was showing impossible movement, namely hopping and walking without its head bobbing. Hence, the pigeons did not attend to these particular details of the display. When they were trained to discriminate between the normal and the modified version of the CG pigeon, they were able to learn the discrimination. The results of an additional partial occlusion test suggest that the subjects used head movement as a cue for the usual vs. unusual CG pigeon discrimination.