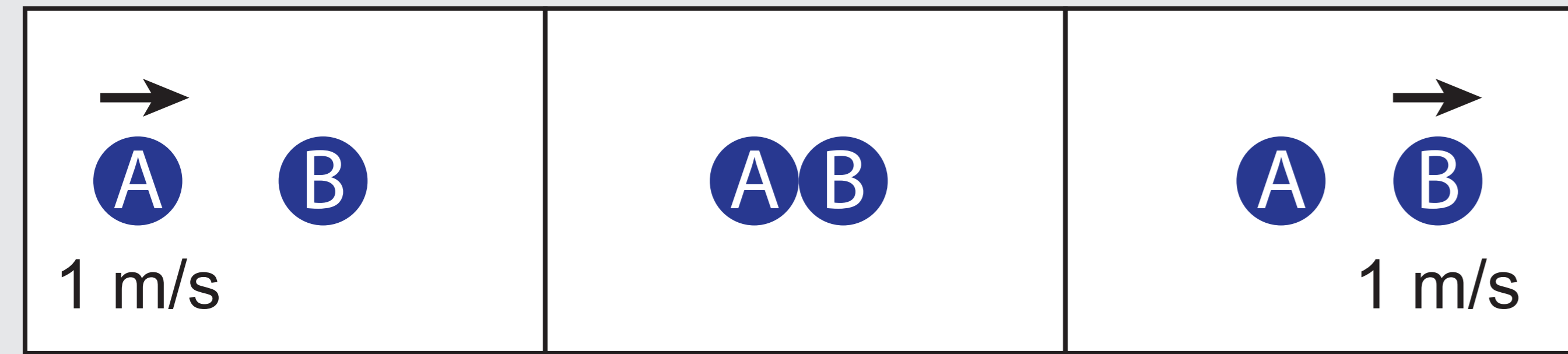


Identifying the principles of causal perception through visual adaptation transfer

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Introduction

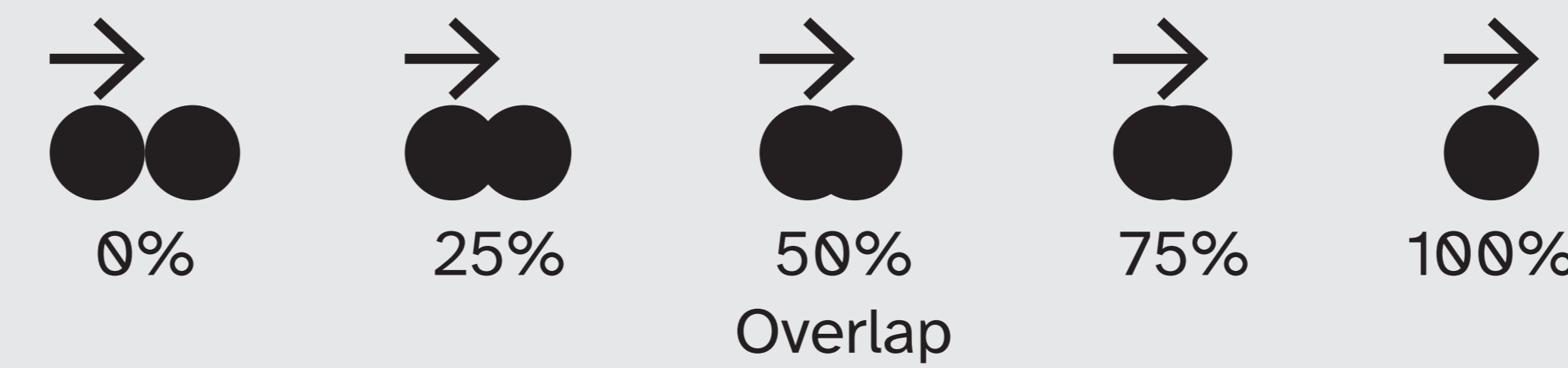
Some events are automatically and irresistably **perceived** as cause-and-effect interactions, e.g. Michotte's '**Launching**' event.



(Michotte, 1946/1963)

