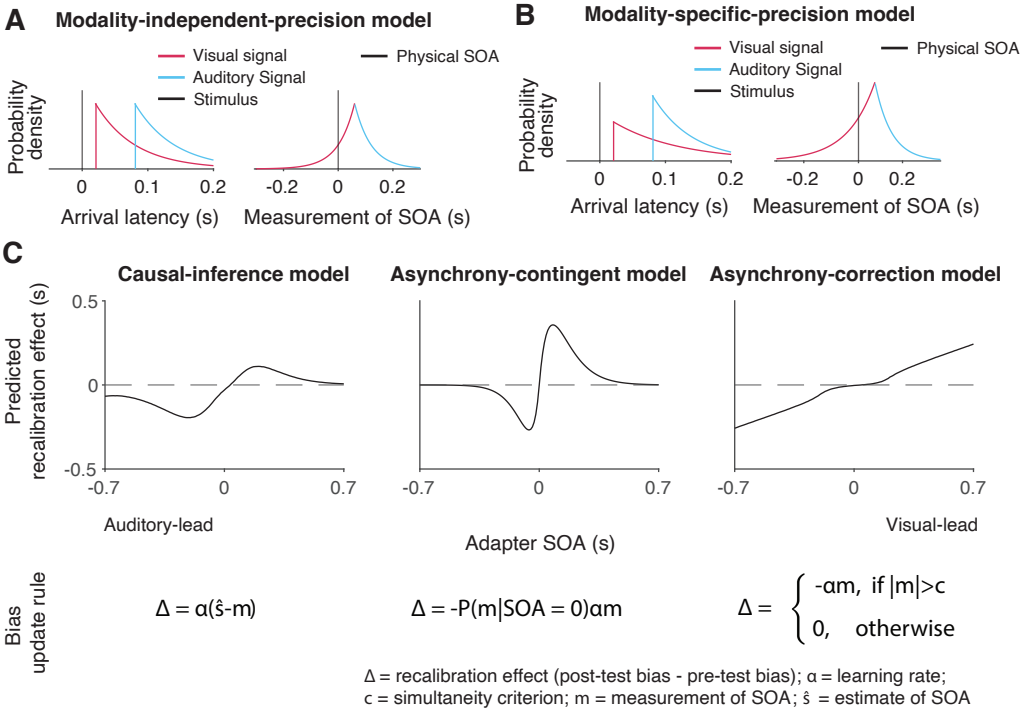
A
Modality-independent-precision model
Visual signal
Auditory Signal
Stimulus
Physical SOA
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
B
Modality-specific-precision model
Visual signal
Auditory Signal
Stimulus
Physical SOA
Probability density
0
0.1
0.2
-0.2
0
0.2
Arrival latency (s)
Measurement of SOA (s)
C
Causal-inference model
Asynchrony-contingent model
Asynchrony-correction 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
Δ = α(ŝ-m)
Δ = -P(m|SOA = 0)αm
Δ = -αm, if |m|>c
0, otherwise
Δ = recalibration effect (post-test bias - pre-test bias); α = learning rate;
c = simultaneity criterion; m = measurement of SOA; ŝ = estimate of SOA