

Attention to fire

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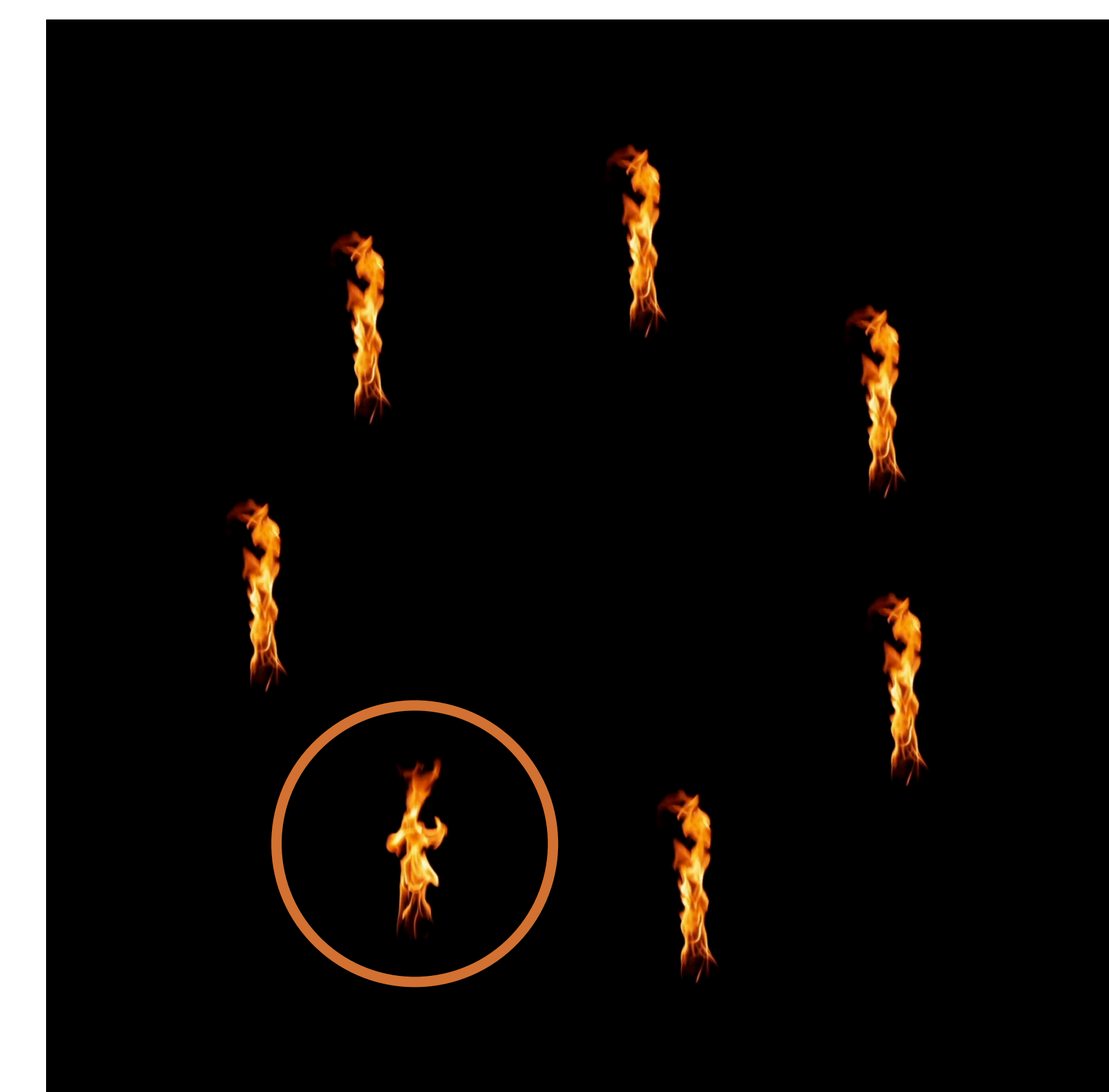
Significance



- Taming fire: Unique to hominids
- Socially, historically, practically significant

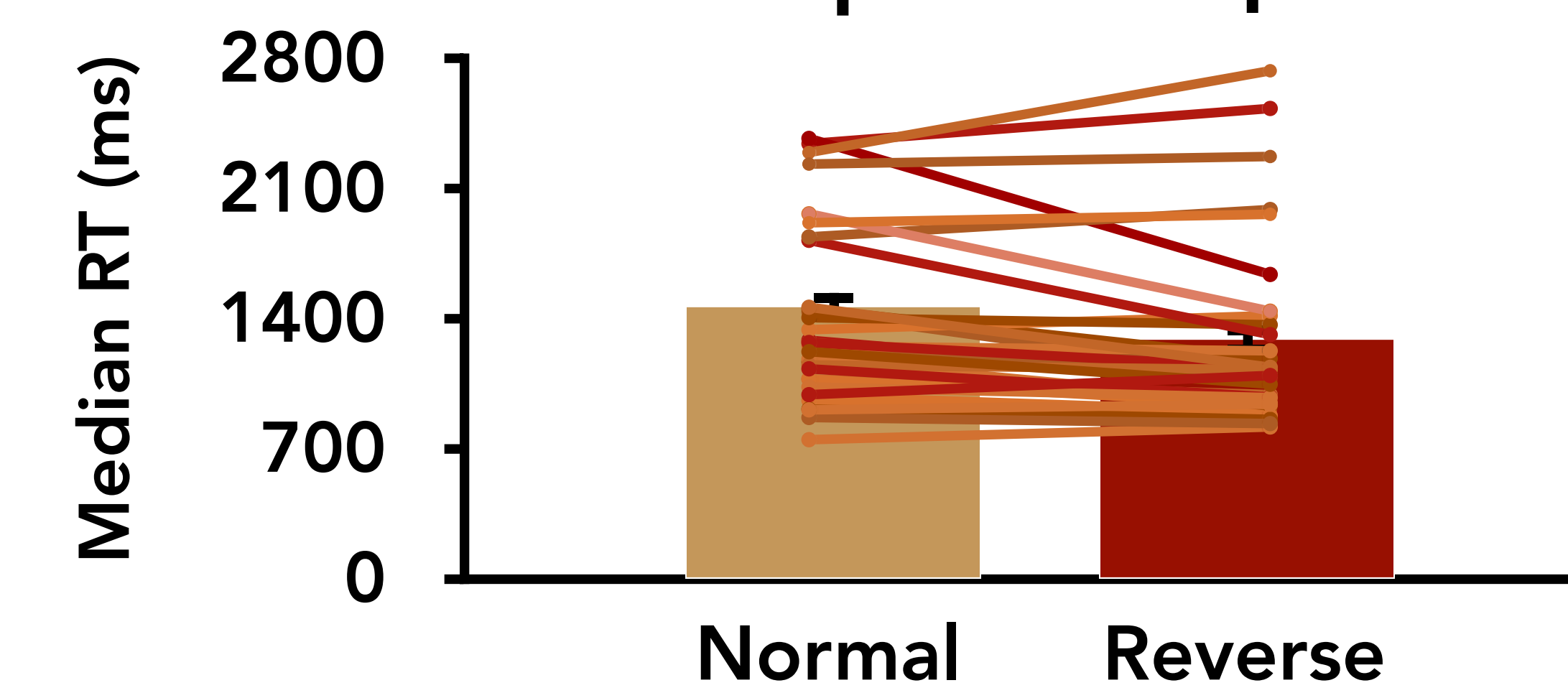
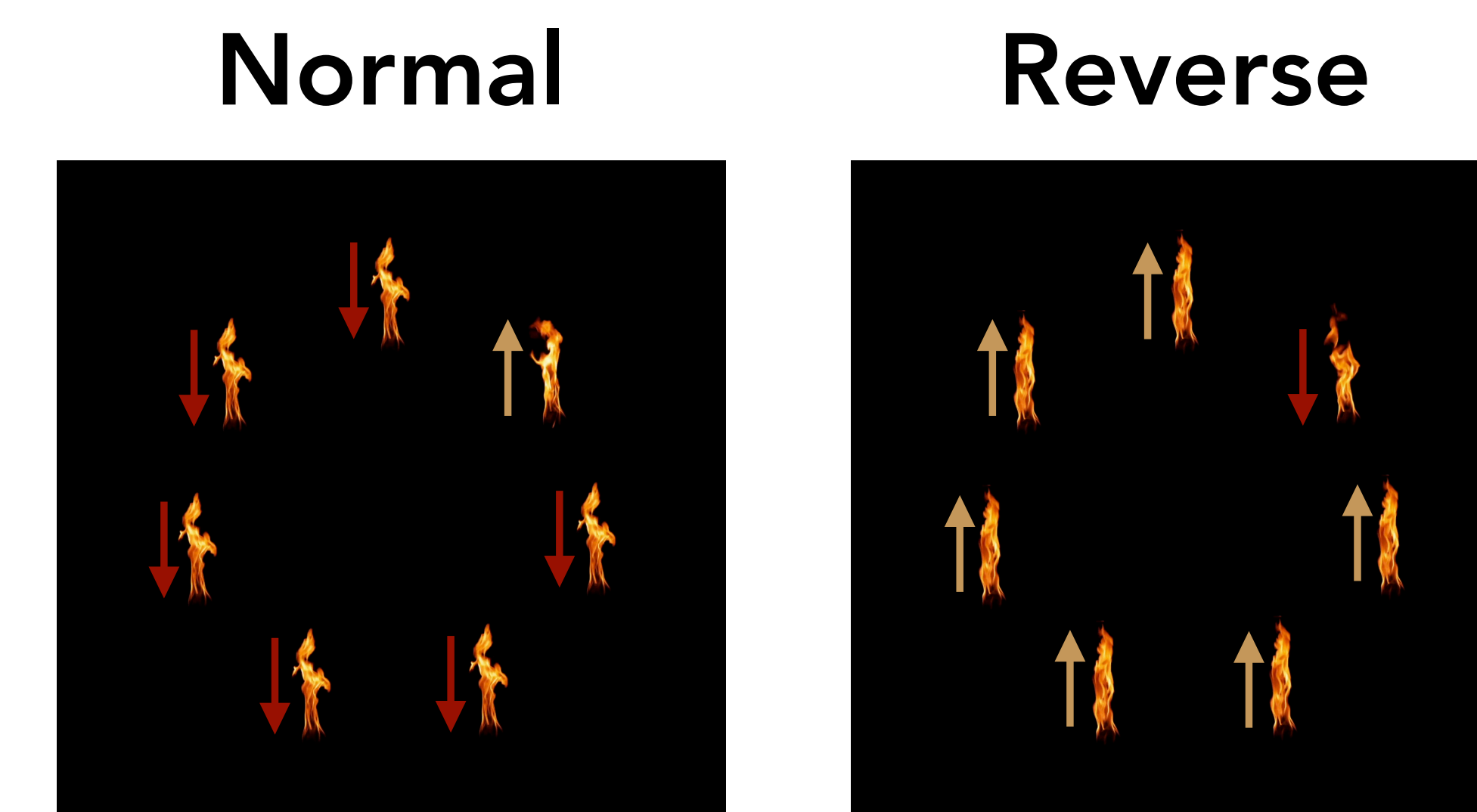
Is visual perception sensitive
to the features that
characterize burning fire?

