

The serial dependence effect is both attraction to the previous response and repulsion from the previous stimulus.

Sadil, P., Cowell, R. A., Huber, D. E.
University of Massachusetts, Amherst
(2337)



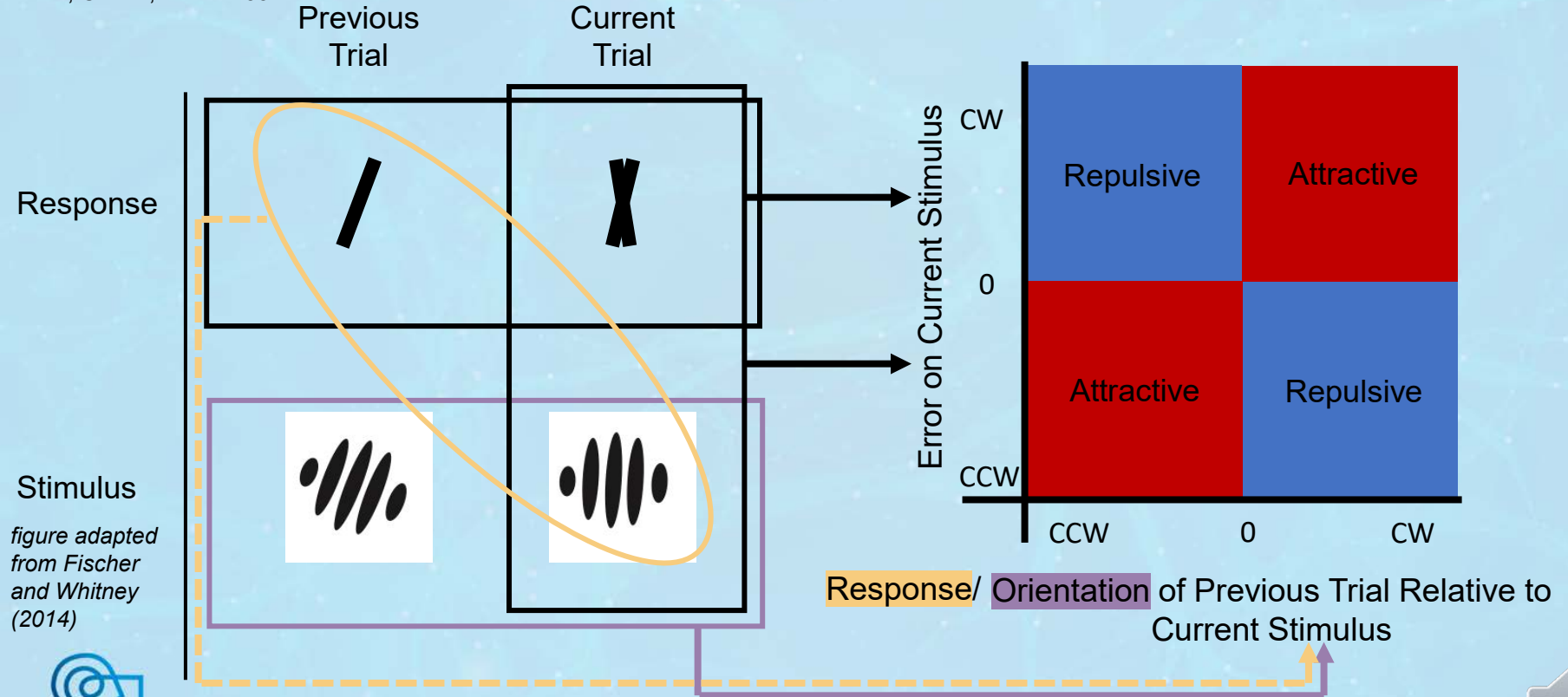
61st Annual Meeting

VIRTUAL PSYCHONOMICS



When judging orientations, participants exhibit both repulsive and attractive dependencies (e.g., tilt aftereffect and serial dependence)

