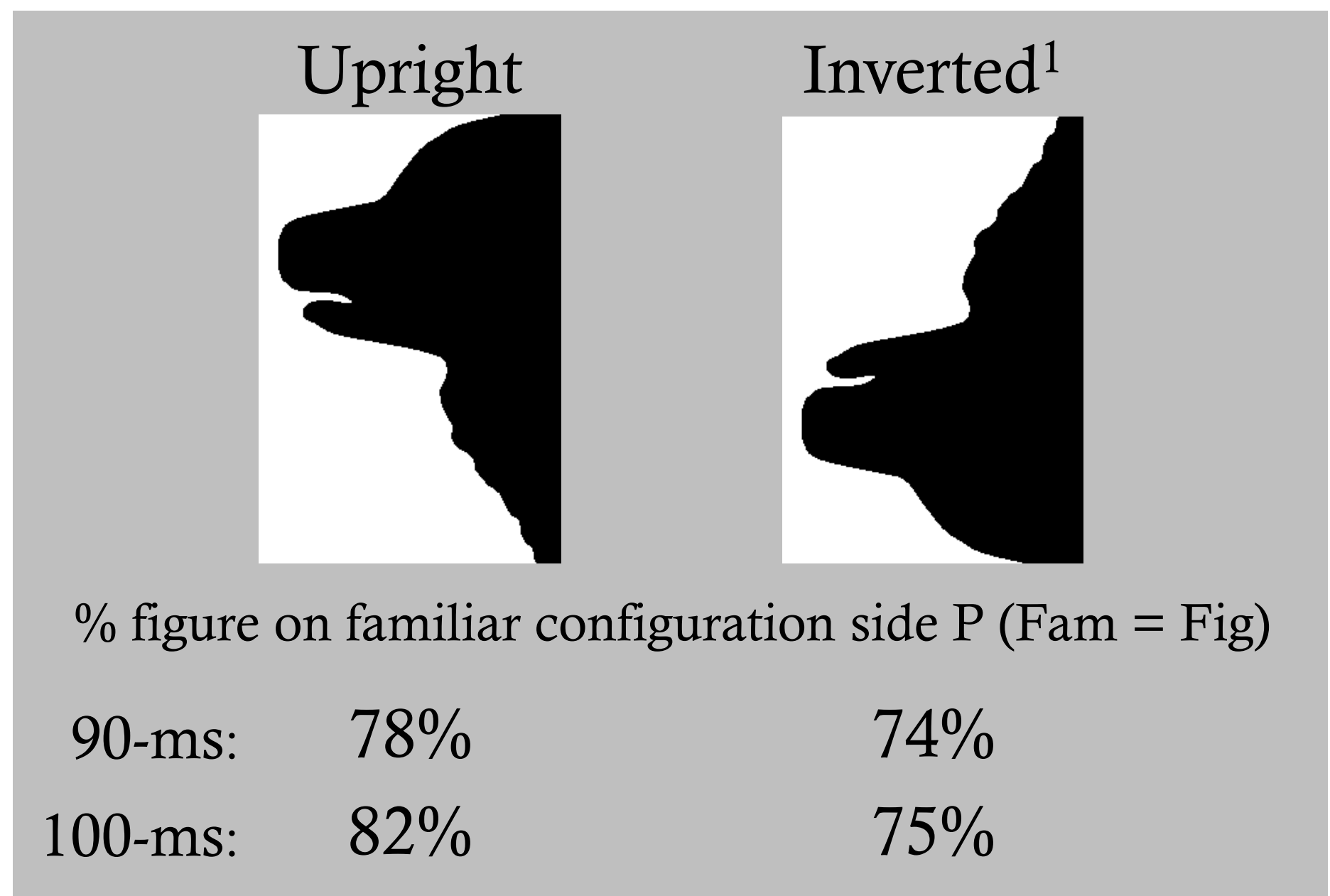


BACKGROUND

Past Experience Influences Figure Assignment



Semantics are activated during fig assignment²⁻⁴