Exp 1: Fire guides search

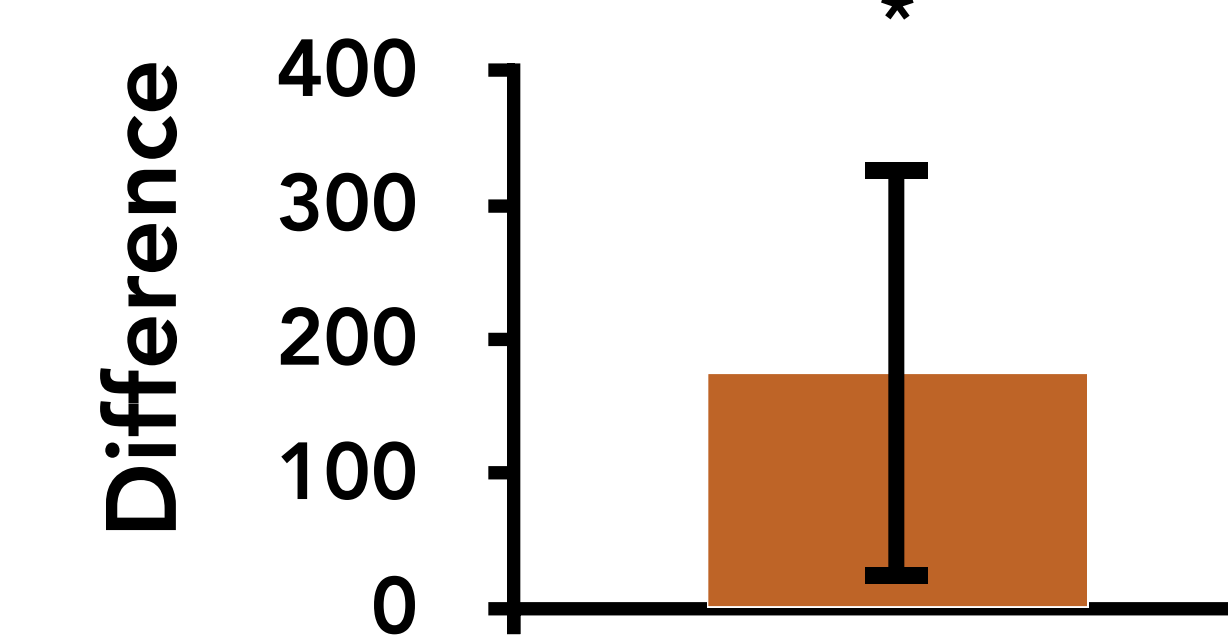


"Is one fire burning
differently than the rest?"

