

- 1 HAS HUMAN CULTURE 'SHAPED' THE SHAPE BIAS: COMPARISONS WITH OTHER
- 2 APES
- 3 Jennifer Vonk
- 4 Oakland University, Rochester MI, U.S.
- 5 Email: vonk@oakland.edu

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- 7 Keywords: chimpanzees, shape, bias, children
- 8 Children show a bias toward information about shape when categorizing unfamiliar objects or
- 9 learning new labels for objects. We presented two adult zoo-housed chimpanzees (*Pan*
- 10 troglodytes) and 3- to 5-year old children with a relational matching task in which samples and
- 11 comparison stimuli matched on either shape or color. Whereas children at all ages performed
- 12 above chance on the task, chimpanzees performed at close to chance levels overall. However,
- 13 closer examination of their performance revealed that, whereas children performed better on
- shape (86%) versus color trials (78.5%), chimpanzees showed the opposite pattern, performing at
- chance on shape trials (49%) and above chance on color trials (72%). I propose that the shape
- bias arises because of cultural effects, whereas color may be a more salient natural cue that
- differentiates, for instance, between ripe and non-ripe fruit. Interestingly, earlier work with
- orangutans and one gorilla, however, showed that the apes initially performed best on shape
- trials, but learned quickly to match more effectively by color. In a second order relational task,
- 20 preferences were less clear. Further work is needed to determine the evolutionary history of the
- shape bias in human children.