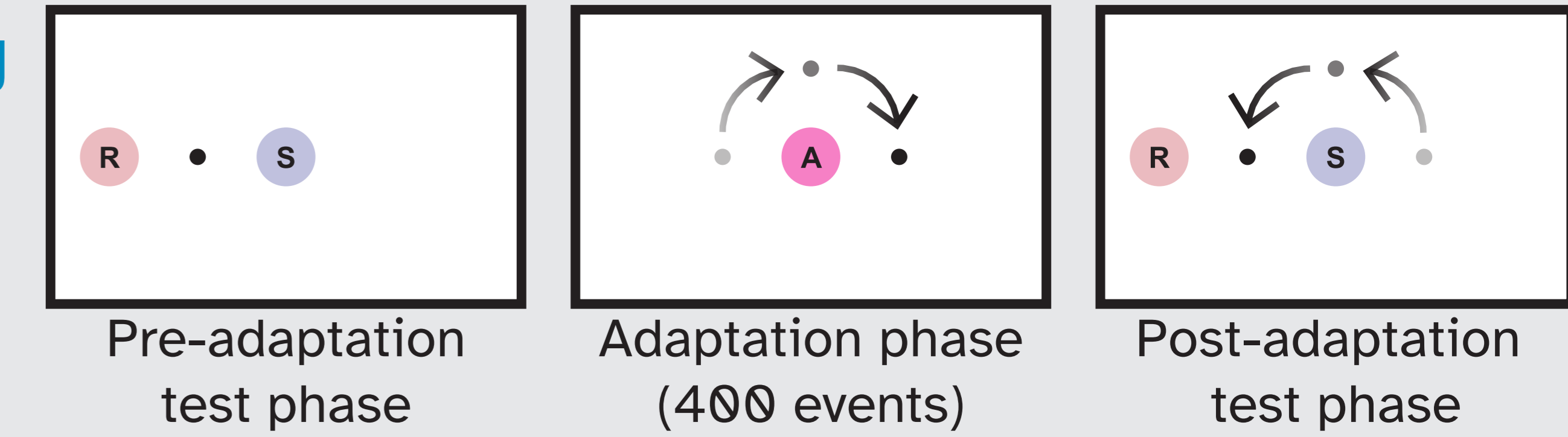
Approach: Adaptation transfer

Causal Launching vs. Non-Causal Passing



At high overlaps, A appears to "Pass" B without making contact (Scholl & Nakayama, 2002)

If another adaptation event creates the same effect with these test events, **it shares underlying processing with Launching** (Kominsky & Scholl, 2020)



After adapting to **Launching**, people see more **Passing**, **but only at R** (Rolfs et al., 2013)