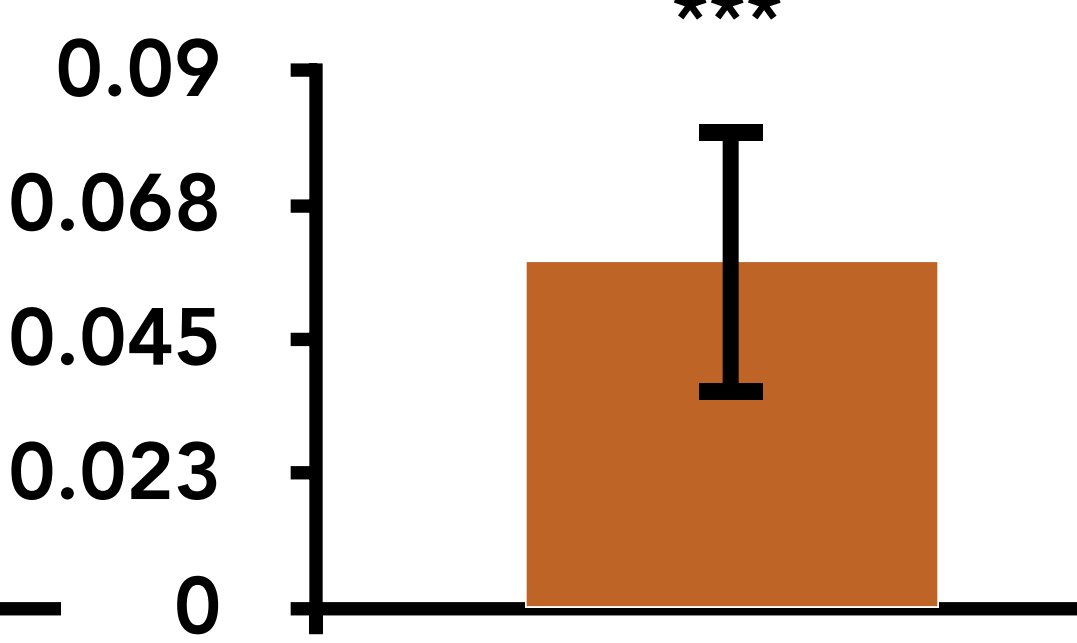
Target fire



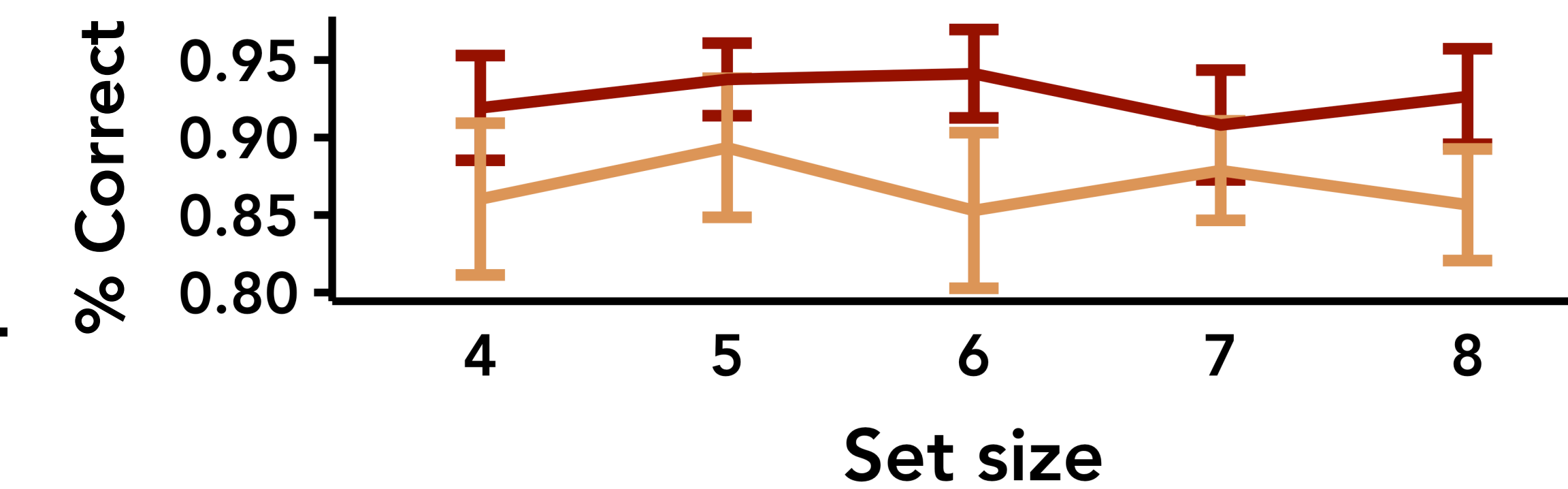
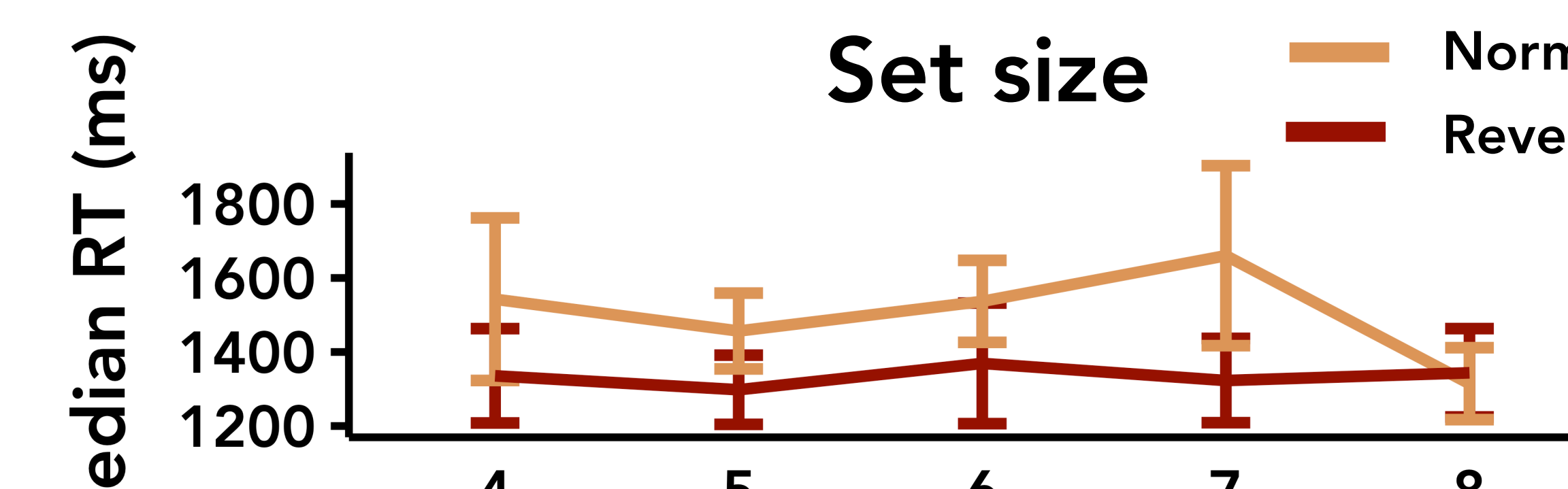
RT



