



# Attentional deployment to Space and Features: Separate and Together

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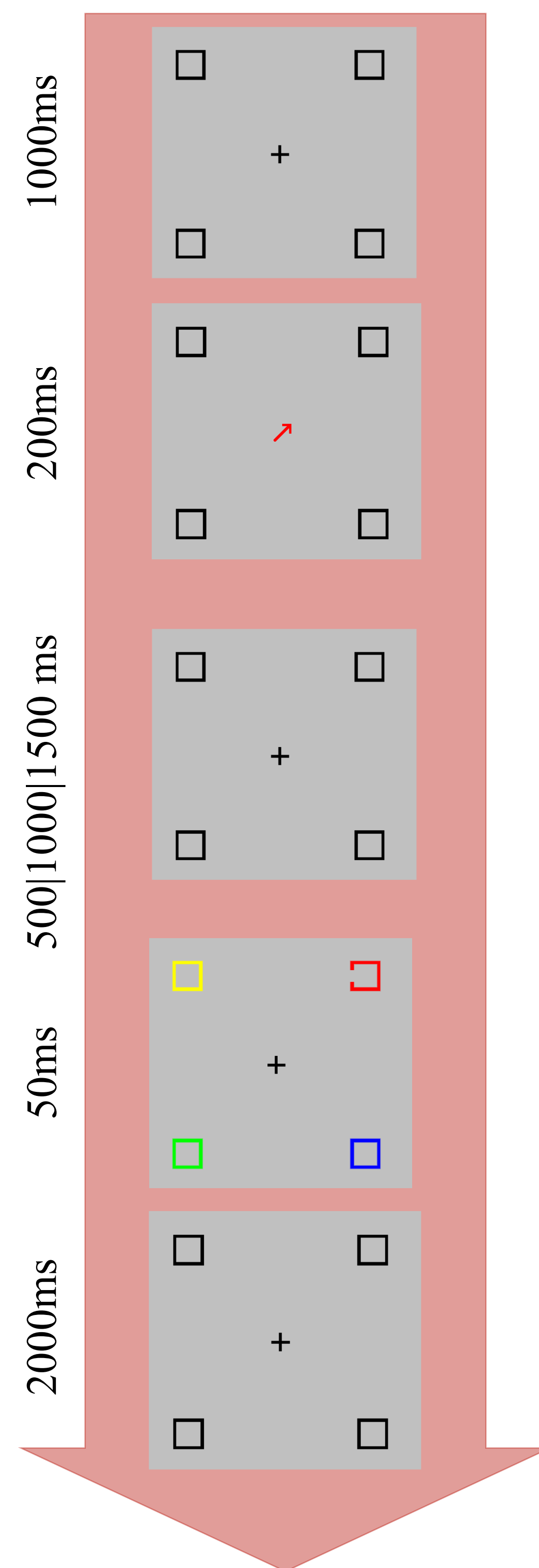
The Selective Attention & Perception Lab

## Introduction

- Space-based attention (SBA) enhances information at relevant location(s)
- Feature-based attention (FBA) enhances relevant low-level feature representations
- Both selection mechanisms modulate similar sensory populations
- How their unique influences interact to facilitate behavior remains unclear