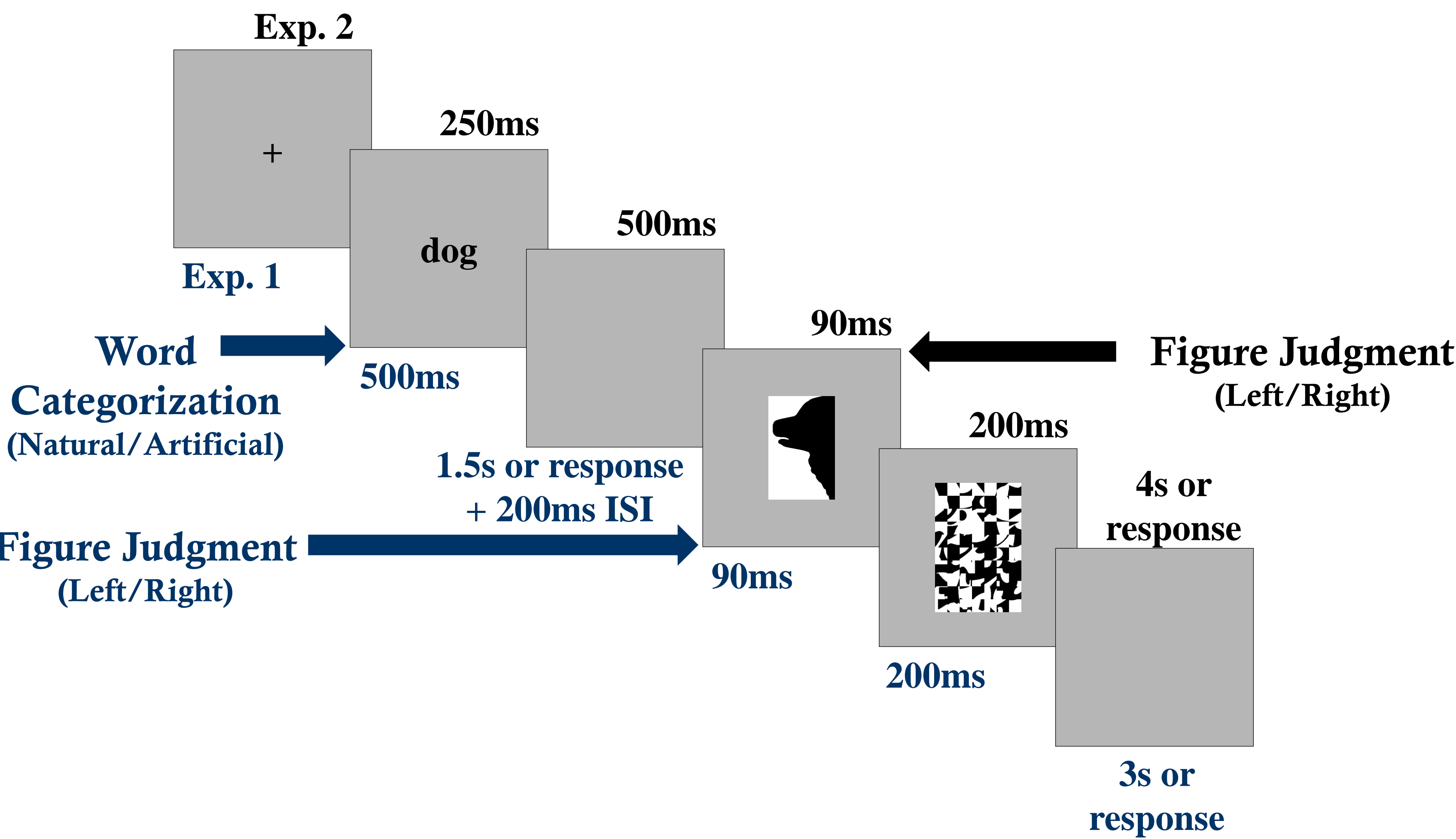
Shown by word categorization RTs (Natural/Artificial)

QUESTION

Can semantic activation from a word prime increase P(Fam = Fig)?