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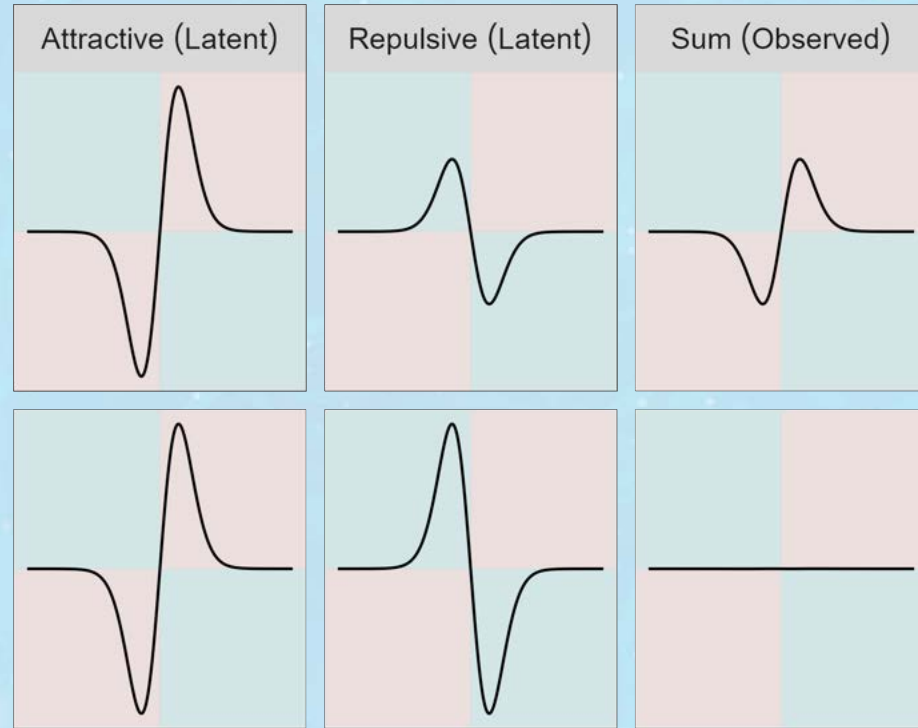


Stimulus
figure adapted from Fischer and Whitney (2014)



If there were multiple dependencies, then a plot of errors against only the previous orientation would be uninformative

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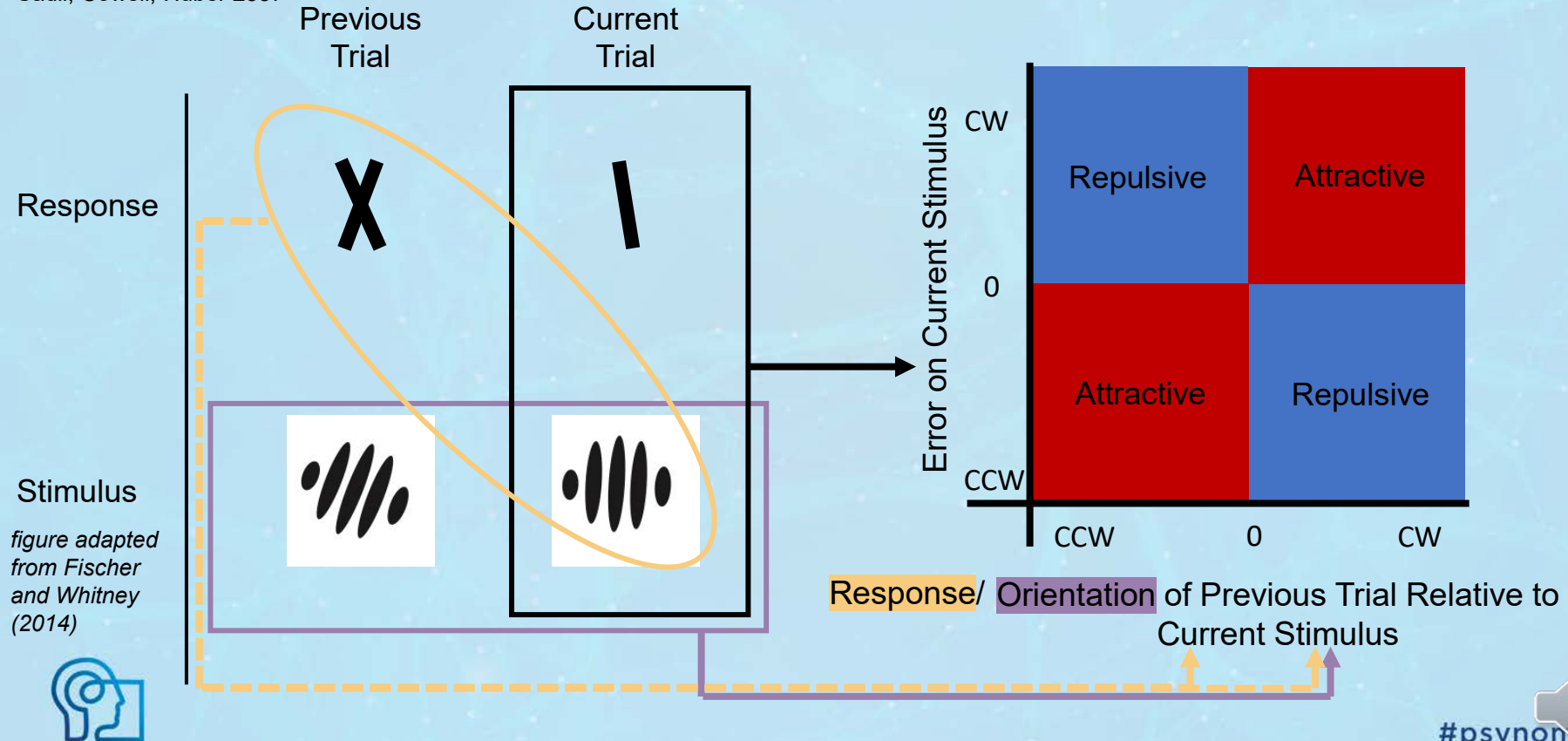


