

**A****Morph-Families**

Parent: 0%



Morph: 35%



Morph: 70%



Parent: 100%

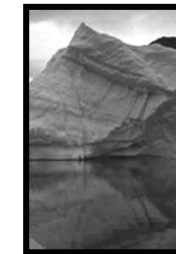
“Female”



“Male”

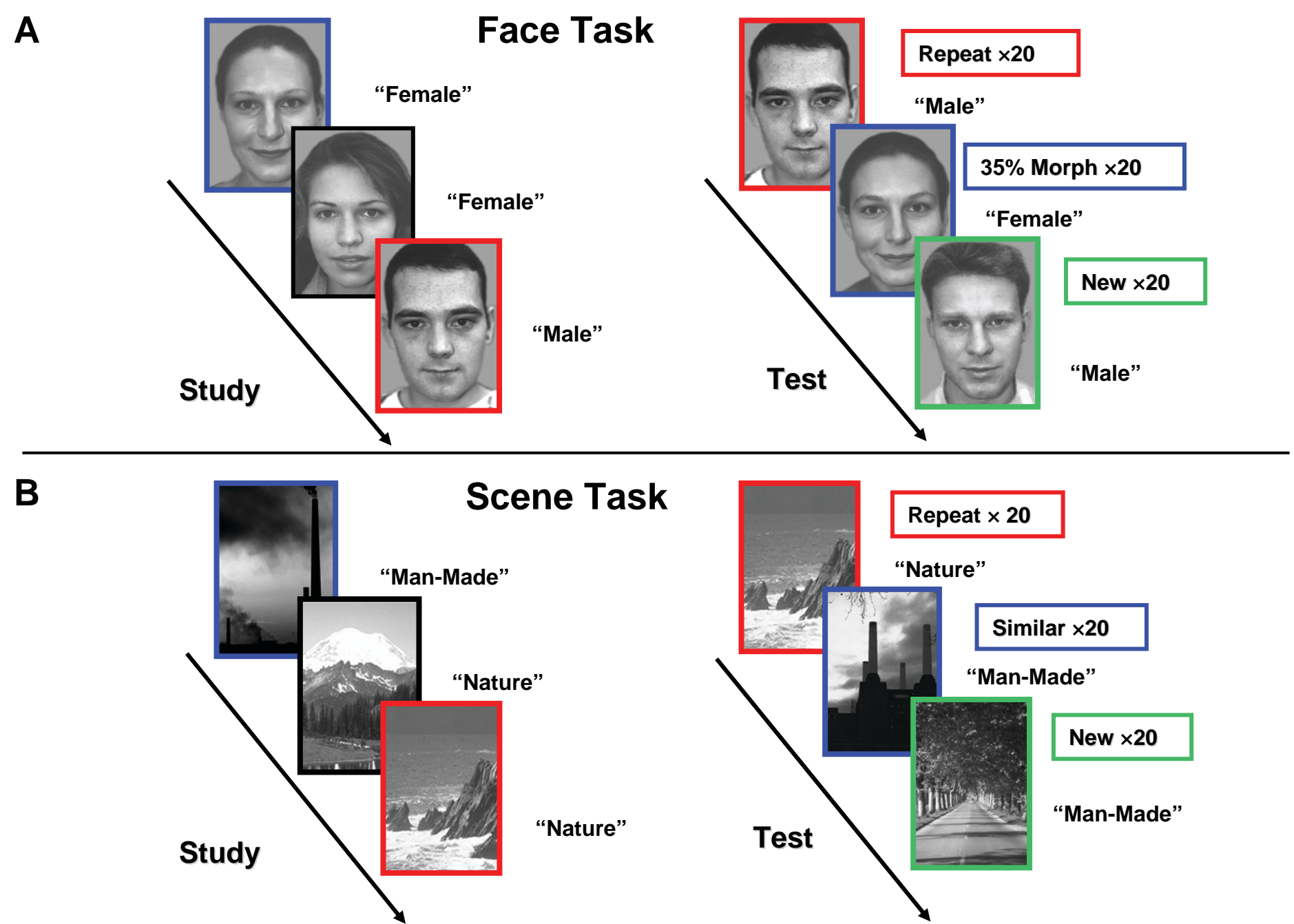
**B****Similar  
Scene- Pairs**

“Man-Made”



“Nature”

Supplementary Figure 1 Sample face and scene stimuli. (A) Examples of female (top) and male (bottom) morph-families. (B) Examples of man-made (top) and natural (bottom) similar scene-pairs.



Supplementary Figure 2 Classification tasks for faces and scenes. (A) General trial sequence for study and test runs, and test conditions for the face task. (B) General trial sequence for study and test runs, and test conditions for the scene task.