If so, greater P (Fam = Fig) when preceded by basic-level prime

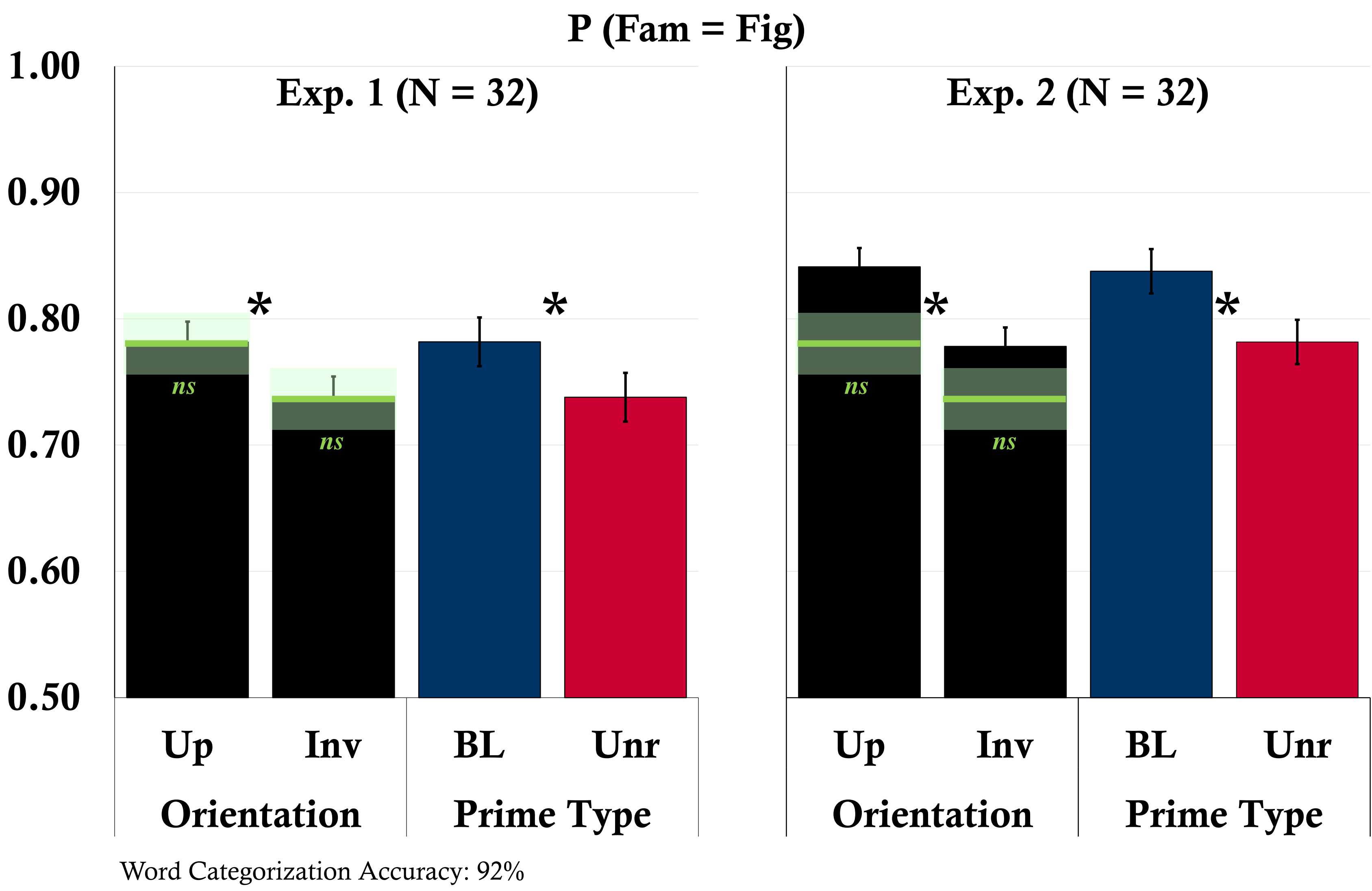
EXPERIMENTS 1 & 2 (90-ms Test Displays)



Design:

- Test Displays presented 2x (1x Up; 1x Inv; diff B/W & L/R; balanced)
Exp. 1: 38 Test Displays / Exp. 2: 36 Test Displays
- Word Primes not repeated (1 Basic-Level & 1 Unrelated per display; balanced)
Unrelated primes from different superordinate category (Natural/Artificial)
Exp. 1: 76 Word Primes / Exp. 2: 72 Word Primes

RESULTS EXPS. 1 & 2



90 ms:

