

## Unit 3: Opinions and polarization

### READINGS AND RESOURCES

- Deffuant, G., Neau, D., Amblard, F., & Weisbuch, G. (2000). Mixing beliefs among interacting agents. *Advances in Complex Systems*, 3, 87-98. <https://doi.org/10.1142/S0219525900000078>
- Flache A, et al. (2017) Models of social influence: Towards the next frontiers. *Journal of Artificial Societies and Social Simulation* 20(4): 2. <http://jasss.soc.surrey.ac.uk/20/4/2.html>

### Further directions

- Differentiation from similar individuals.
  - o Smaldino PE, Epstein JM (2015) Social conformity despite individual preferences for distinctiveness. *Royal Society Open Science* 2: 140437. <https://doi.org/10.1098/rsos.140437>
  - o Weisbuch G (2015) From anti-conformism to extremism. *Journal of Artificial Societies and Social Simulation* 18(3): 1. <http://jasss.soc.surrey.ac.uk/18/3/1.html>
  - o Touboul J (2019) The hipster effect: When anti-conformists all look the same. *Discrete & Continuous Dynamical Systems B* 24: 4379-4415. <http://dx.doi.org/10.3934/dcdsb.2019124>
- Multiple interacting opinions.
  - o Axelrod R (1997) The dissemination of culture: A model with local convergence and global polarization. *Journal of Conflict Resolution* 41: 203-226. <https://doi.org/10.1177%2F0022002797041002001>
  - o Mark NP (2003) Culture and competition: Homophily and distancing explanations for cultural niches. *American Sociological Review* 68: 319-345. <https://www.jstor.org/stable/1519727>
  - o Battiston F, Nicosia V, Latora V, San Miguel M (2017) Layered social influence promotes multiculturalism in the Axelrod model. *Scientific Reports* 7: 1809. <https://www.nature.com/articles/s41598-017-02040-4>
- Network structure.
  - o Flache, A., & Macy, M. W. (2011). Small worlds and cultural polarization. *Journal of Mathematical Sociology*, 35(1-3), 146-176. <https://doi.org/10.1080/0022250X.2010.532261>
  - o Turner, M. A., & Smaldino, P. E. (2018). Paths to polarization: How extreme views, miscommunication, and random chance drive opinion dynamics. *Complexity* 2018: 2740959. <https://doi.org/10.1155/2018/2740959>
- Scientific beliefs.
  - o Akerlof GA, Michailat P (2019) Persistence of false paradigms in low-power sciences. *Proceedings of the National Academy of*

*Sciences* 115: 13228-13233.

<https://doi.org/10.1073/pnas.1816454115>

- o Weatherall JO, O'Connor C (2019) Conformity in scientific networks. *arXiv: 1803.09905v4*.  
<https://arxiv.org/abs/1803.09905v4>