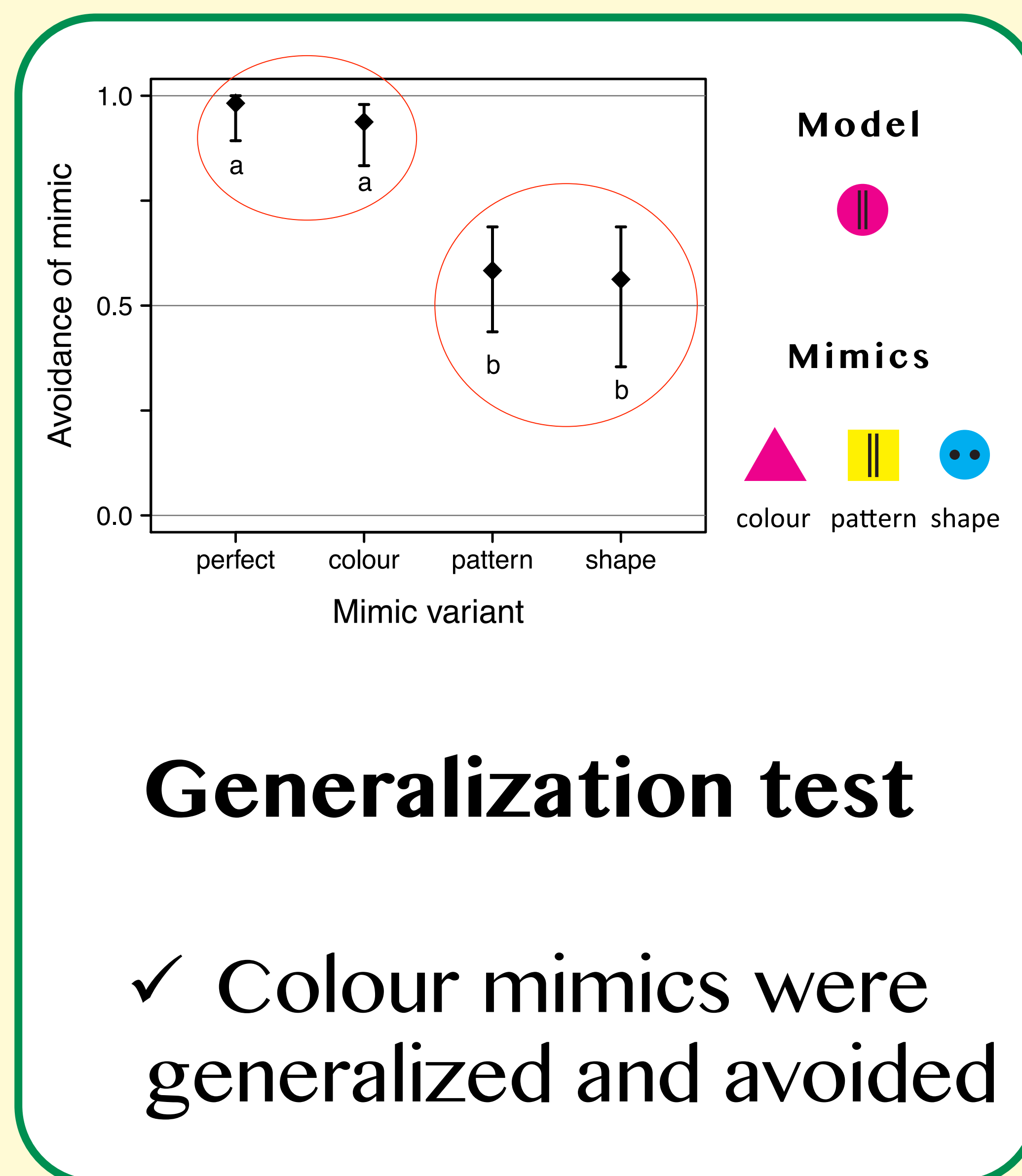