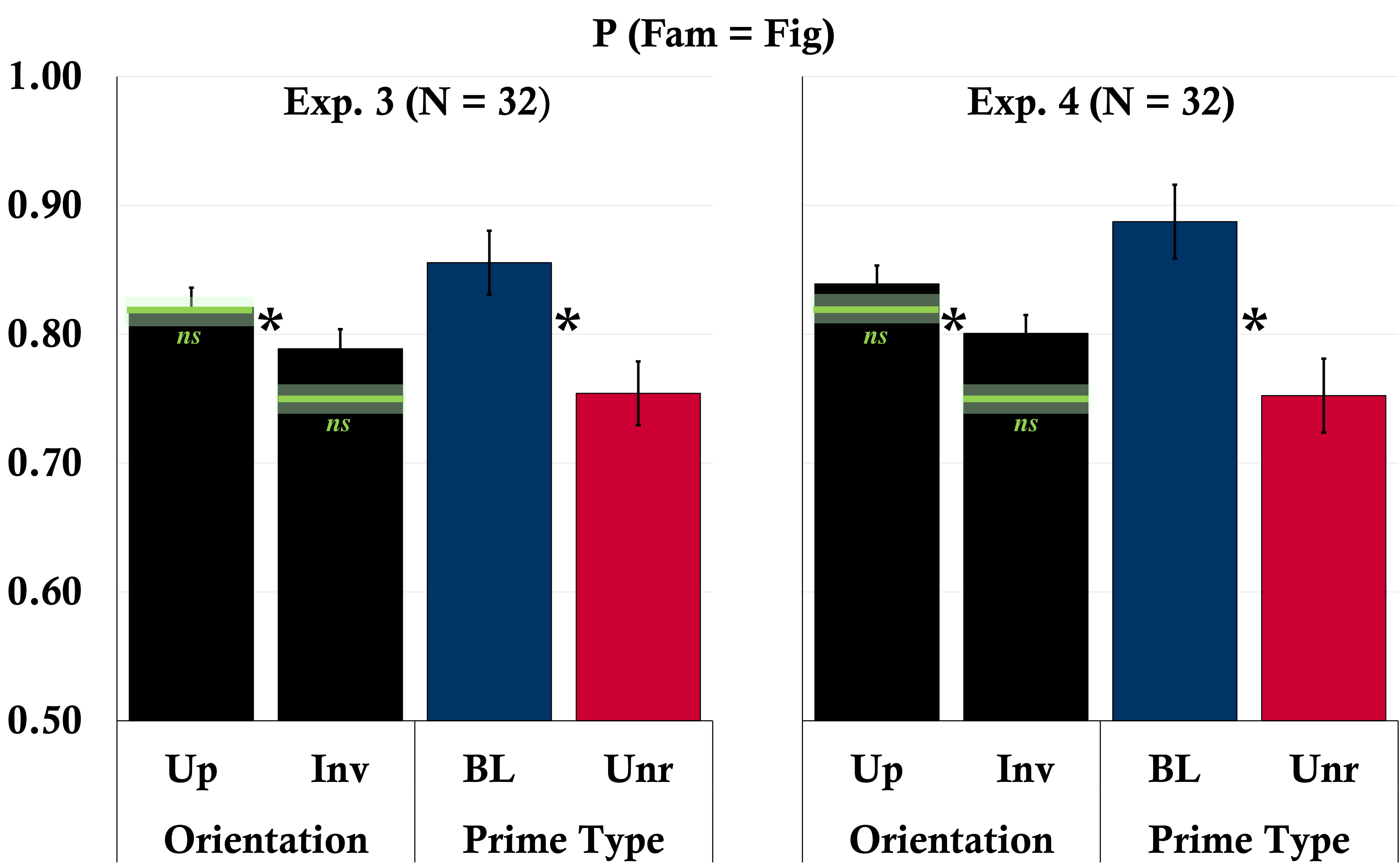
- Hypothesis generated by test display effective (Up > Inv)
- Hypothesis generated by word prime effective (BL > Unr)
- Hypotheses not integrated

→ Word primes generate superordinate category feature predictions?