Accuracy

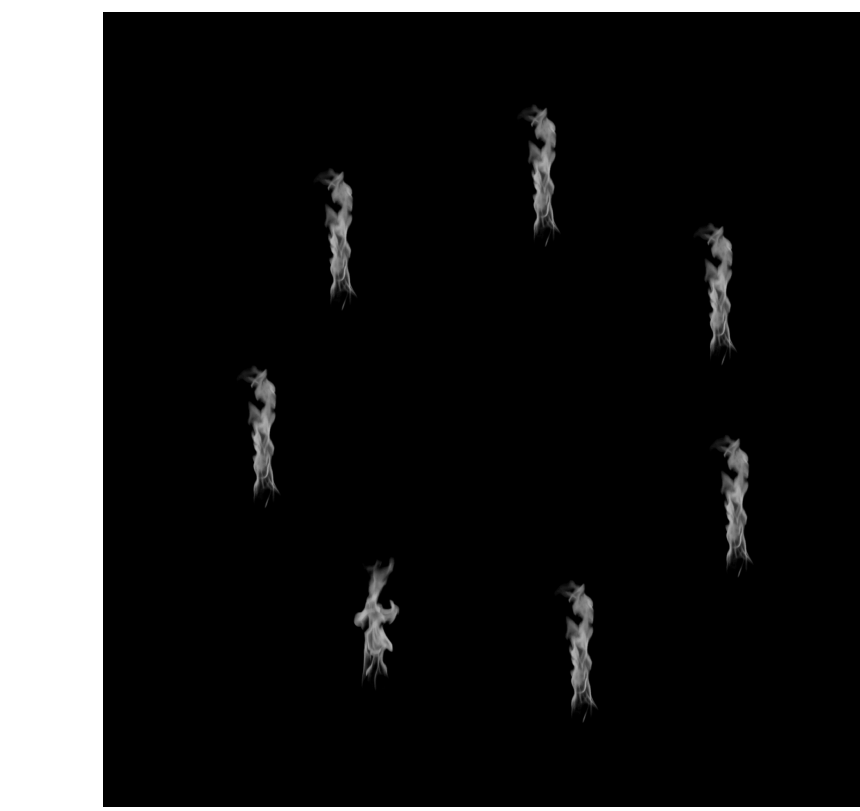


Set size

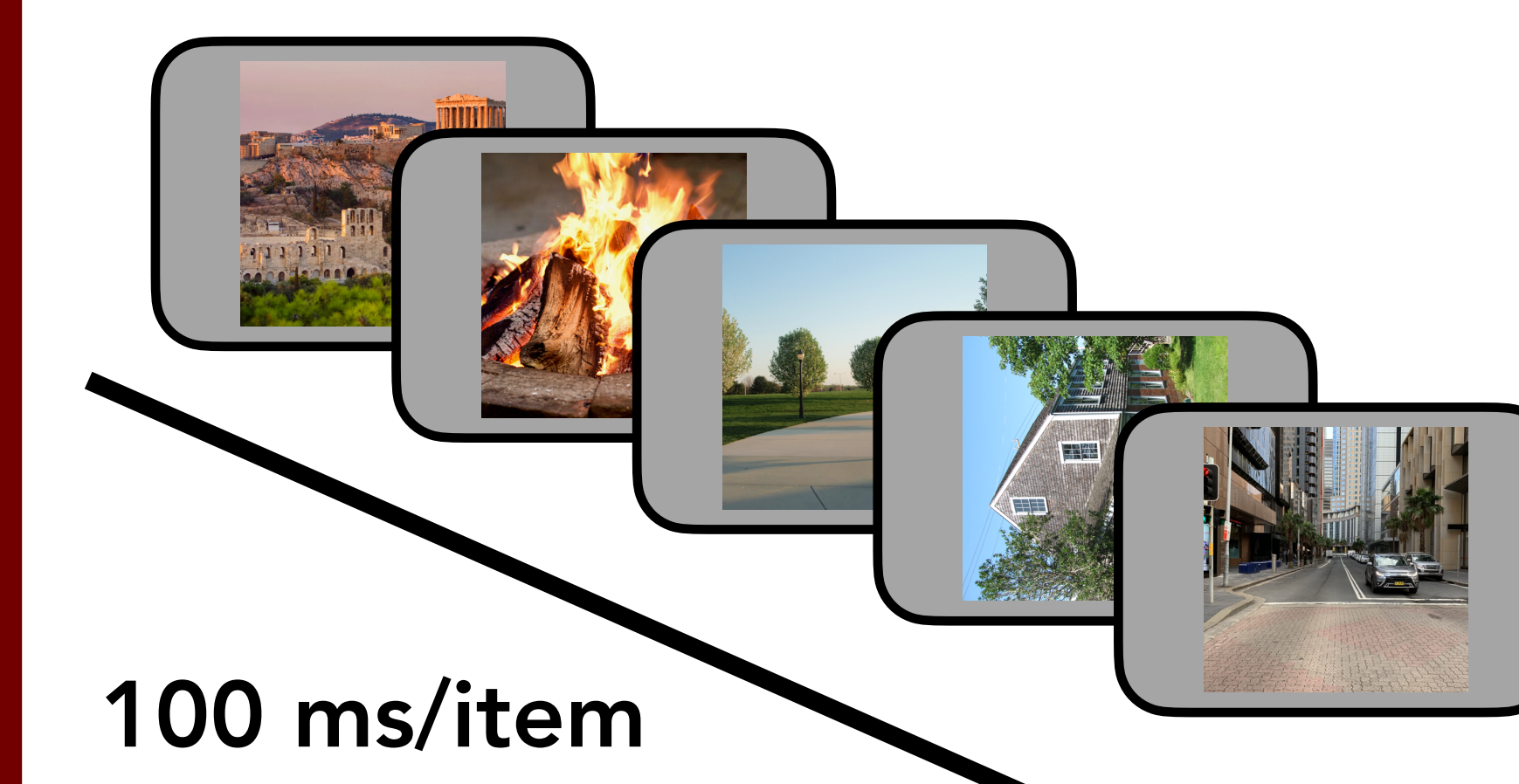


Features?

Color



Motion



100 ms/item