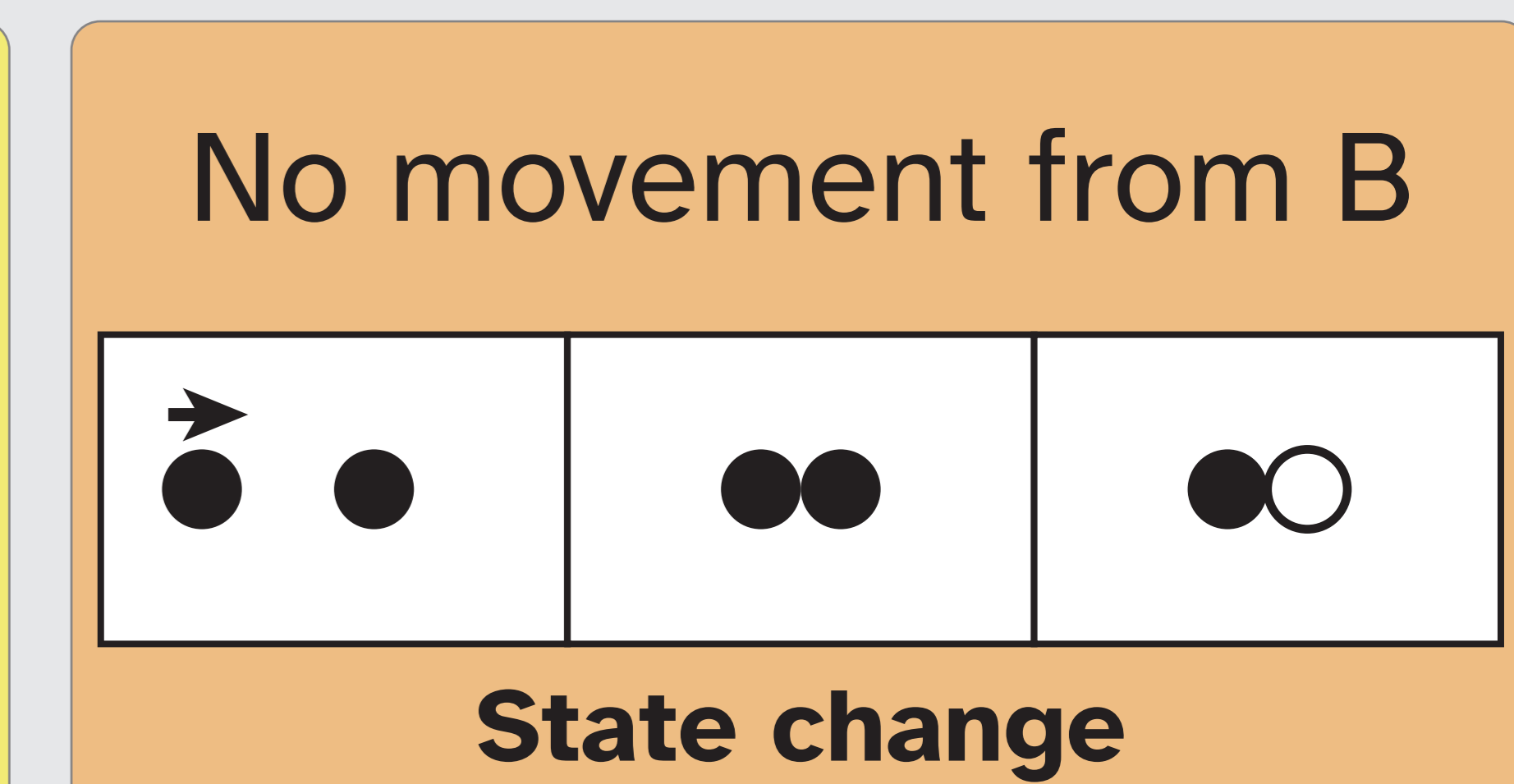
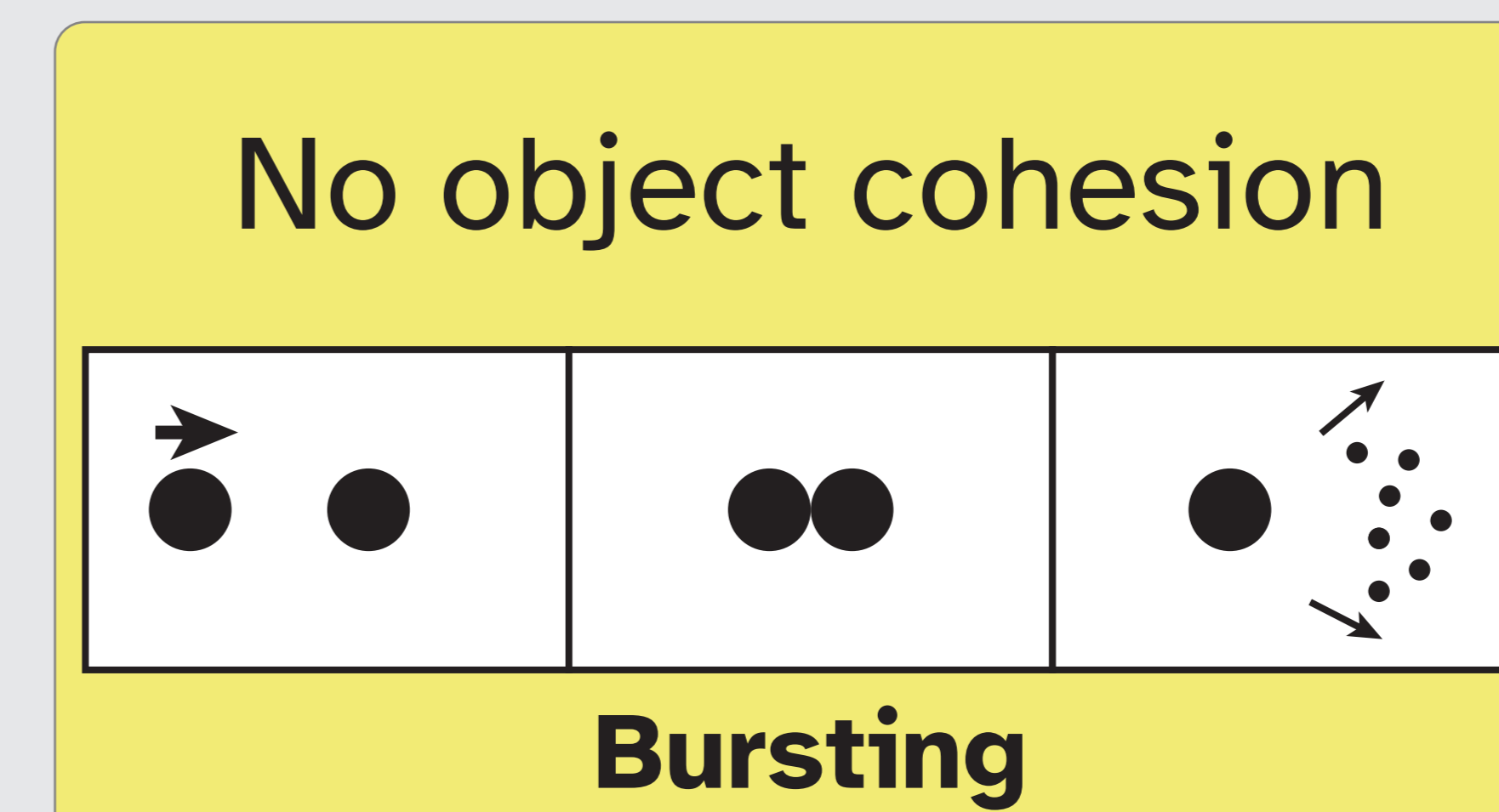