#psynon20



Dependencies can be decomposed into up to two sources by considering both the inducer and the response to that stimulus

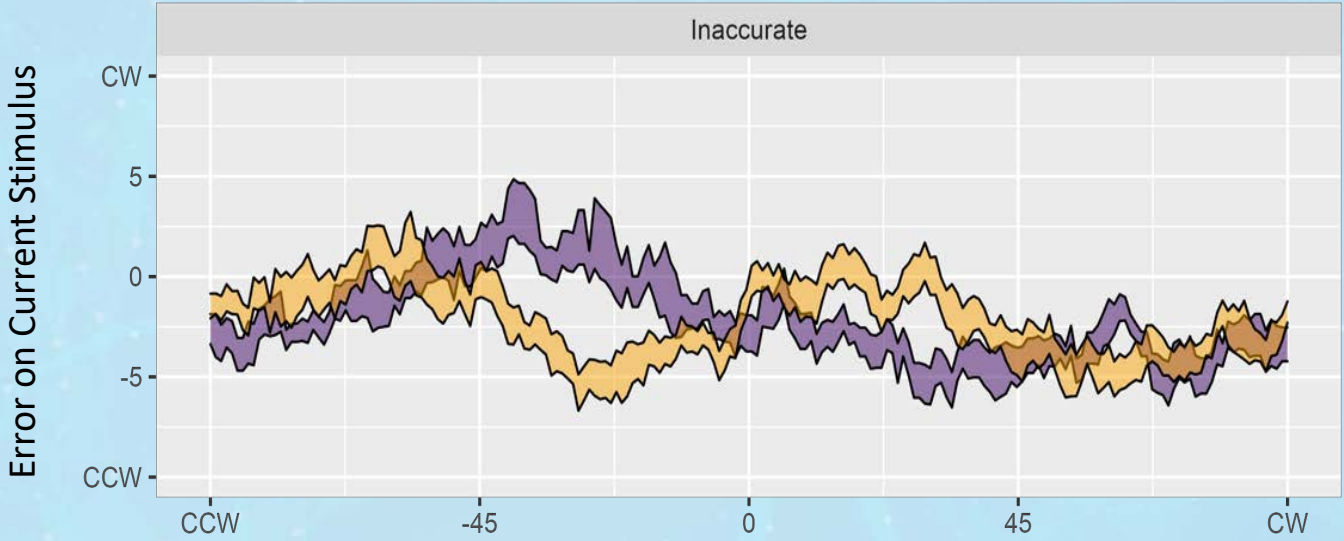
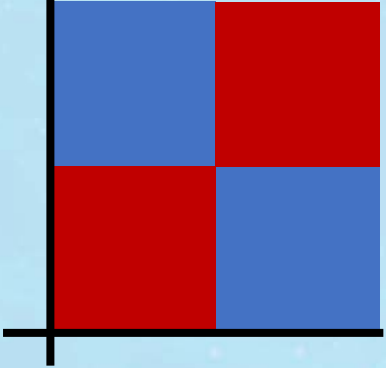
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Split-half analysis suggests that stimuli repel, and responses attract

