

($\kappa_{ii} = 0$). For our simulations, we simply use the communication weights setting $\kappa_{ij} = \nu_{ij}$.

The linear $x_j - x_i$ term in Equation 3 represents the shift effect. The gaussian term represents the acceptance process and we refer to it as the acceptance function, $a(\Delta\rho, \lambda) = e^{-\Delta\rho^2/2\lambda^2}$. Although the acceptance function is always symmetric with respect to the sign of the rhetorical difference, $a(-\Delta\rho) = a(\Delta\rho)$, a concave $\rho(x)$ can causes it to appear asymmetric along the policy axis as clearly seen for F_2 and F_3 in Figure 1, illustrating how RIA manifests itself directly on policy.

In addition to position change, communication can also affect a person’s uncertainty regarding their position. Group discussion has been observed to increase the level of certainty that members have in their quantitative judgments (Sniezek 1992; Davis et al. 1997). Discussion can increase attitude certainty due to the exchange of new information or simply learning that others share similar opinions (Tormala 2016). Of specific relevance to our experiment, the provision of new information has been found to reduce the uncertainty in point spread estimates of knowledgeable NFL fans (Tsai, Klayman, and Hastie 2008). Accordingly, we introduce an uncertainty reduction mechanism in our model in which messages from those with similar positions constrict an individual’s LOA so that they become more resistant to persuasion from distant positions. Messages originating within the LOA that are accepted decrease the LOA, but not beneath a certain minimum value λ_{min} . This yields for the LOA dynamics:

$$\frac{d\lambda_i}{dt} = \begin{cases} \sum_{j=1}^N \kappa_{ij}(\lambda_{min} - \lambda_i)e^{-\Delta\rho_{ij}^2/2\lambda_i^2}, & |\Delta\rho_{ij}| \leq \lambda_i \\ 0, & |\Delta\rho_{ij}| > \lambda_i. \end{cases} \quad (4)$$

Equations 3 and 4 comprise the ASC model. Taking $\rho(x) = x$, Equation 3 is equivalent to the model of Gabbay (2007) without the self-influence force which models