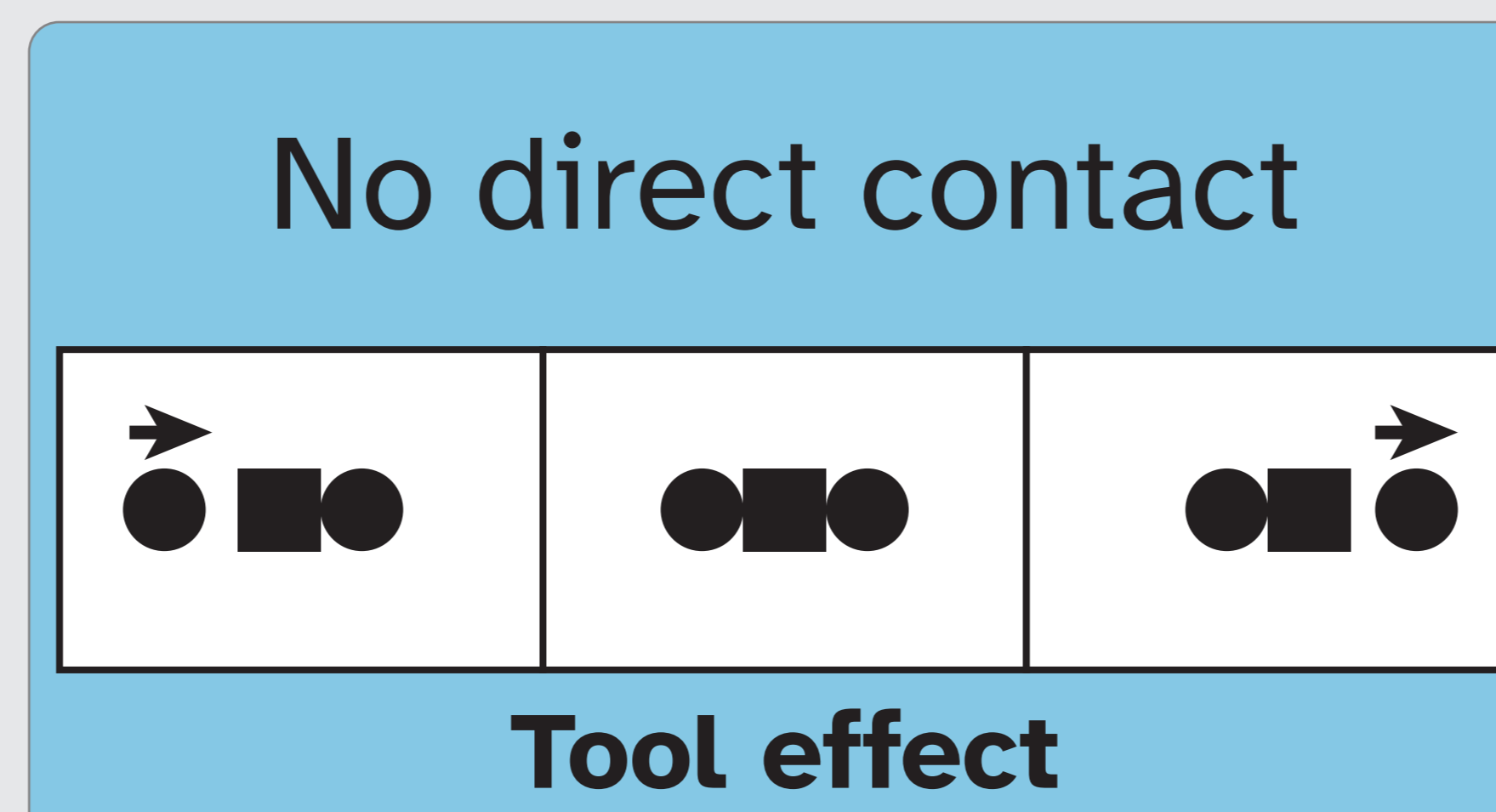
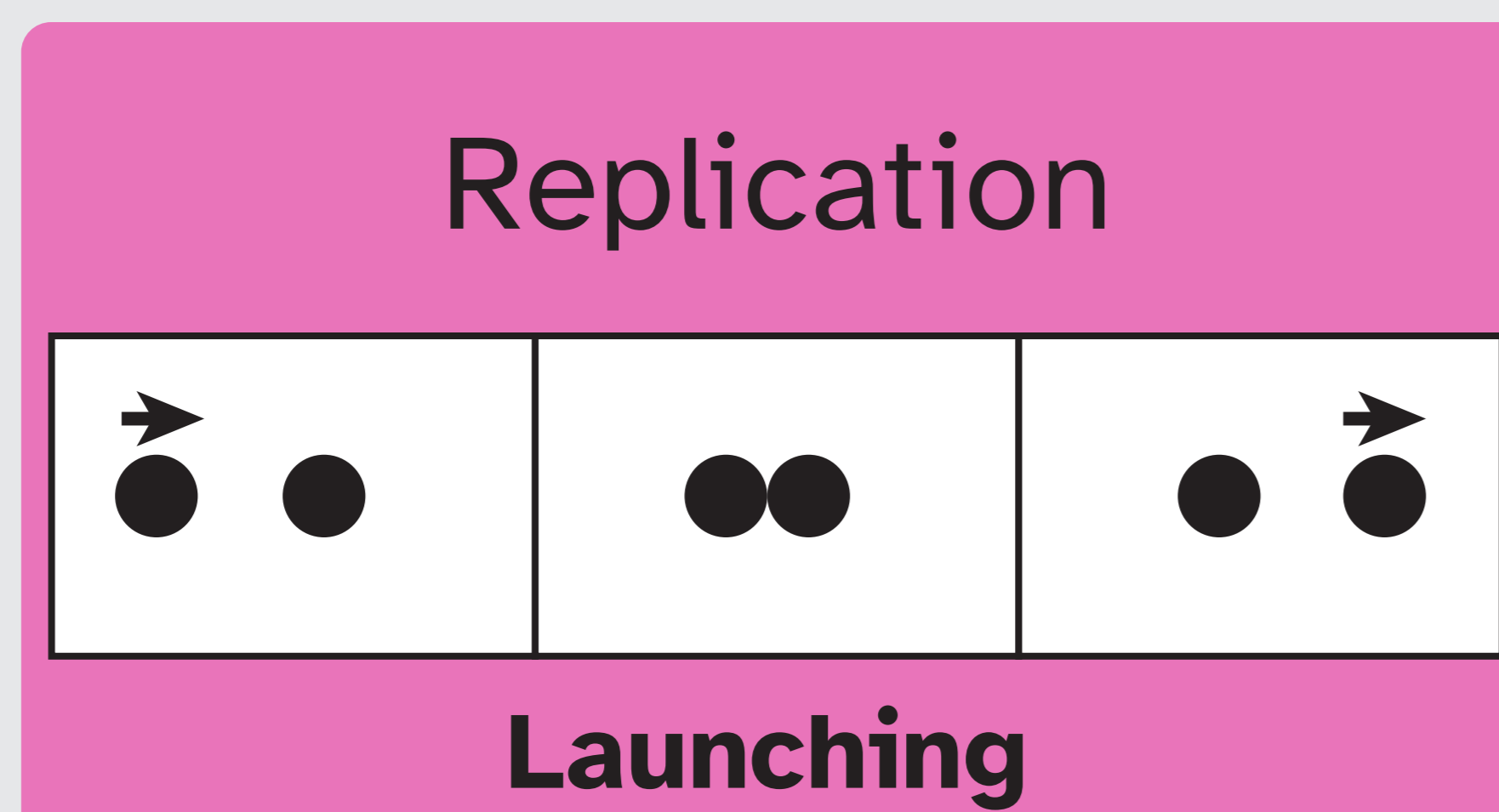
Question

