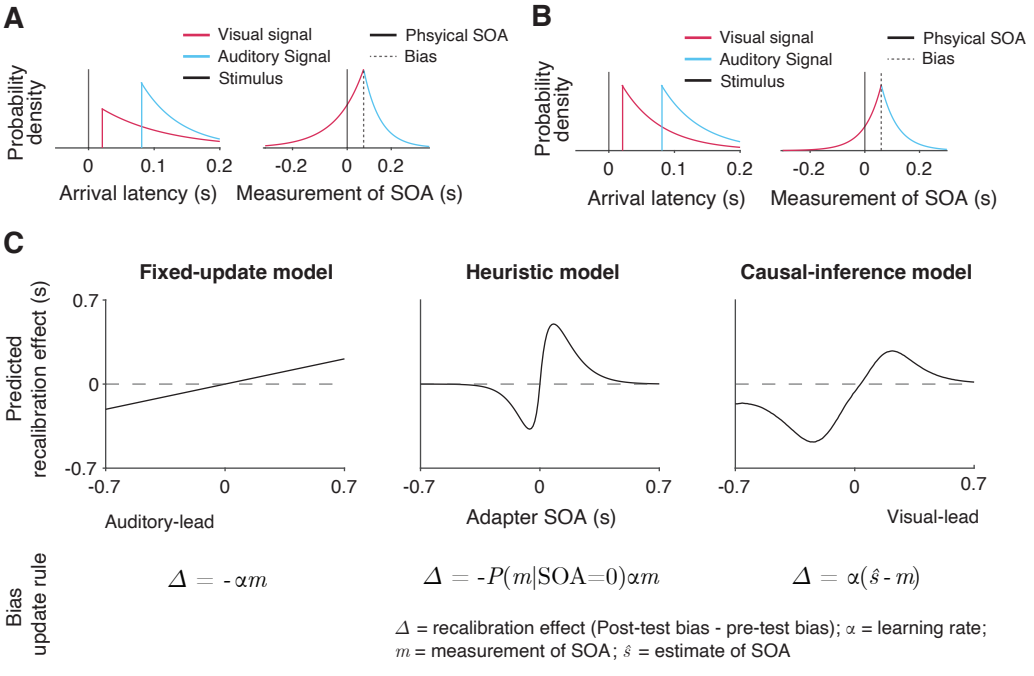
A
Visual signal
Auditory Signal
Stimulus
Phsyical SOA
Bias
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
B
Visual signal
Auditory Signal
Stimulus
Phsyical SOA
Bias
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
C
Fixed-update model
Heuristic model
Causal-inference model
Predicted recalibration effect (s)
0.7
0
-0.7
-0.7
0
0.7
Auditory-lead
Adapter SOA (s)
Visual-lead
Bias update rule
$\Delta = -\alpha m$
$\Delta = -P(m|\mathrm{SOA}{=}0)\alpha m$
$\Delta = \alpha(\hat{s} - m)$
Δ = recalibration effect (Post-test bias - pre-test bias); α = learning rate;
m = measurement of SOA; $\hat{s}$ = estimate of SOA