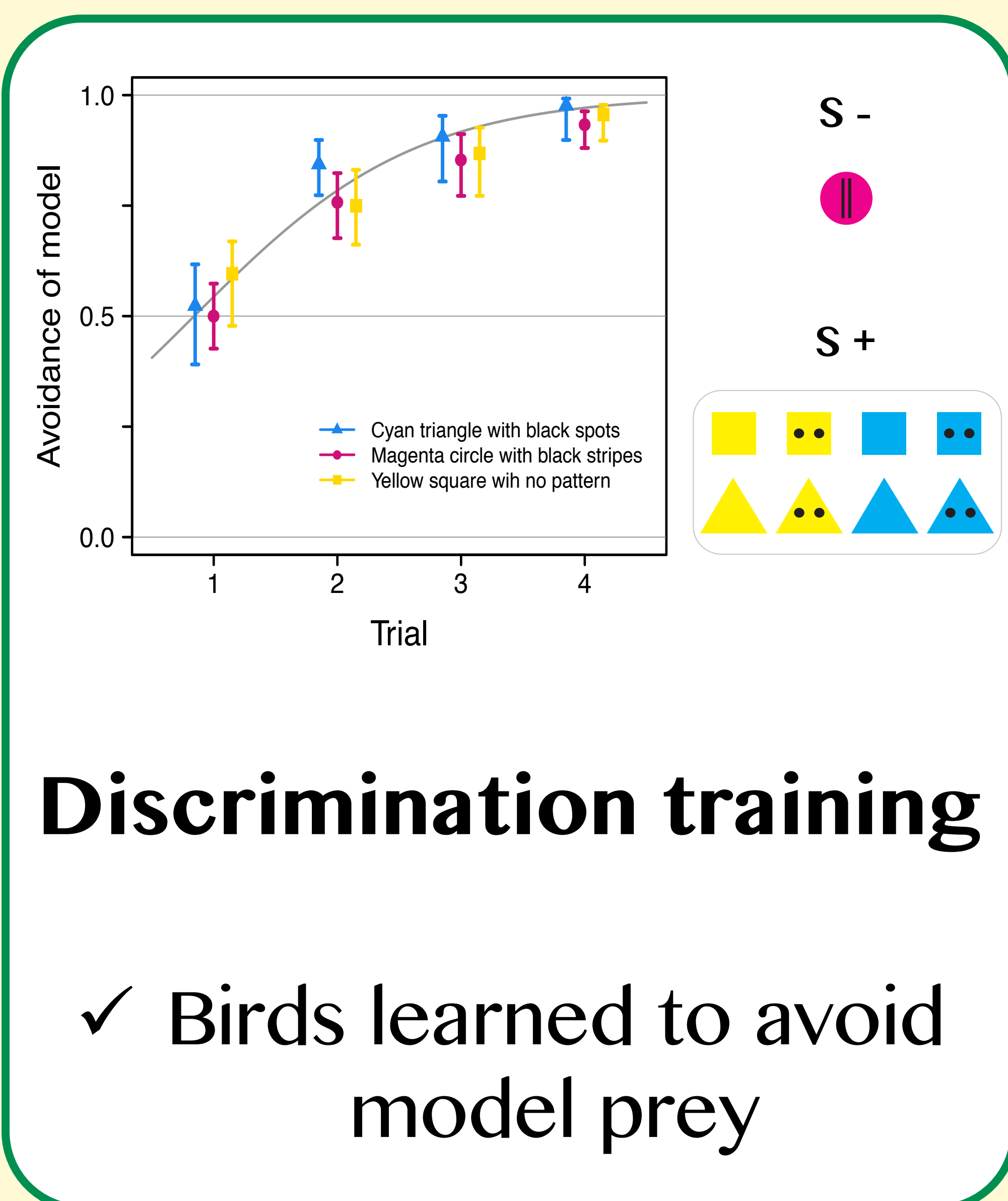