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Participants: 16
Trials per participant:
1500



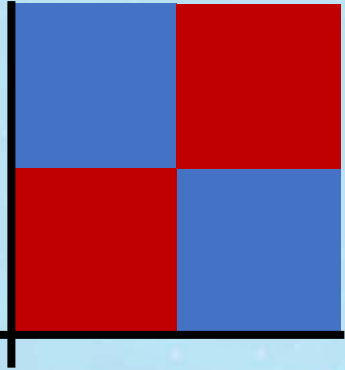
Response/ Orientation of Previous Trial Relative to Current Stimulus



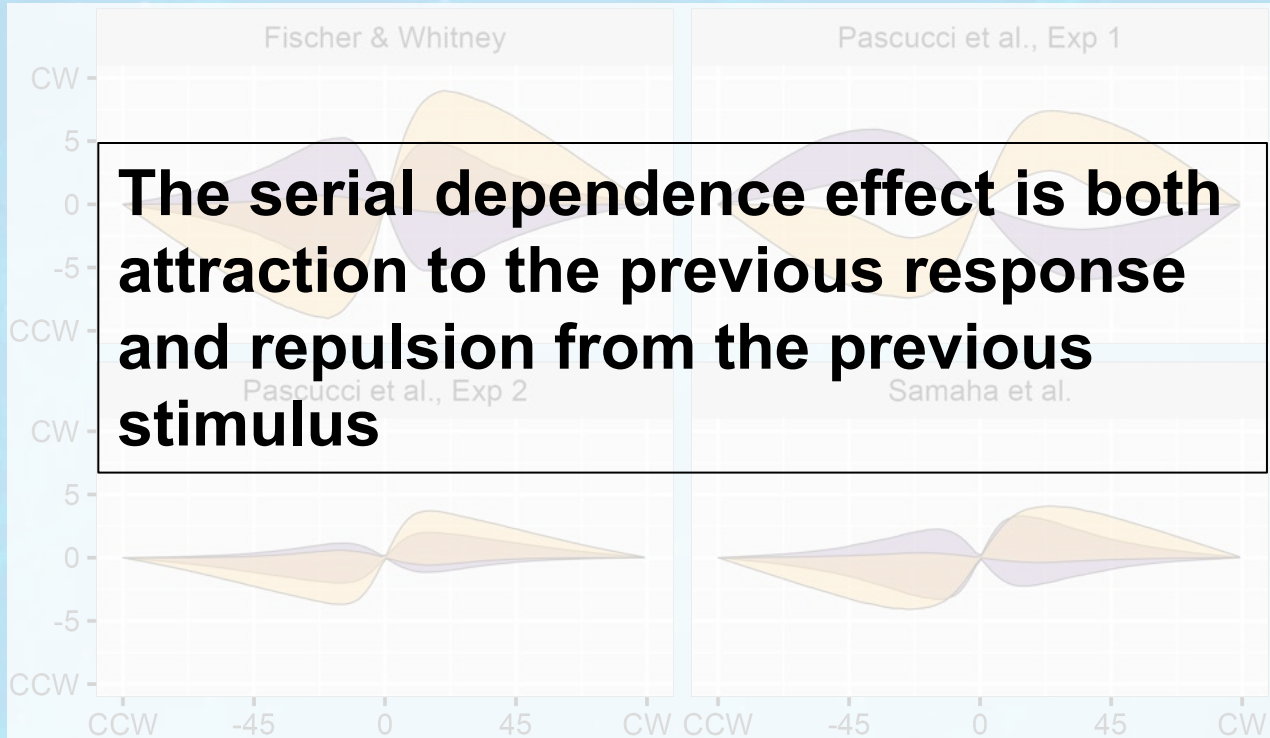
Across datasets, there was no evidence that the inducing orientation attracted errors

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data from Fischer & Whitney, 2014; Samaha et al., 2019; Pascucci et al., 2019



Error on Current Stimulus



Response/ Orientation of Previous Trial Relative to Current Stimulus