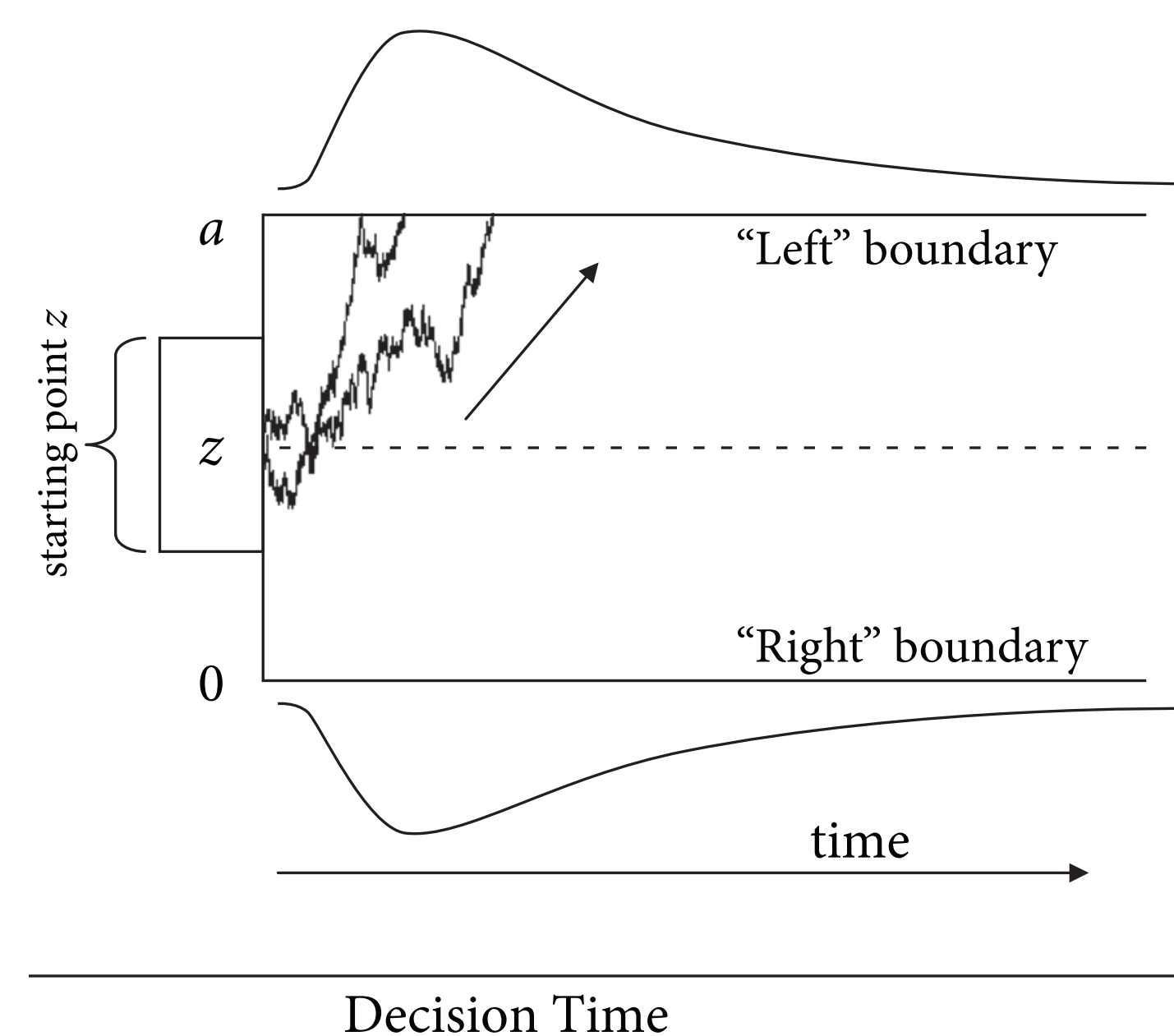
## Methods

Feature Cue		Proportions of Trials	
Valid	Invalid	70	10
Valid	Invalid	10	10
		Spatial Cue	



