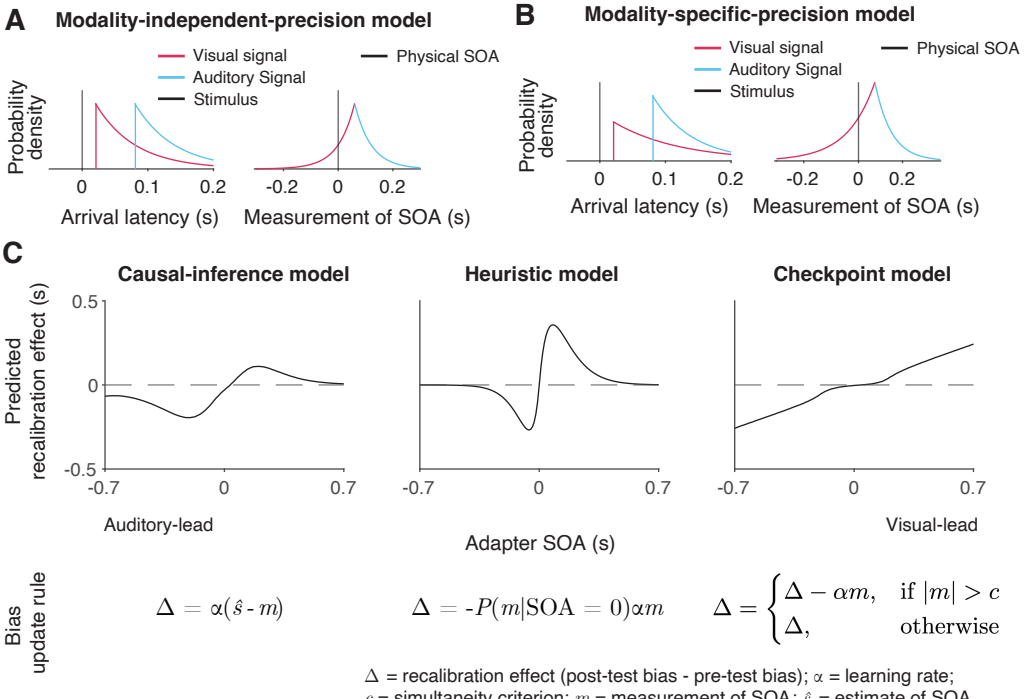
A
Modality-independent-precision model
Visual signal
Auditory Signal
Stimulus
Physical SOA
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
B
Modality-specific-precision model
Visual signal
Auditory Signal
Stimulus
Physical SOA
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
C
Causal-inference model
Heuristic model
Checkpoint model
Predicted recalibration effect (s)
0.5
0
-0.5
-0.7
0
0.7
Auditory-lead
Adapter SOA (s)
Visual-lead
Bias update rule
$\Delta = \alpha(\hat{s} - m)$
$\Delta = -P(m|\mathrm{SOA} = 0)\alpha m$
$\Delta = \begin{cases} \Delta - \alpha m, & \text{if } |m| > c \\ \Delta, & \text{otherwise} \end{cases}$
Δ = recalibration effect (post-test bias - pre-test bias); α = learning rate;
c = simultaneity criterion; m = measurement of SOA; $\hat{s}$ = estimate of SOA