Texture



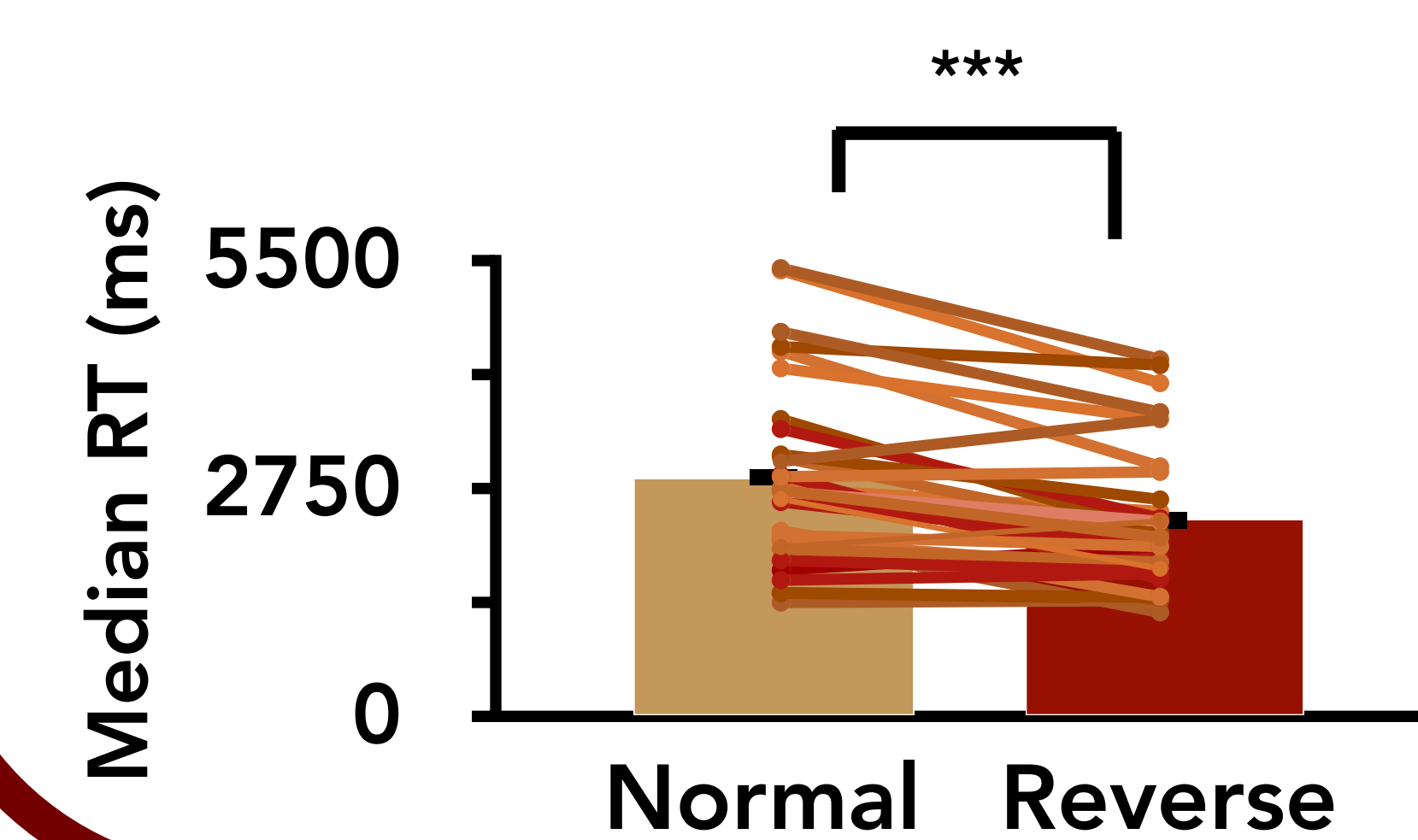
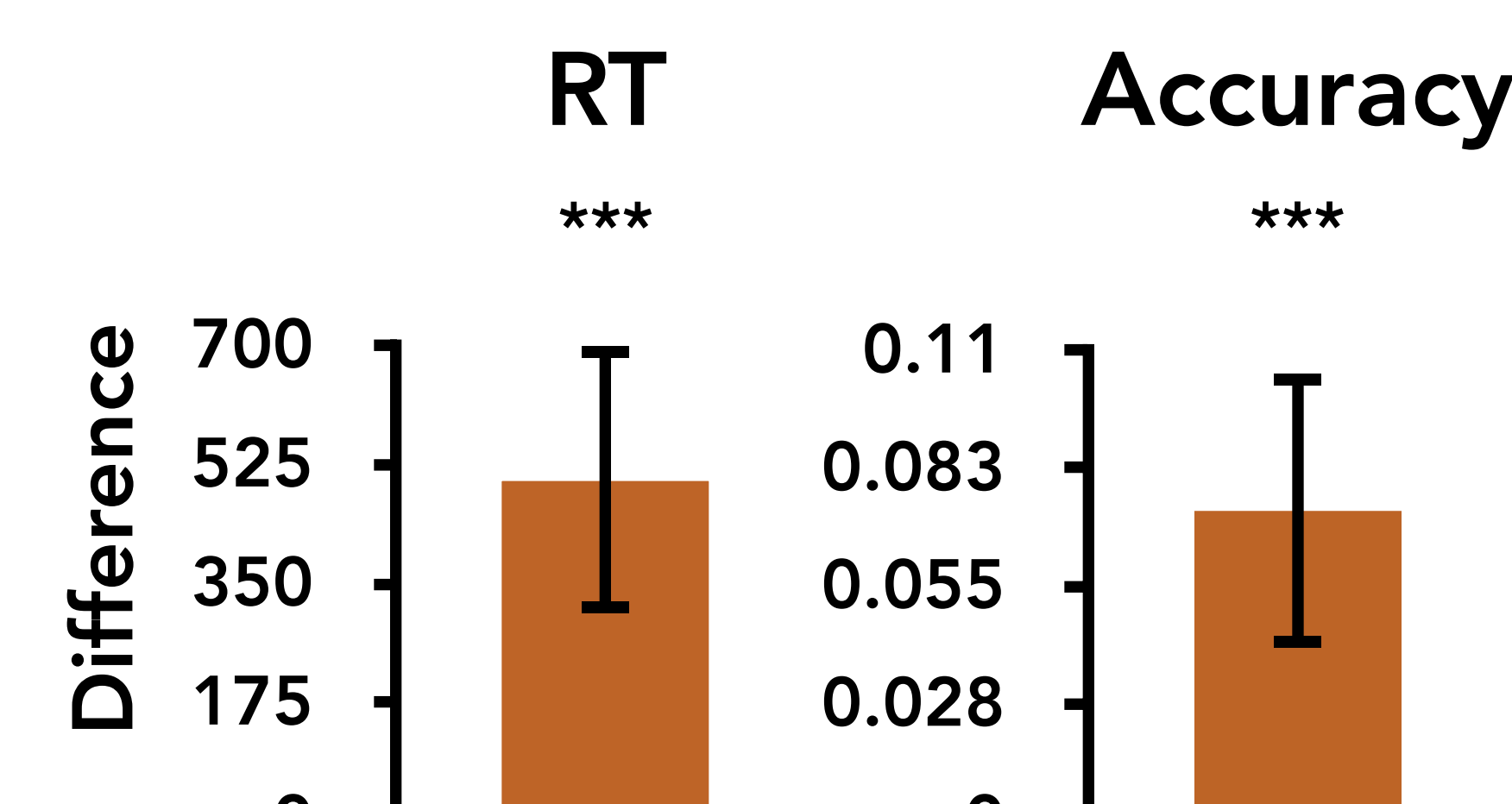
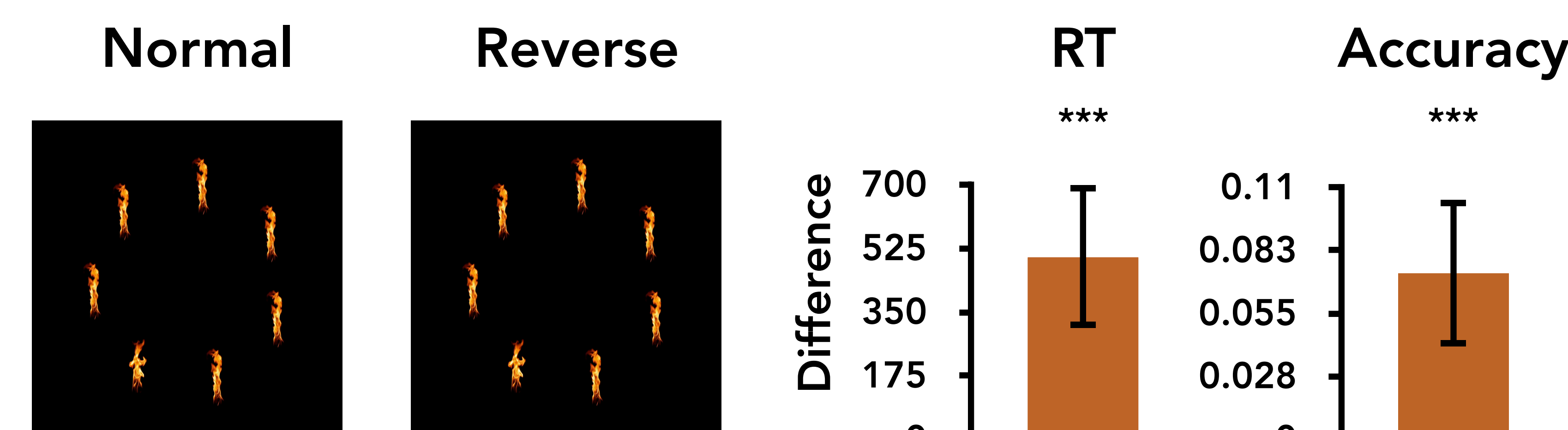
Conclusion