Are we adapting **Launching** or a specific feature?

Methods

<https://osf.io/38sd4/>

Adaptation transfer conditions removing different features

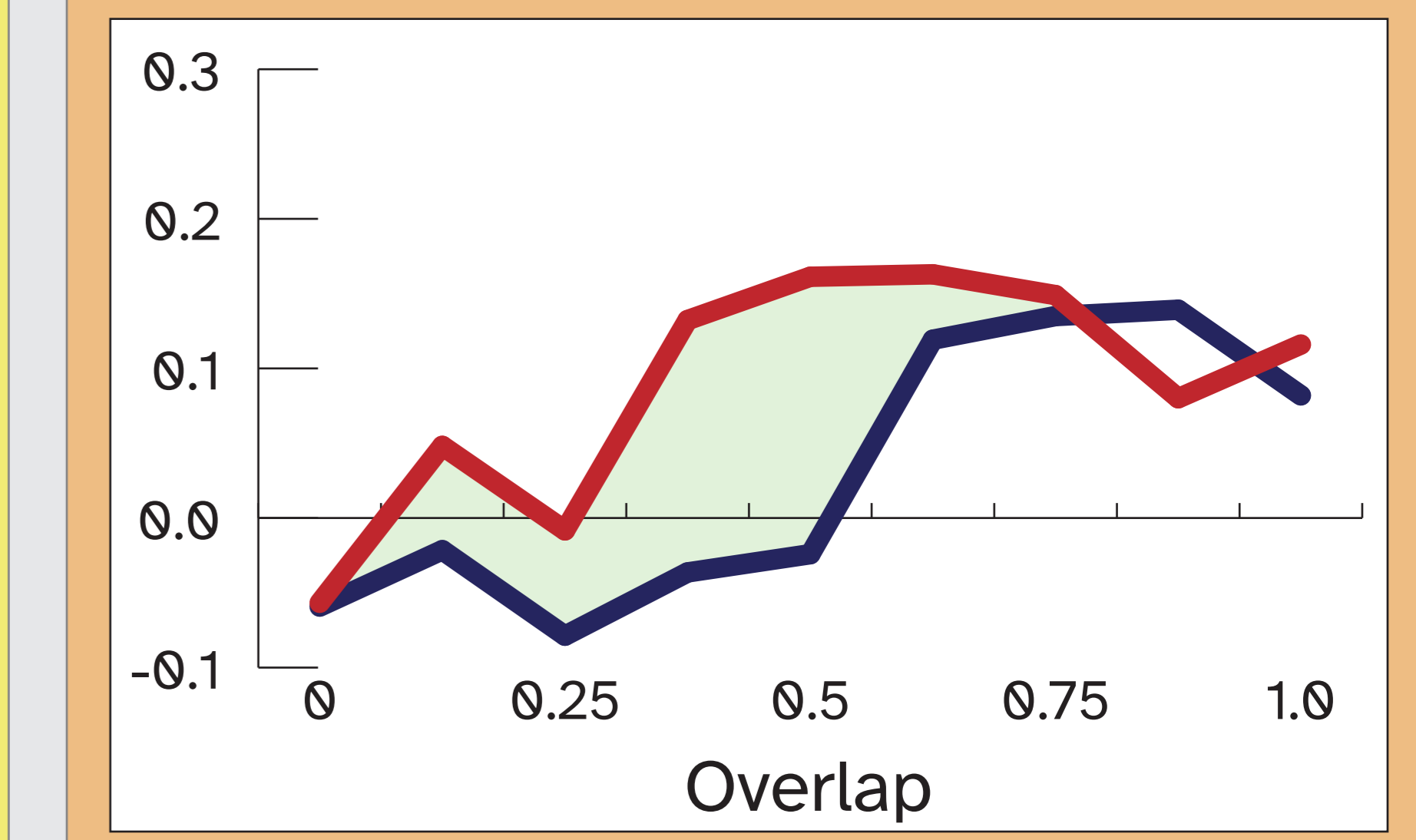