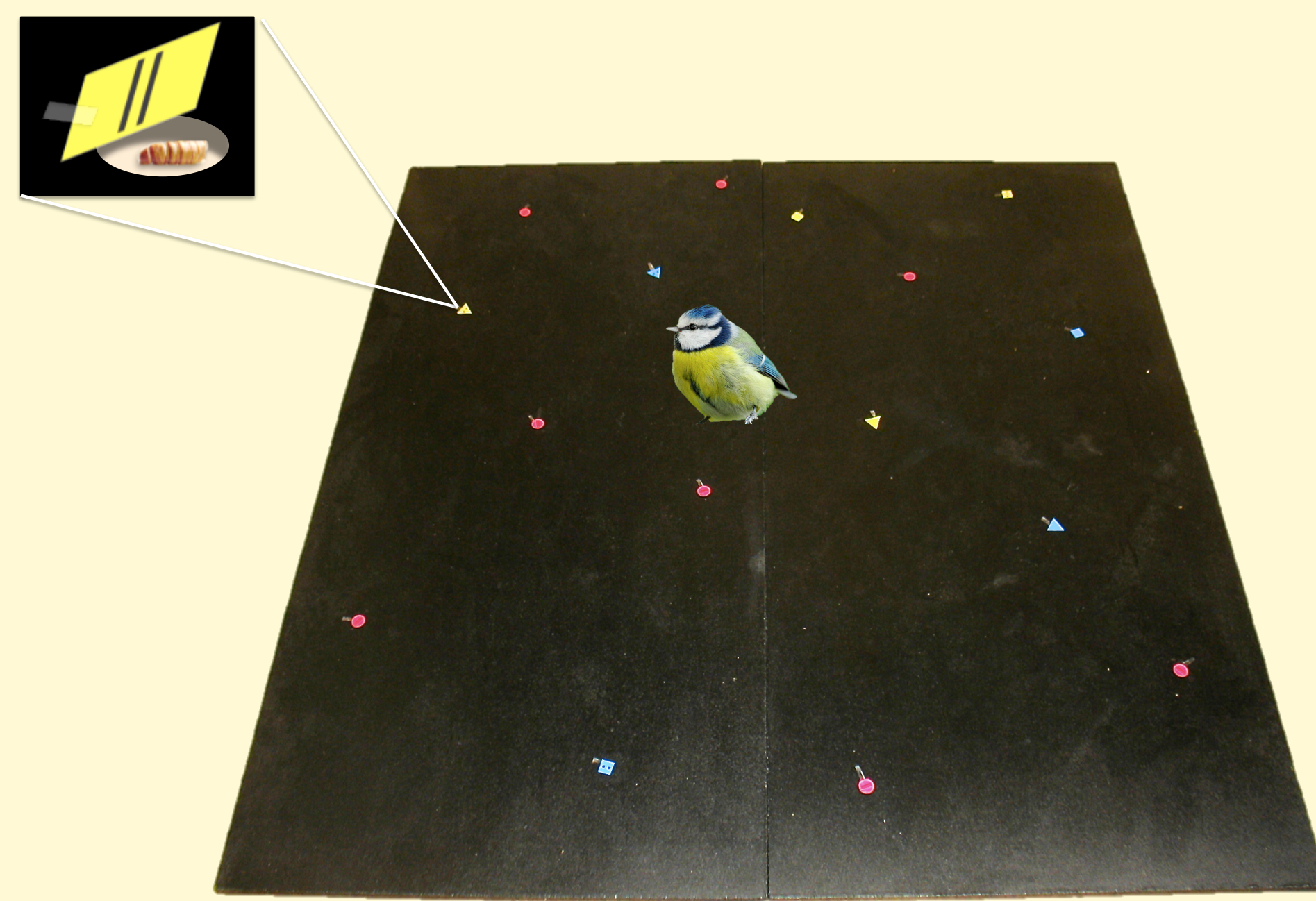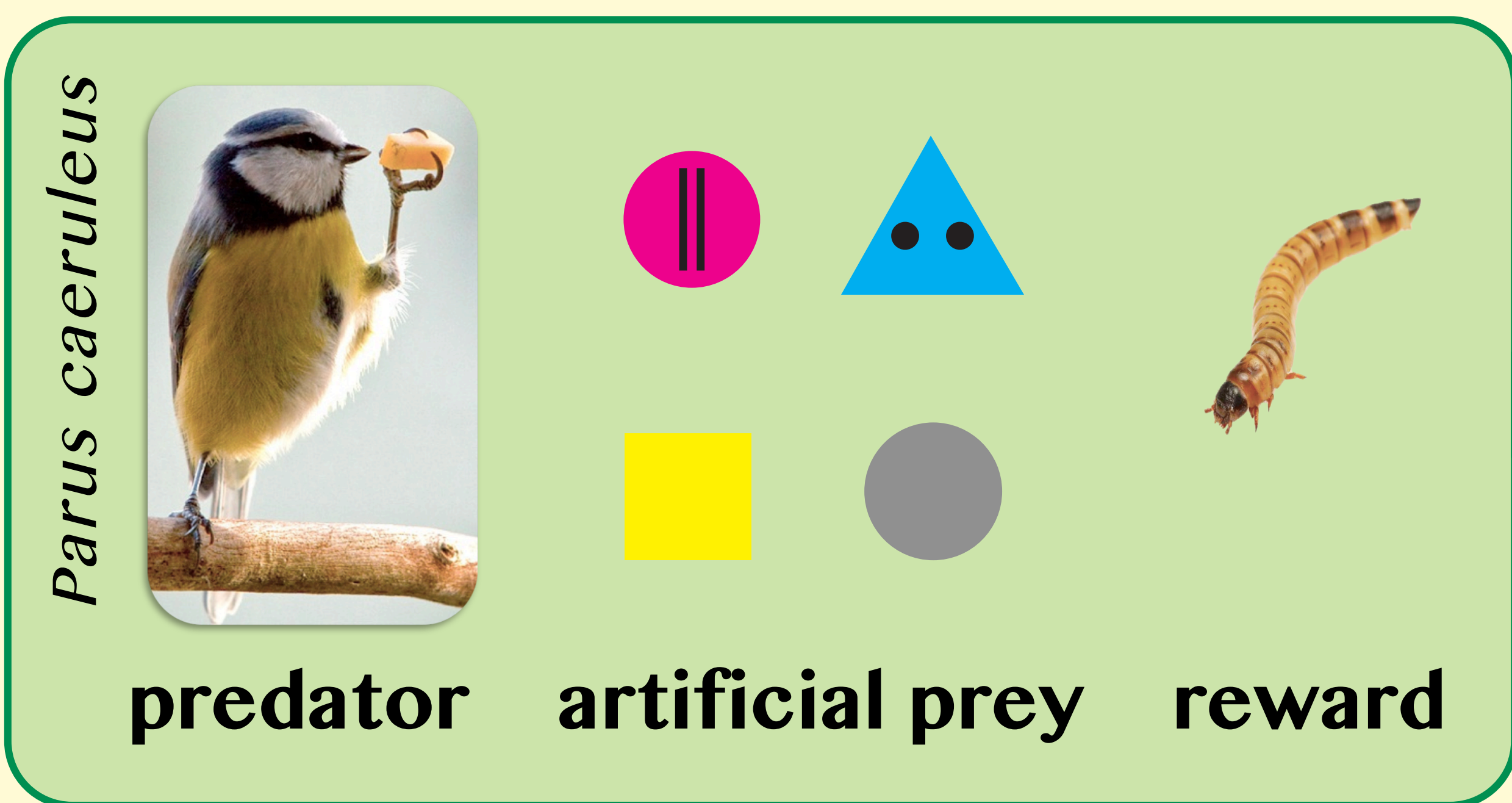# MIMICRY IS IN THE EYE OF THE BEHOLDER