- Search asymmetries present for naturalistic burning fire
- Rotating fire eliminates asymmetry
- Largest effects observed for fire, relative to other (tested) naturalistic stimuli
- Up next: featural contributions (color, texture, motion)

Evidence for distinct
perceptual representations
of fire!

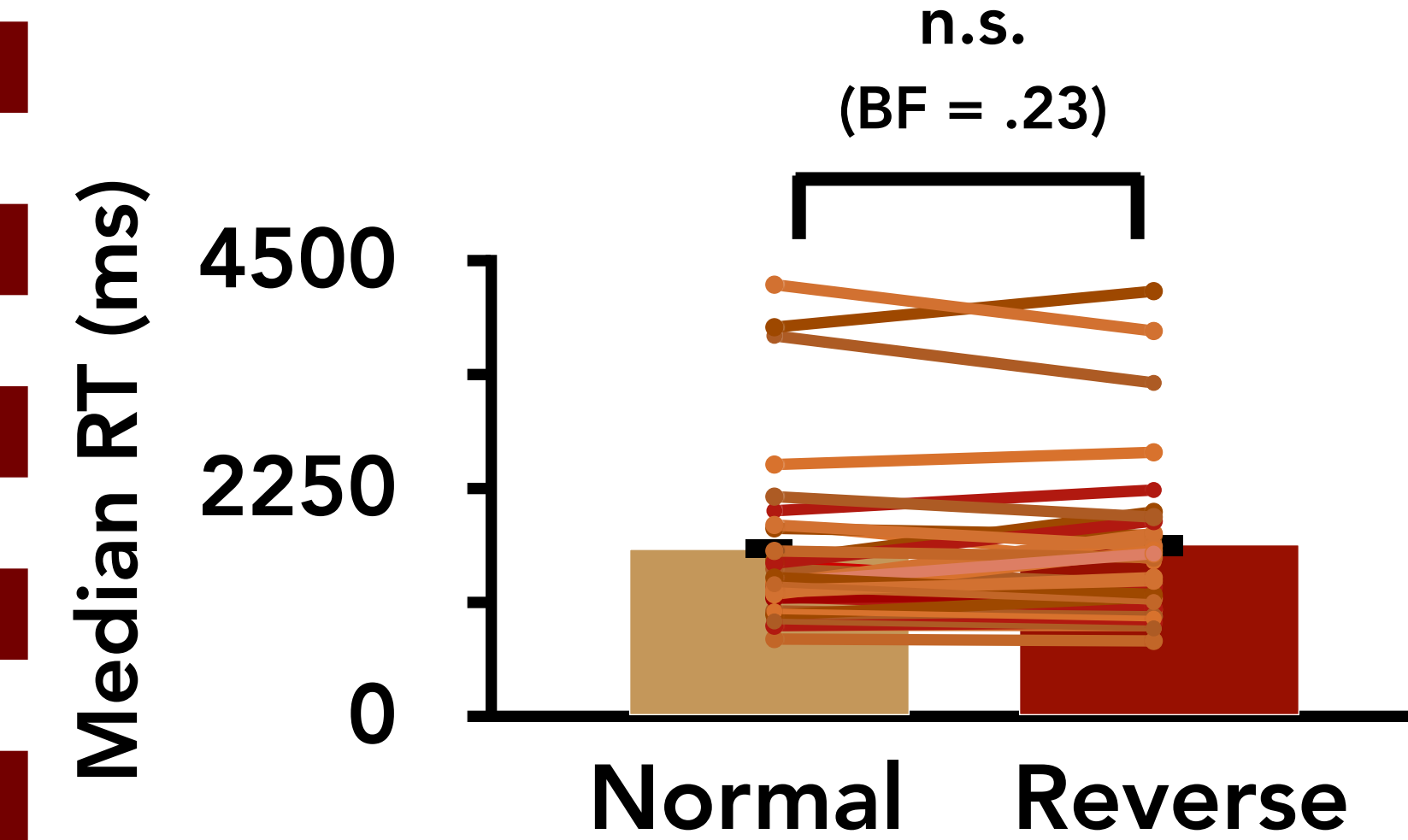
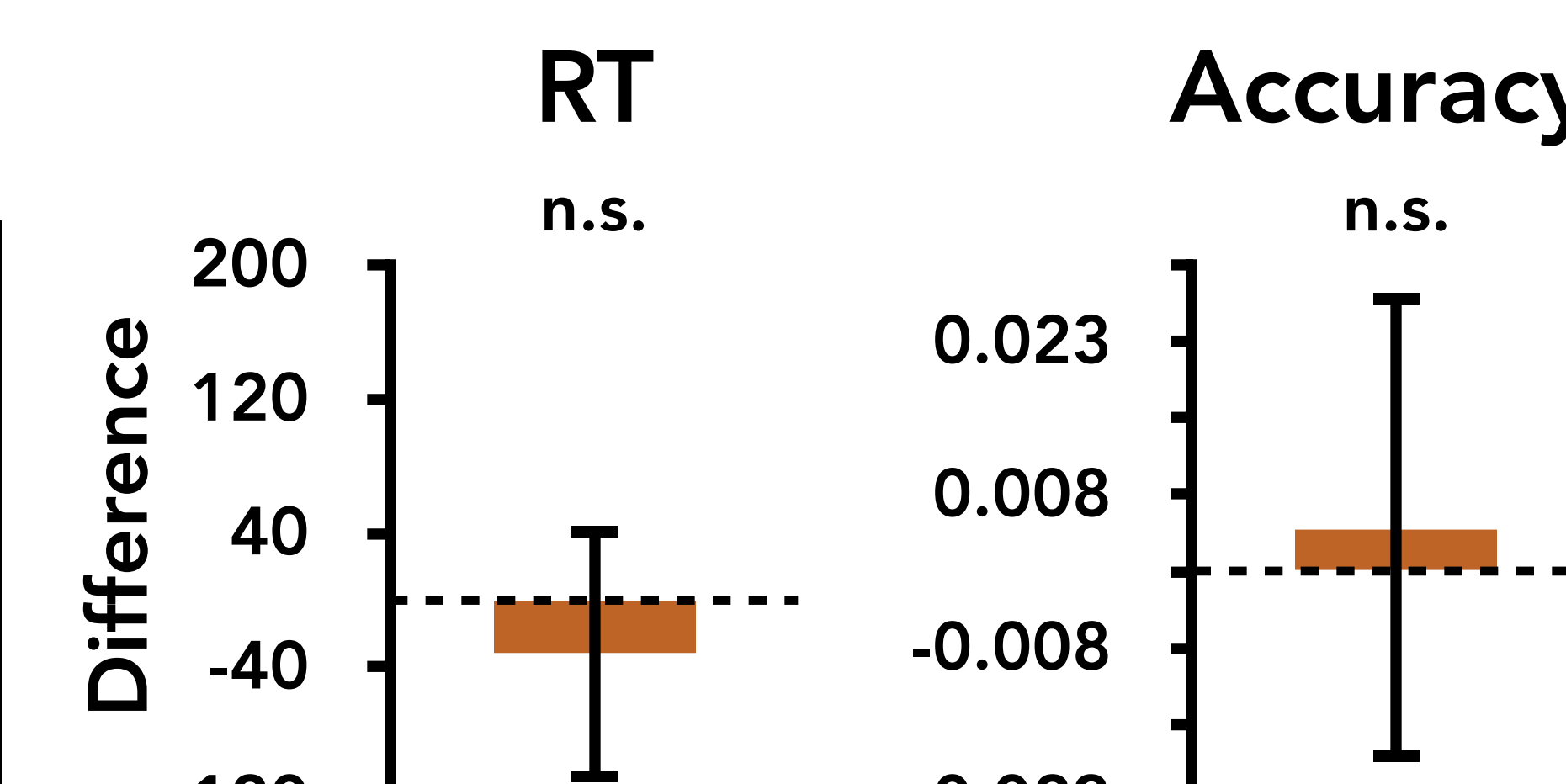
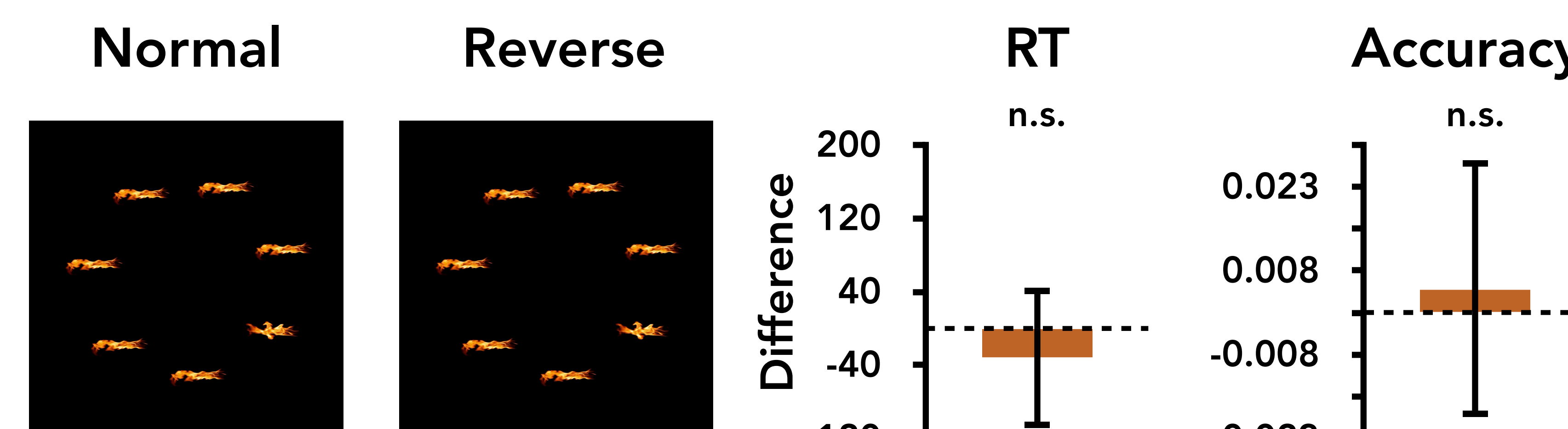
Exps. 2-5: Global motion, low-level features, other natural stimuli