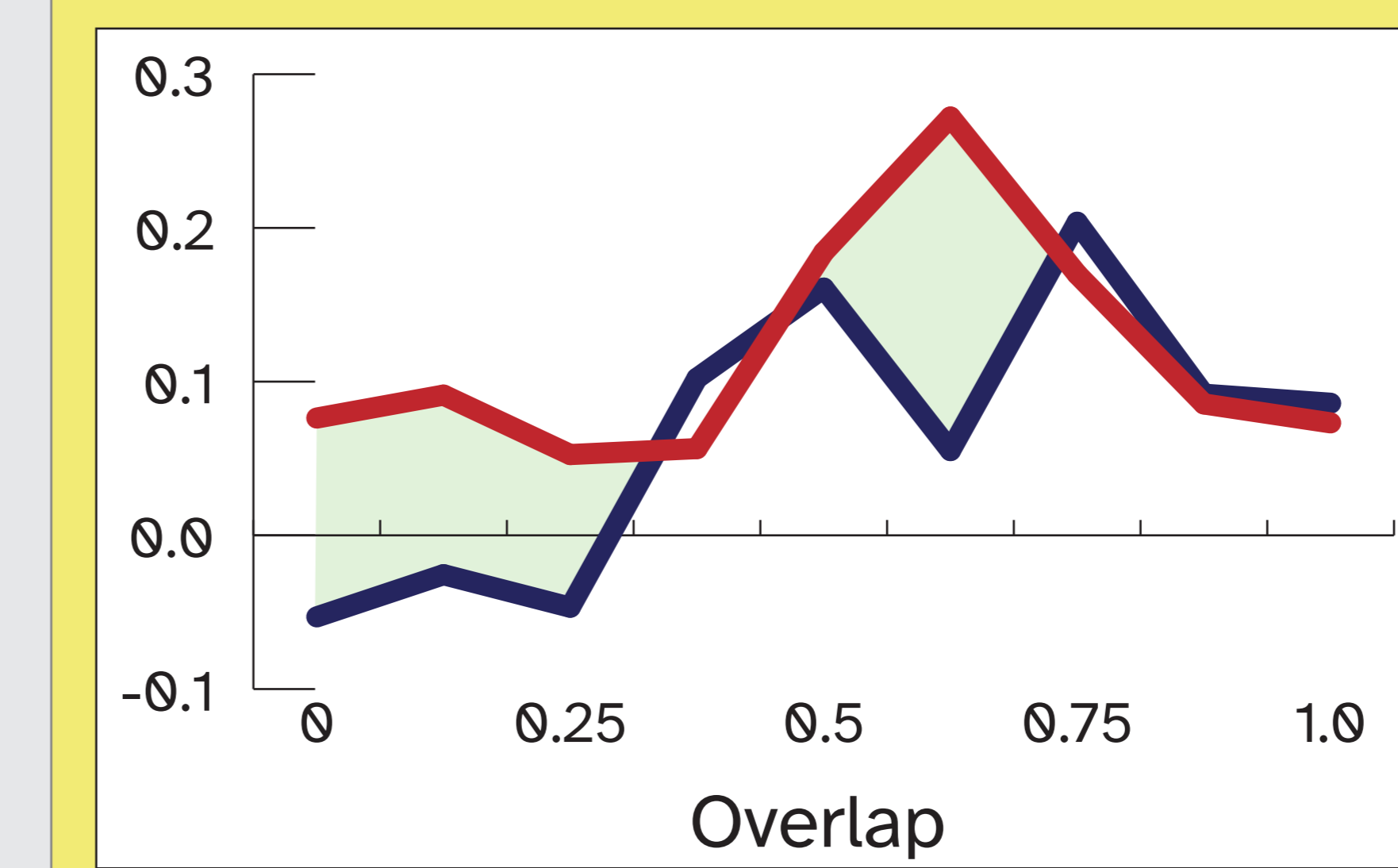
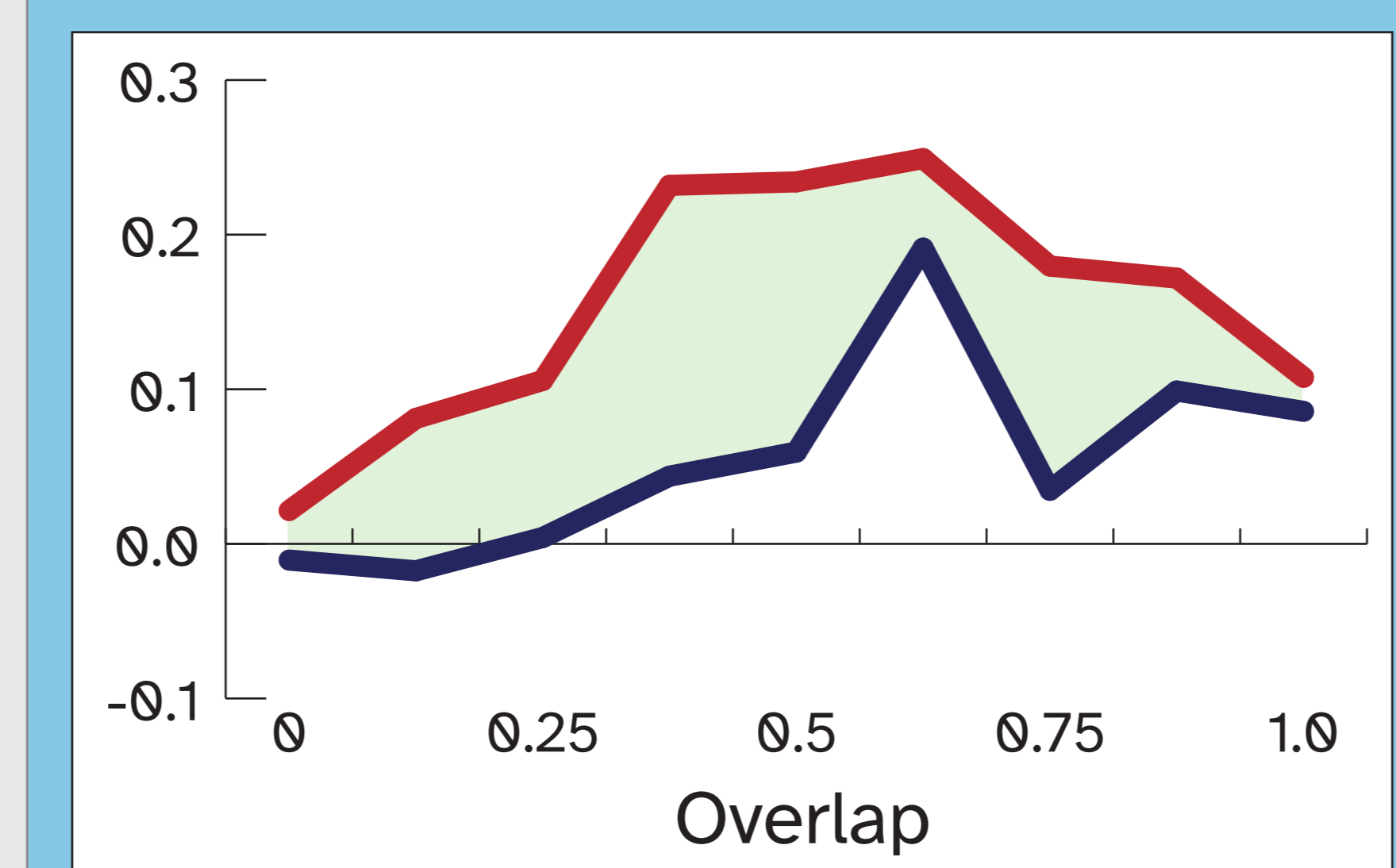
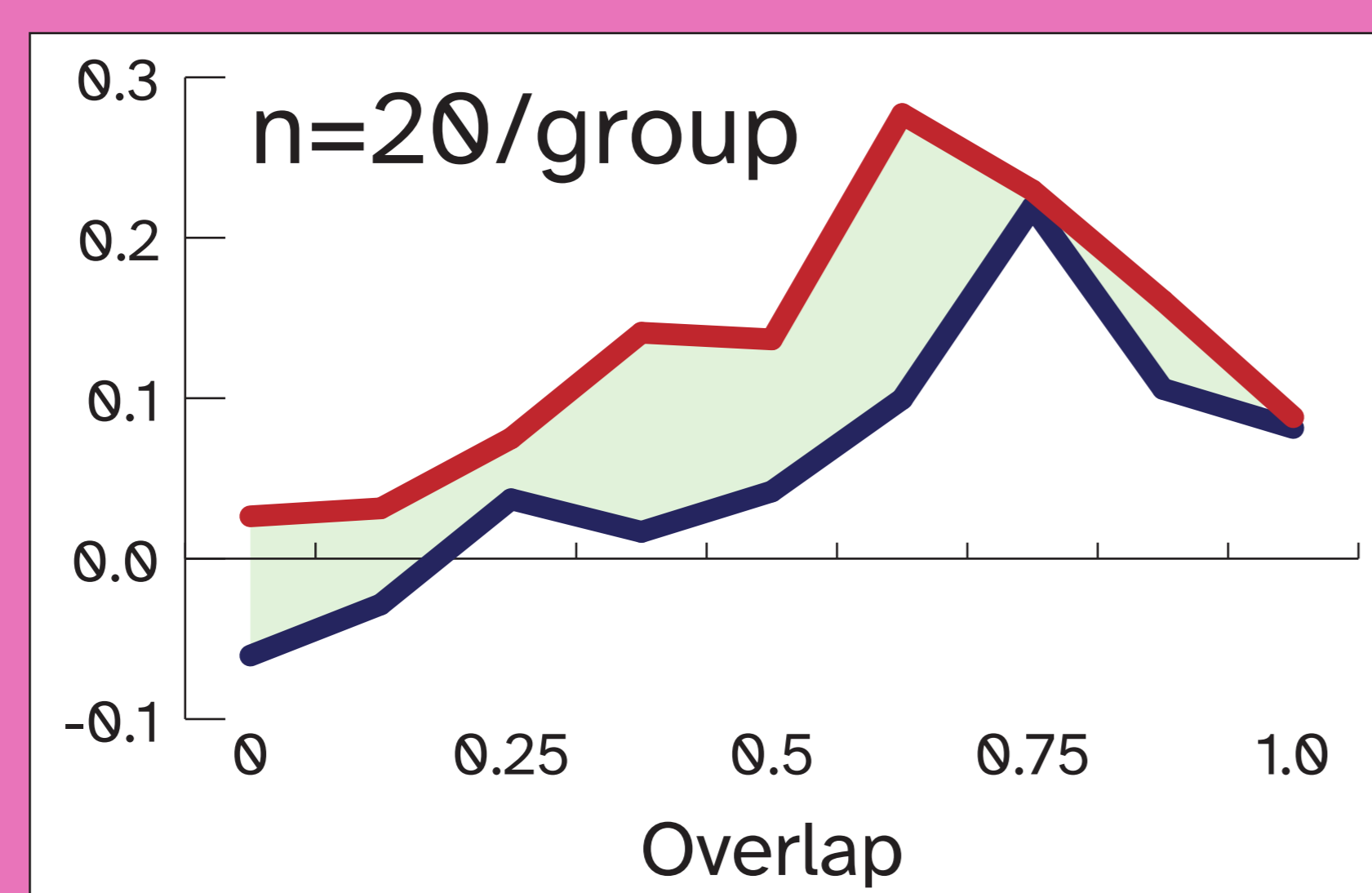