Study 1: 40 x 3	Test 1: Repeat (20) ; Morph (20) ; New (20)
Study 2: 40 x 3	Test 2: Repeat (20) ; Morph (20) ; New (20)
Primer 1: 10 new (20 s)	Face-Rest 1 (4:40)
Primer 2: 10 new (20 s)	Face-Rest 2 (4:40)

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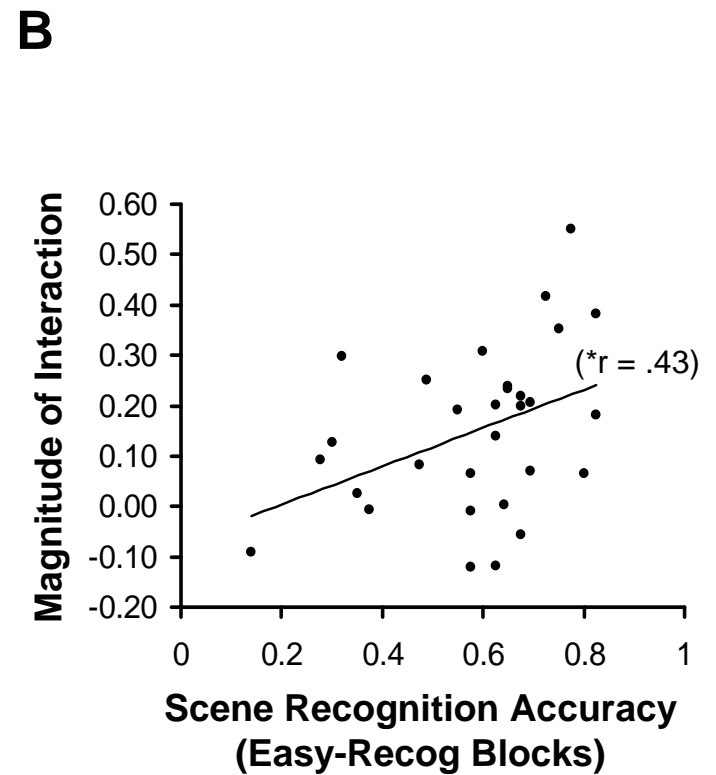
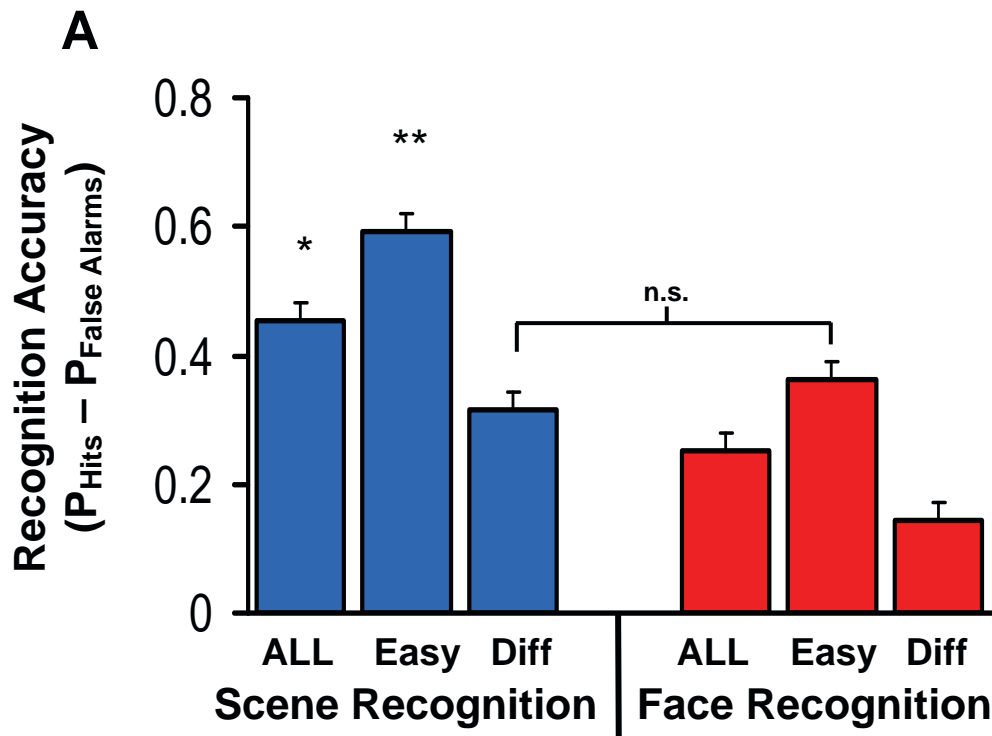
Study 1: 40 x 3	Test 1: Repeat (20) ; Similar (20) ; New (20)
Study 2: 40 x 3	Test 2: Repeat (20) ; Similar (20) ; New (20)
Primer 1: 10 new (20 s)	Scene-Rest 1 (4:40)
Primer 2: 10 new (20 s)	Scene-Rest 2 (4:40)

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Localizer/Recognition 1 (5:45)
Localizer/Recognition 2 (5:45)

Supplementary Figure 3 Study design and sequence of runs for a participant starting with faces. Category of visual stimuli for each run represented by pictures in the left column.



Supplementary Figure 4 Recognition performance across conditions. (A) The 2×2 repeated-measures ANOVA revealed significant main effects of both stimulus-type ( $F = 40.4$ ,  $p < .001$ ) and difficulty ( $F = 213.3$ ,  $p < .001$ ), but no interaction, indicating that recognition performance was higher for scenes than for faces, and as expected, for easy-recognition than for difficult-recognition blocks; recognition accuracy for faces in the easy-recognition blocks was not significantly different from that for scenes in the difficult-recognition blocks ( $t = 1.3$ ,  $p = .2$ ). The magnitude of the task × ROI interaction in the rIFG was correlated with overall scene-recognition accuracy collapsed across difficulty ( $*r = .37$ ,  $p < .05$ , 2-tailed) across participants, and more strongly with accuracy in the easy-recognition blocks (B:  $**r = .43$ ,  $p = .05$ , 2-tailed). Error bars represent s.e.m. calculated for within-subjects design.