E2: Asynchronous



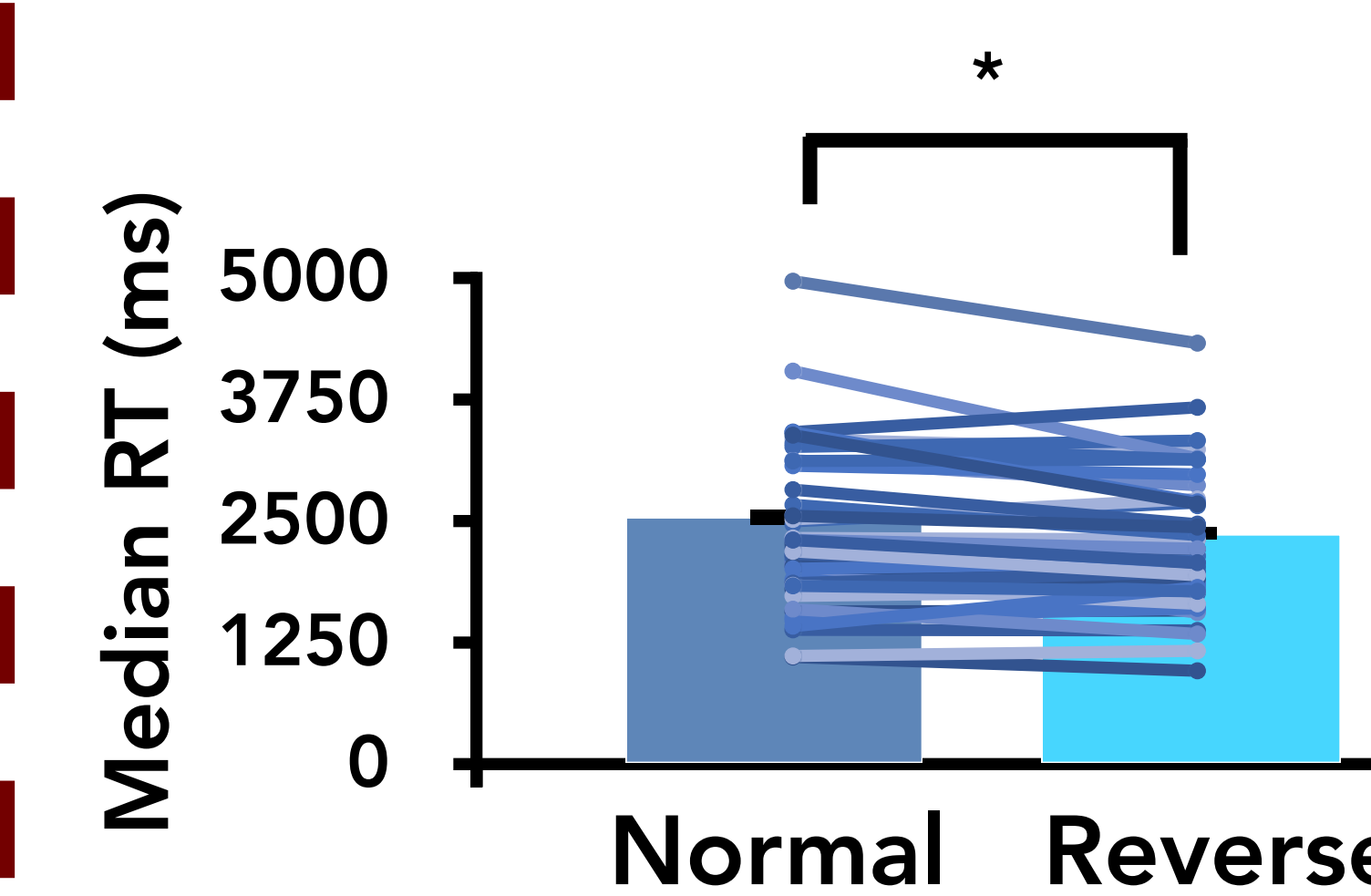
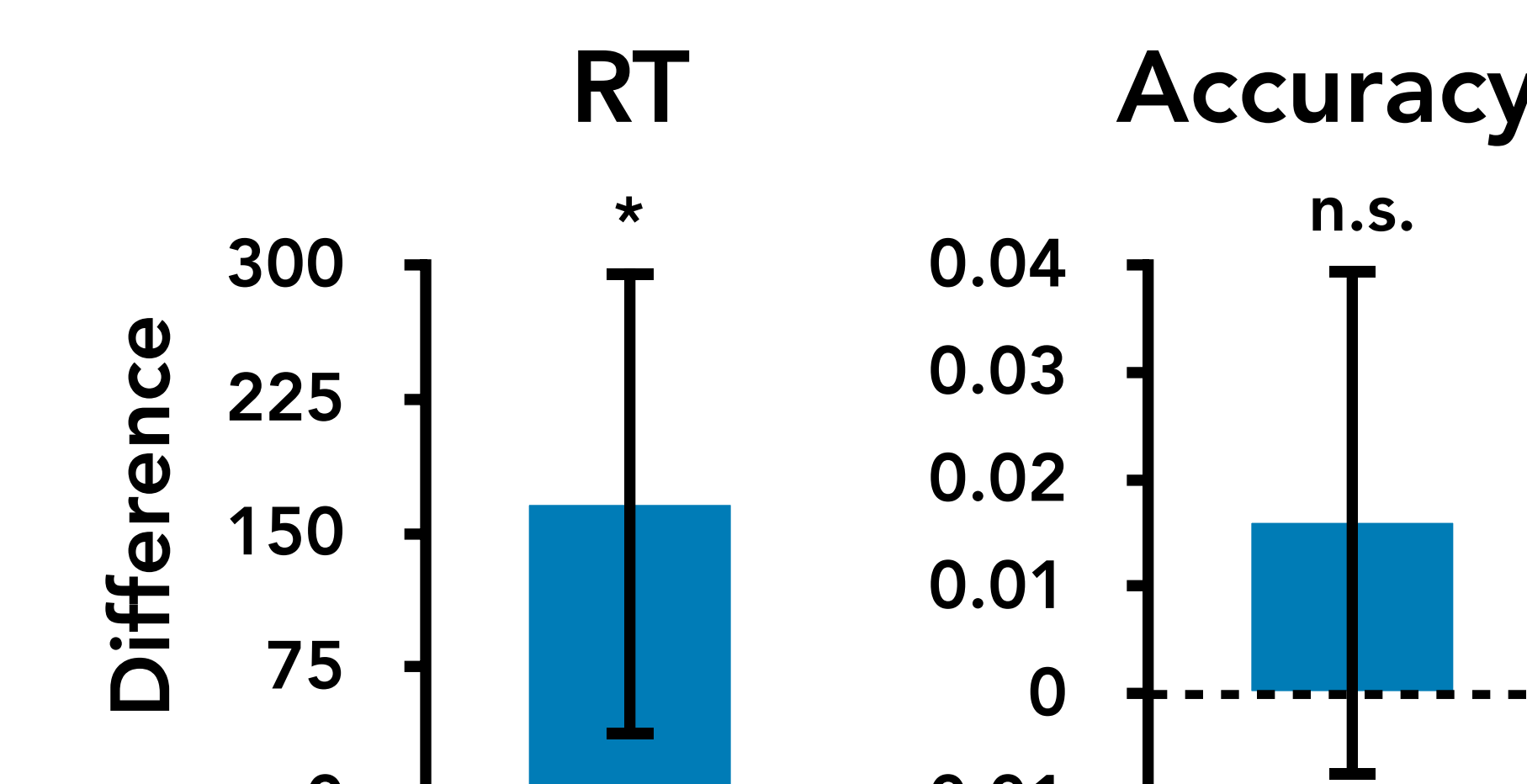
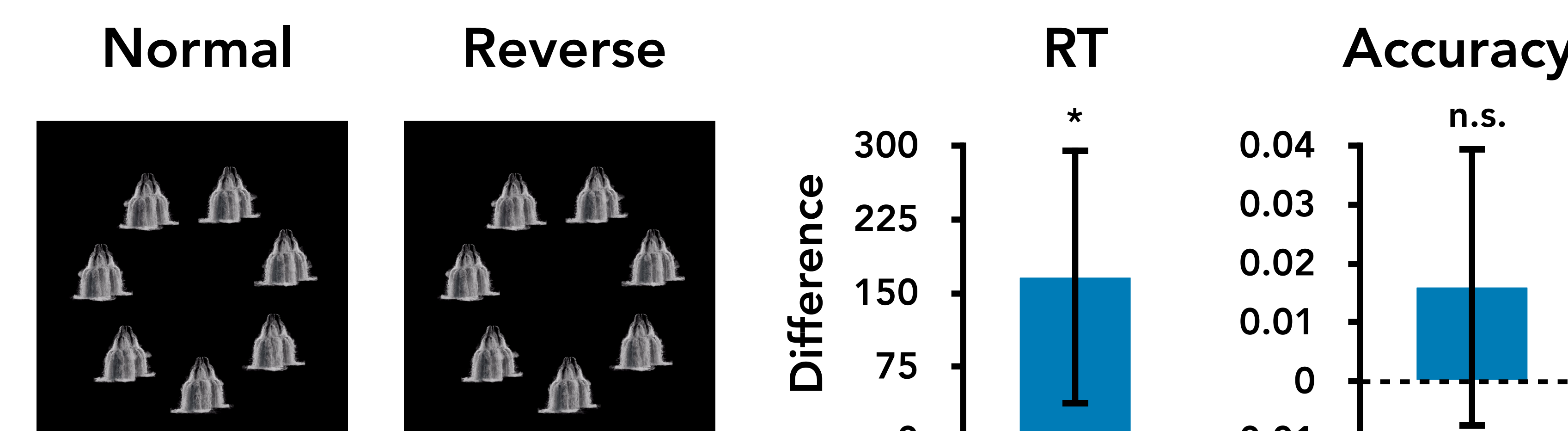
Search asymmetry for
asynchronously
burning fire