Baharan K. Kazemi, Gabriella Gamberale-Stille, Birgitta Tullberg, Olof Leimar

ESTABLISHED MECHANISMS OF ASSOCIATIVE LEARNING CAN EXPLAIN IMPERFECT MIMICY!

Parus caeruleus

predator   artificial prey   reward

Discrimination training

✓ Birds learned to avoid model prey

Generalization test

✓ Colour mimics were generalized and avoided

Salience test

✓ Colour discrimination had highest learning rate
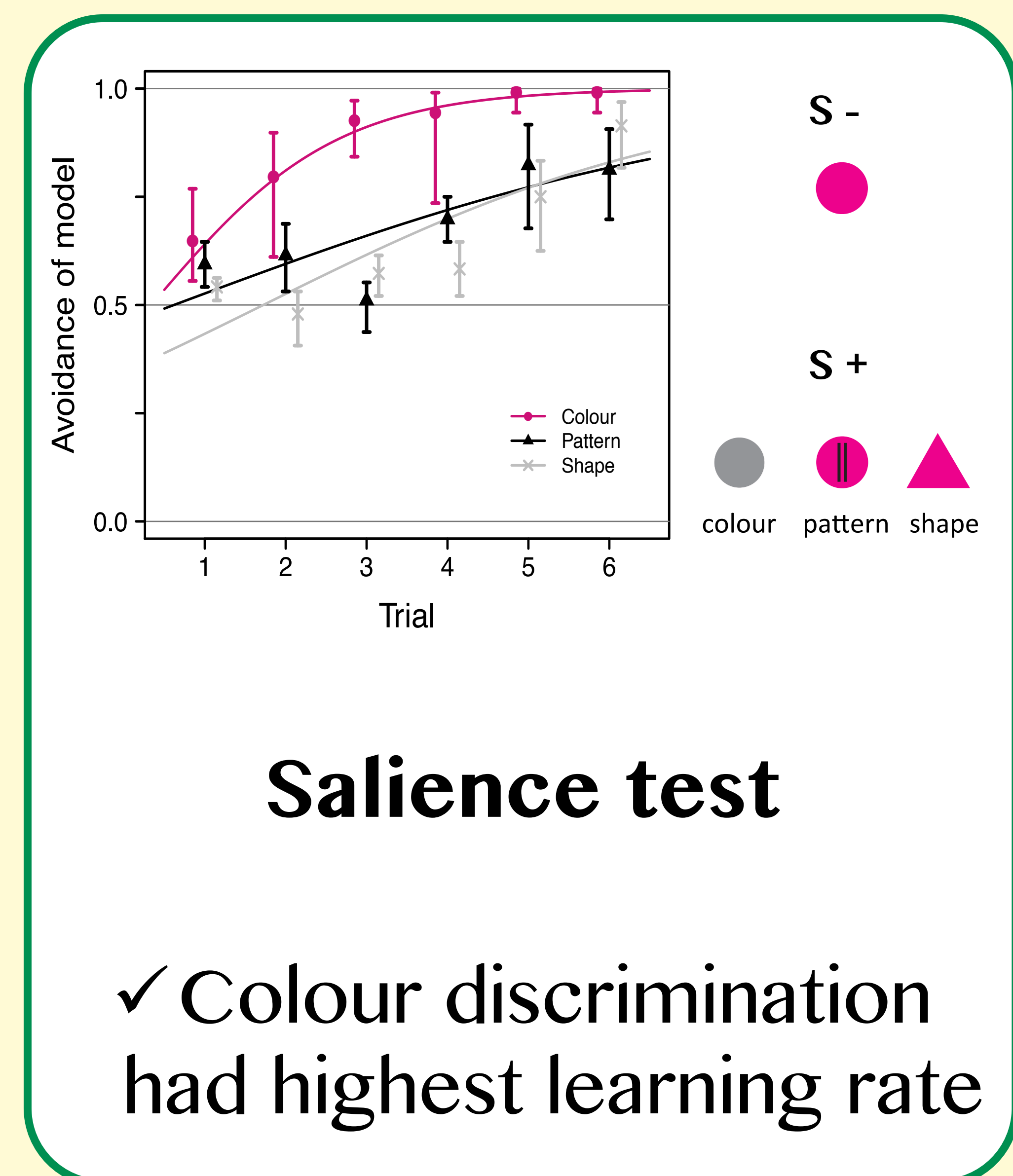
🐦 **Birds used colour for discrimination and generalization of prey**

🐦 **Colour had the highest salience for the predators**

🐦 **The most salient stimulus component gained highest associative strength and overshadowed other components**

MIMIC-MODEL SIMILARITY IN SALIENT TRAITS CAN EXPLAIN IMPERFECT MIMICRY

HIGH-SALIENCE TRAIT MUTATION CAN BE THE FIRST STEP OF MIMICRY EVOLUTION

E-mail: baharan.kazemi@zoologi.su.se   **Phone**: +46 (0)707399756