

Bad Polarization and Socially Adaptive Beliefs

Narrative Doc

1 Description of the Model

The present model is an abstract ABM designed for theoretical exploration and hypotheses generation. Its main aim is to explore the conditions under which the influence of social incentives on belief formation originates bad polarization.

The model represents a community in which individuals aim to determine whether hypothesis H is true, and we assume that agents are in a world in which H is indeed true. To this end, scientists observe evidence. However, agents also distribute social support to other like-minded neighbors. As a consequence, agents may choose to ignore evidence in order to obtain the highest possible amount of social support. In this sense, agents' beliefs are socially adaptive.

2 Files

The file 'Socially Adaptive Beliefs and Bad Polarization.nlogo' corresponds to the actual model.

The file 'Socially Adaptive Beliefs Analysis.R' helps to conduct the data analysis of the model, and to plot some of the results.

Two data sets are required to obtain the plots present in the paper. One is called 'Data FinalOutcomes-table.csv', and is included in the project. The other should be called 'Data EvolutionOutcomes-table.csv' and was too big for me to upload it on Comses. The interested reader may generate it by running the homonymous experiment present in Behavior Space of the Netlogo Model.