E3: Rotated



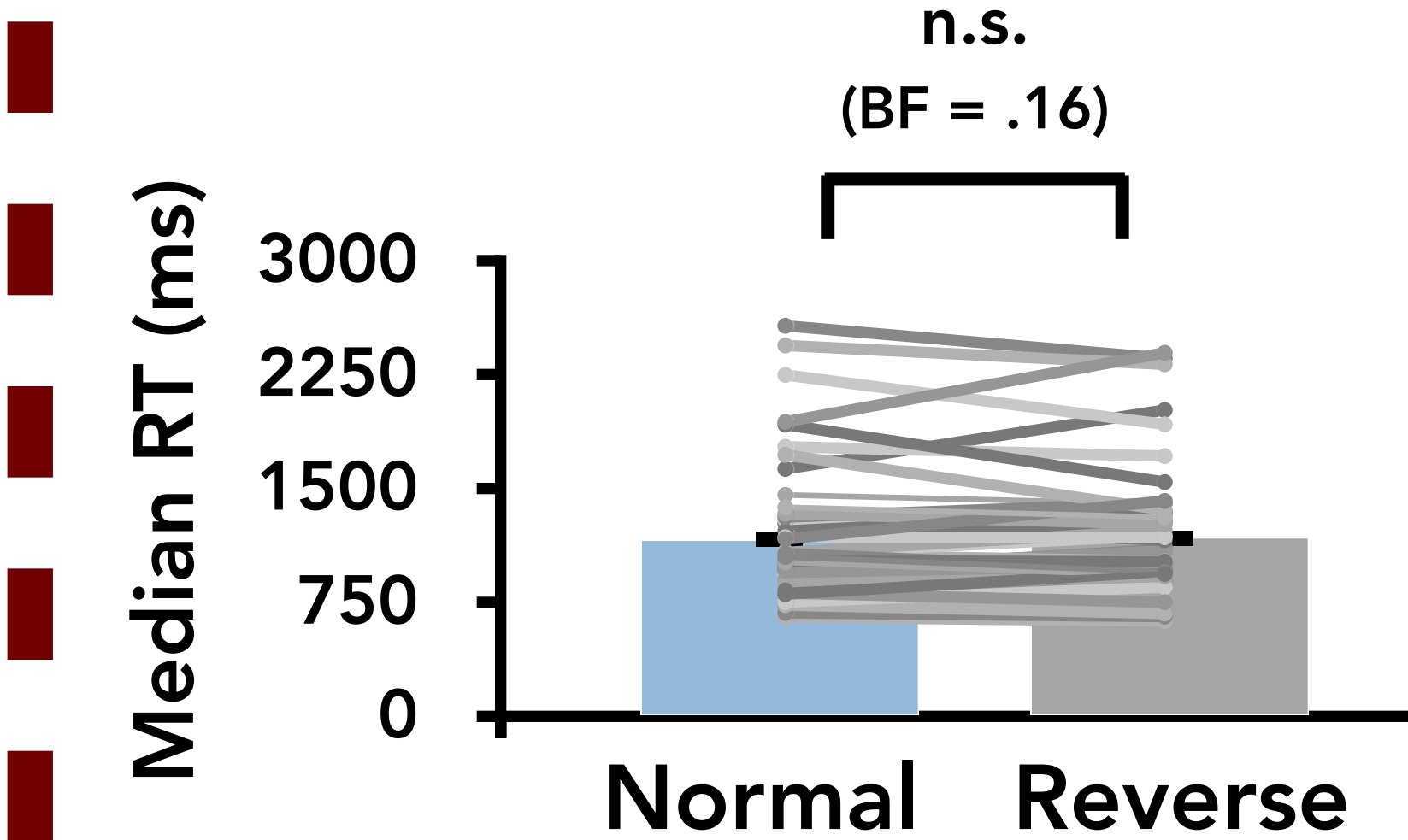
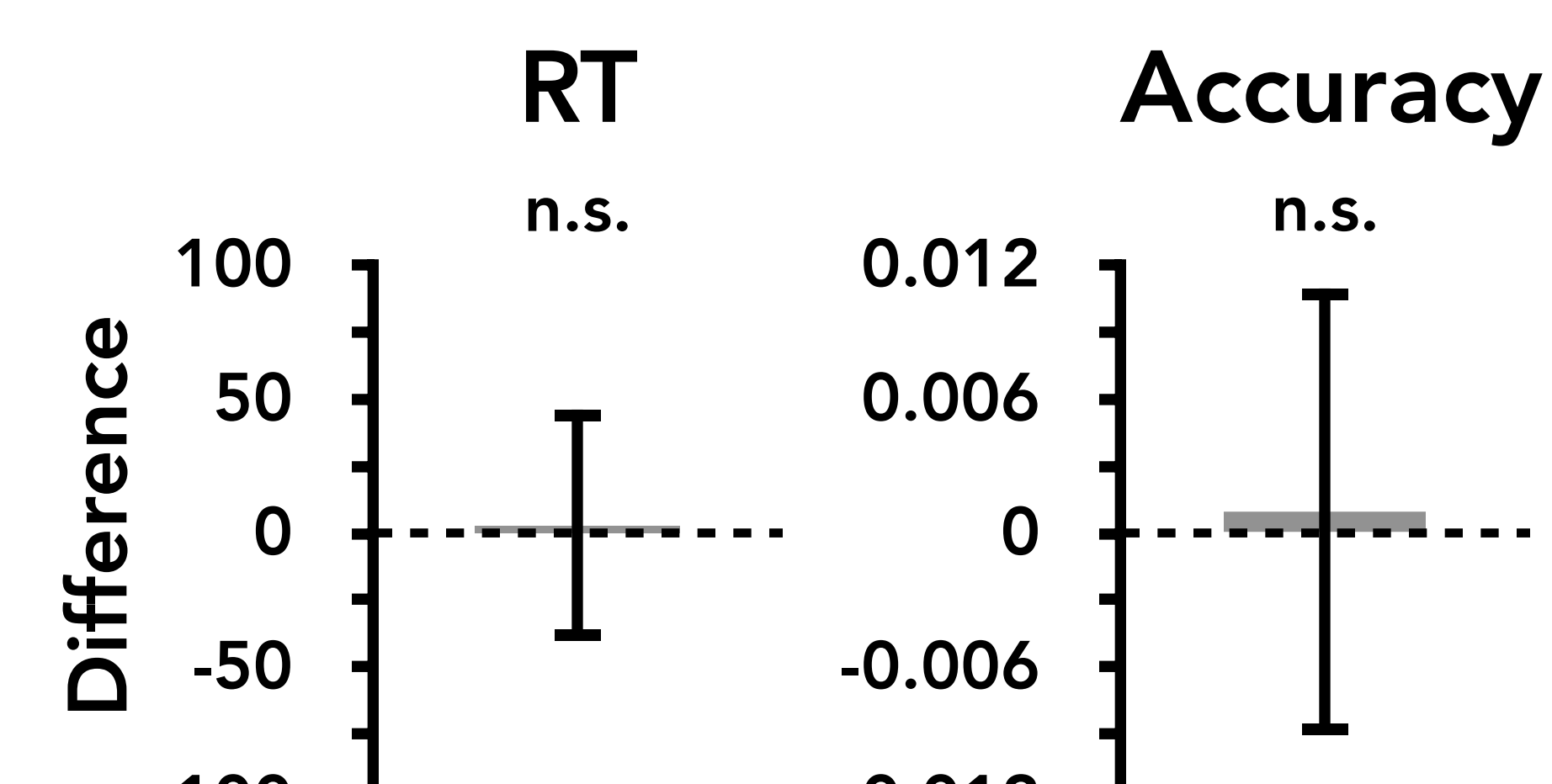
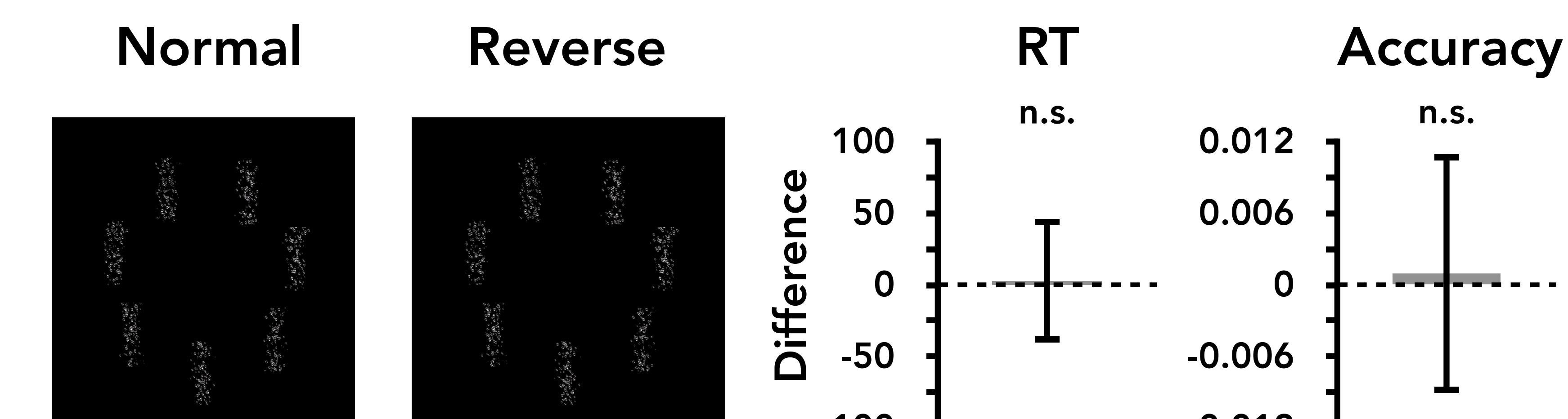
NO asymmetry for
rotated fire!

E4: Water



Moderate asymmetry
for water

E5: Bubbles



NO asymmetry for
bubbles