## Analysis

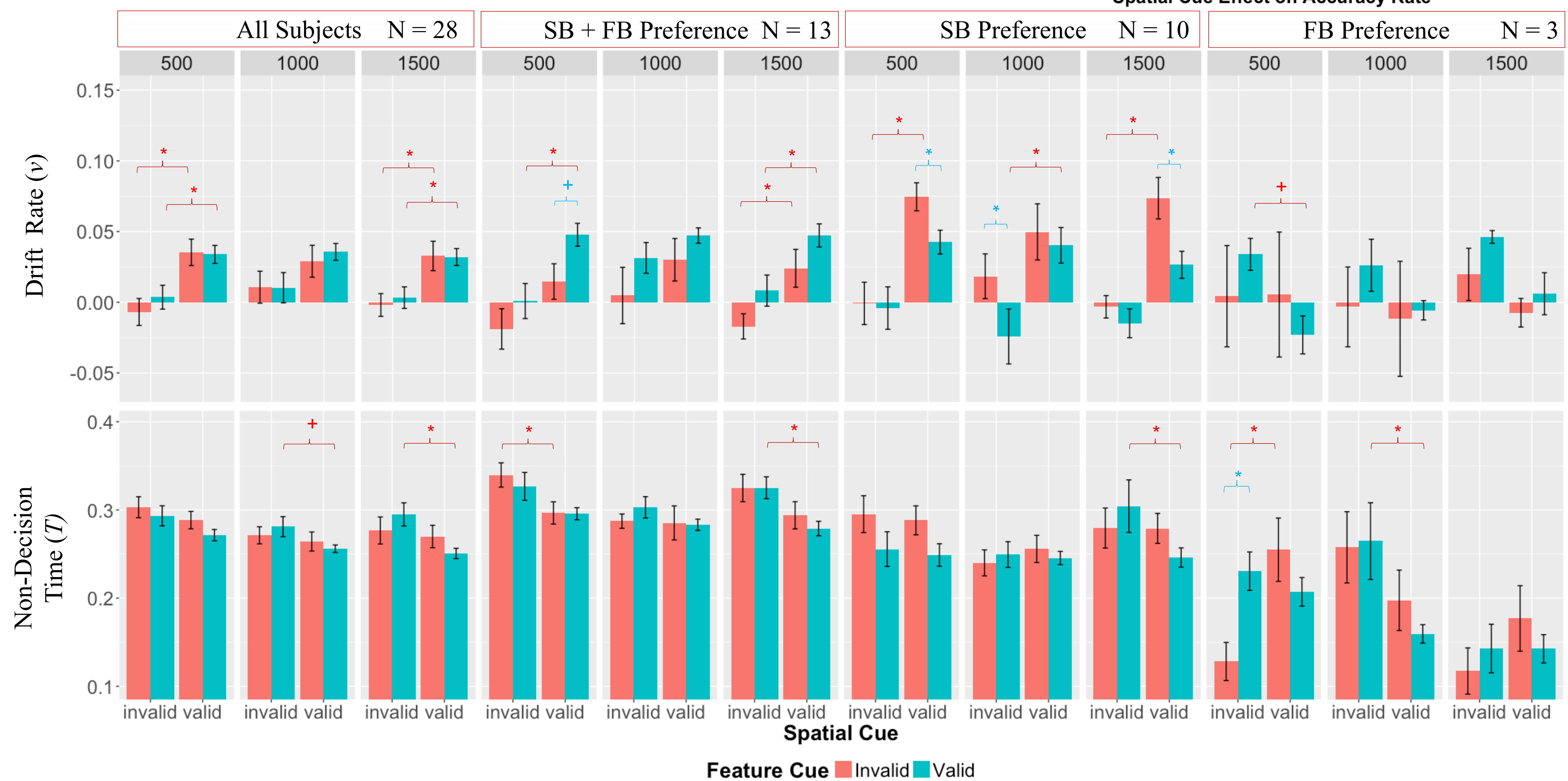
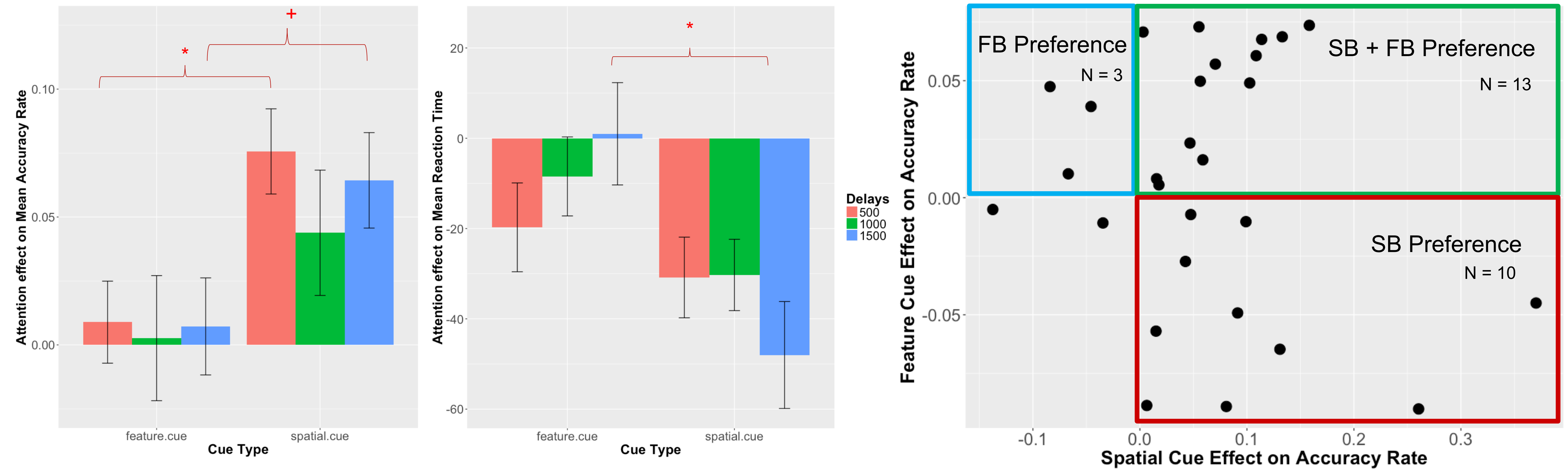
- Drift Diffusion Model
  - $v$ : rate of evidence accumulation of a given response
  - $a$ : criterion leading to a conservative response
  - $T$ : portion of RT unrelated to evidence accumulation



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## Results



## Discussion

- Overall, SBA (but not FBA) improves target identification
- But, individual differences among attention strategies
- Broadly, evidence accumulated based on “preferred” cue, while non-decision time impacted by “nonpreferred” cue

## Reference

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