Results

Legend

- Retinotopic adaptation
- Nonspecific adaptation
- Retinotopic > Nonspecific

Adaptation magnitude (prop. "Pass" post-pre)



Retinotopically-specific adaptation in *all* adaptation conditions ($p_s \leq .005$), no differences

Conclusions

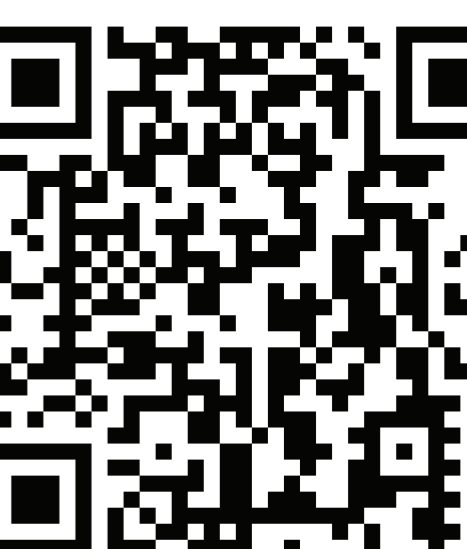
Launch/Pass adaptation does not reduce to a single feature

Next steps

Is adaptation transfer found for any non-causal event? (Not so far!)
Other tests: "Launch" vs. "Push" (ongoing)

References

Kominsky, J. F., & Scholl, B. J. (2020). Retinotopic adaptation reveals distinct categories of causal perception. *Cognition*, 203, 104339.
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