

TABLE 1
Notation guide.

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Notation	Meaning
H^\pm	state of the environment (correct hypothesis)
LLR	log-likelihood ratio
$\xi_t^{(i)}$	observation made at time t by agent i
$\xi_{1:t}^{(i)}$	vector of observations made by agent i at times 1 through t
Ξ	set of all possible observations, ξ
$f_\pm(\xi)$	measurement (observation) distributions, $P(\xi H^\pm)$
$\text{Priv}_{1:t}^{(i)}$	private evidence accumulated by agent i through time t
$\text{Soc}_t^{(i)}$	social evidence given by agent i to its neighbors at time t
$I_t^{(i)}$	total information available to agent i at time t .
$y_t^{(i)}$	belief (LLR) of agent i based on private and social information at time t
θ_\pm	decision threshold associated with H^\pm . When the thresholds are symmetric about 0, <i>i.e.</i> when $\theta_+ = -\theta_-$, we use the notation $\theta = \theta_+$ and $-\theta = \theta_-$.
Θ	interval of possible agent LLRs (beliefs) prior to a decision, <i>i.e.</i> $\Theta = (\theta_-, \theta_+)$
$d_t^{(i)}$	decision state of agent i at time t
$y_{t,k}^{(i)}, d_{t,k}^{(i)}, \text{Soc}_{t,k}^{(i)}$	LLR, decision state, and social information available to agent i at the k th substep of equilibration after a private observation at time t
$S_\pm(t)$	survival probability for an independent agent under H^\pm .
N	total number of agents
Π	all possible LLR increments due to a single private observation
$N^{(i)}$	set of agents that agent i observes (neighbors)
$U^{(i)}$	set of agents that agent i cannot see (unobserved)
$R(t, \mathcal{I})$	LLR from observing agent i has belief in interval \mathcal{I} at time t , $\log \left(\frac{P(y_t^{(i)} \in \mathcal{I} H^+)}{P(y_t^{(i)} \in \mathcal{I} H^-)} \right)$