

Explicit Strategies May Emerge Discretely, Not Progressively

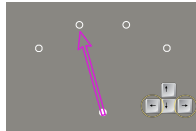
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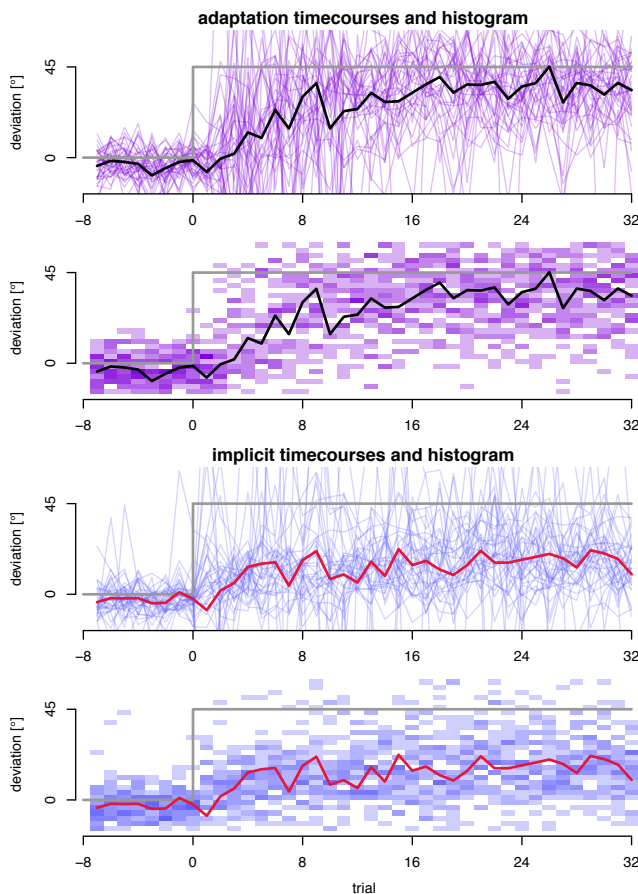
Sudden insight?

In previous data we have seen that explicit strategies seem to develop differently from other processes. Not all participants develop strategies, and in those who do, this happens suddenly. Does this mark a moment of insight?

Participants adapted to a 45° rotation and indicated their explicit strategy by aiming an arrow relative to a target.

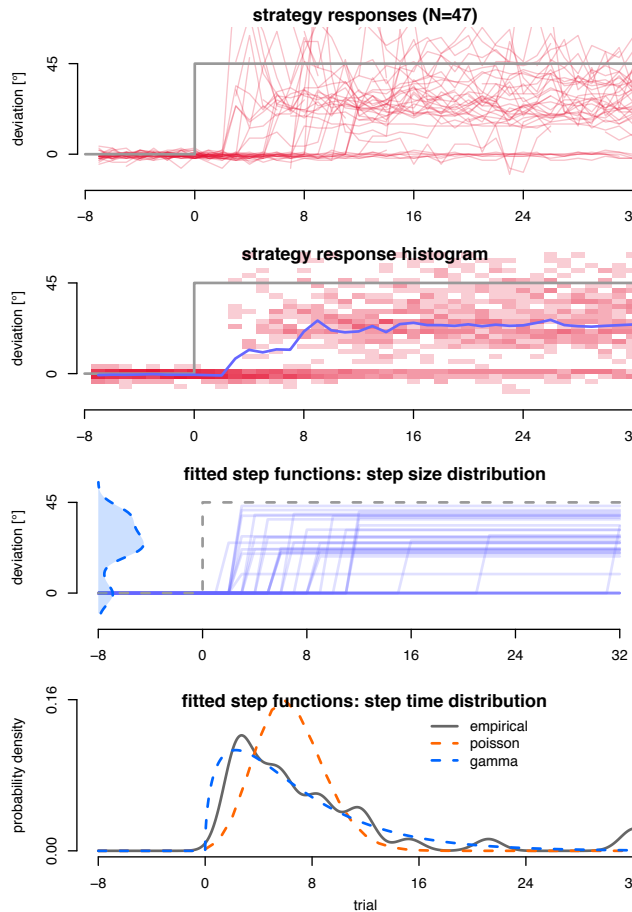


Implicit and overall adaptation look gradual



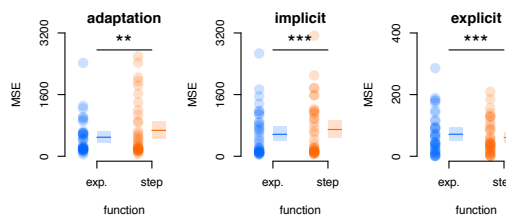
Explicit looks discontinuous

So we fit step functions to strategy timecourses.



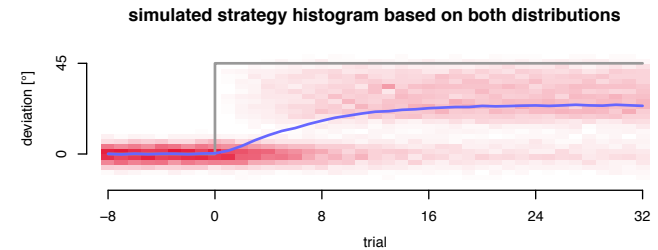
Step functions fit best for explicit

Implicit and total adaptation are gradual.



Superposition of step functions

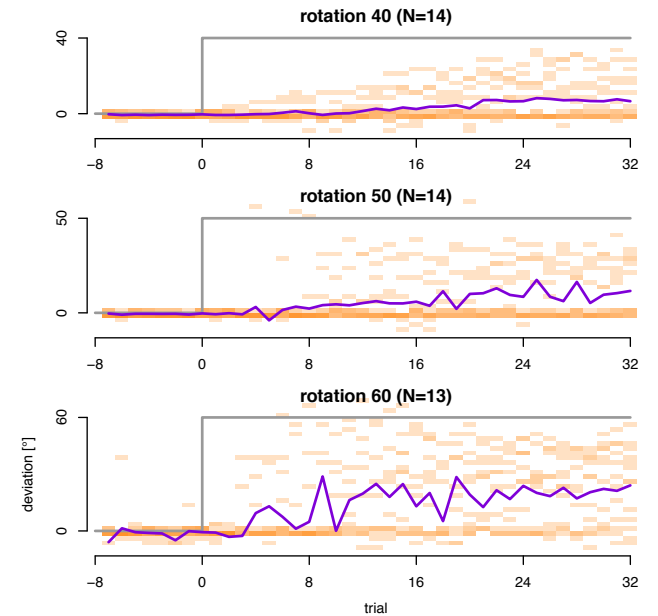
The histogram can be recovered with step functions.



Exploring stepwise strategy development

Current experiment to test how stepwise strategy development could depend on rotation size:

- 1: steps occur earlier in larger rotations
- 2: more people develop strategies in larger rotations
- 3: steps are larger in larger rotations



A superposition of step functions predicts the development of strategies