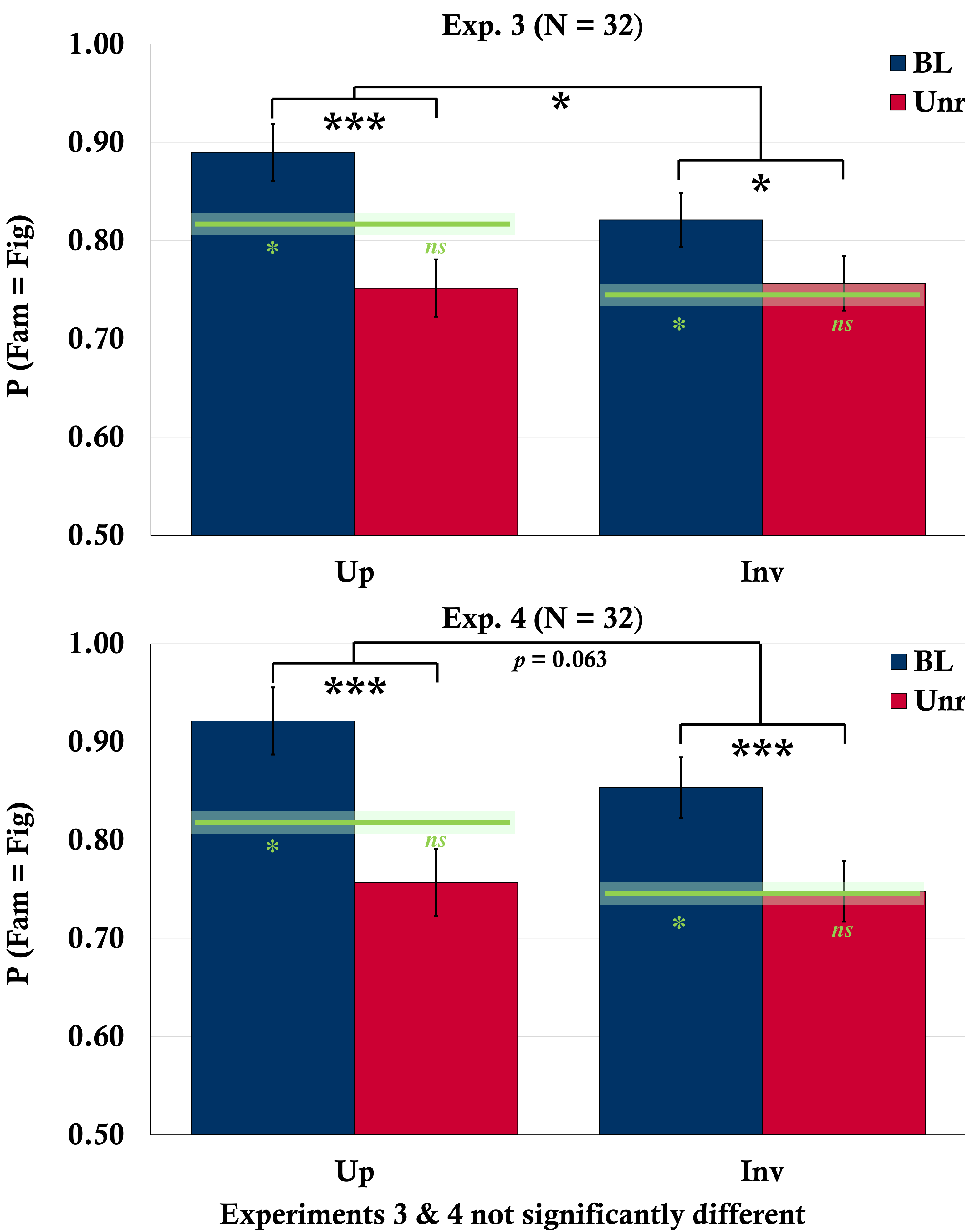
Priming effect not configuration based; not orientation dependent

EXPERIMENT 3 & 4 (100-ms Test Displays)

Enough time to integrate hypotheses from word prime & test display?



RESULTS CONT'D EXPS. 3 & 4



100 ms:

- P (Fam = Fig): Up (BL - Unr) > Inv (BL - Unr)

Configuration based; orientation dependent

Basic-Level: Object hypothesis generated by test display integrates with hypothesis generated by word prime

→ Configuration based re-entrant predictions confirmed

Unrelated: Object hypothesis generated by test display competes with hypothesis generated by word prime

→ Only superordinate category feature predictions confirmed (predictions from word prime)

CONCLUSIONS

Predictions generated by a word prime can affect figure assignment

90-ms test display exposures: prime-based predictions operate at a coarse category level (not integrated with orientation specific hypotheses from display)

100-ms test display exposures: prime-based predictions & orientation-specific test display-based predictions interact (diff results for congruent/incongruent)

