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THE CRITICAL FEW: ANTICONFORMISTS AT THE CROSSROADS OF MINORITY SURVIVAL AND COLLAPSE

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ABSTRACT

To maintain stability yet retain the flexibility to adapt to changing circumstances, social systems must strike a balance between the maintenance of a shared reality and the survival of minority opinion. Computer simulations employing a cellular automata platform tested hypotheses concerning the survival of minority opinion and the maintenance of system stability for different proportions of two basic, oppositional social processes-conformity and anticonformity. Results revealed that a relatively small proportion of anticonformists facilitate the survival of a minority opinion held by a larger number of conformists who would otherwise succumb to pressures for social consensus. Beyond a critical threshold, however, increased proportions of anticonformists undermined social stability. Understanding the adaptive benefits of balanced oppositional forces has implications for psychological and social processes in general.

One Sentence Summary: Computer simulations reveal that a small number of anticonformists increase the resilience of minority opinion held by a larger number of conformists [1].

REFERENCES

[1] M. S. Jarman, A. Nowak, W. Borkowski, D. G. Serfass, A. E. Wong, and R. R. Vallacher: *The Critical Few: Anticonformists at the Crossroads of Minority Opinion Survival and Collapse*, Journal of Artificial Societies and Social Simulation, to appear.

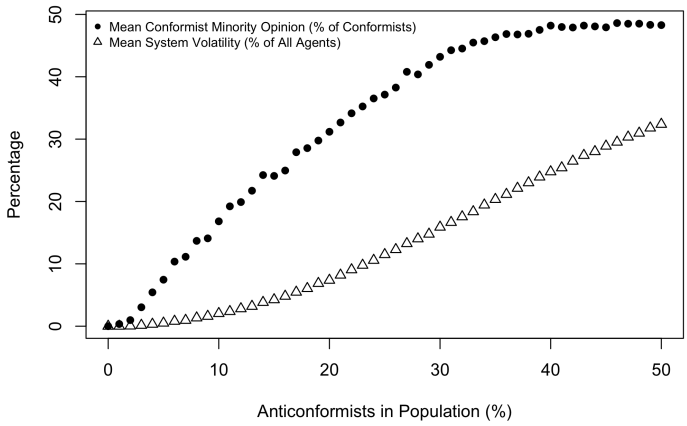

Figure 1. Conformist Minority Opinion and System Volatility in the Presence of Noise. The circles indicate the average percentage of conformists holding the minority opinion in the last Monte Carlo step (the 2000th step) of the model after being run 100 times at every percentage of anticonformists. The triangles indicate the average percentage of all agents (conformists and anticonformists) that changed their opinion in the last Monte Carlo step when averaged across the 100 replications. The initial minority opinion was 45:55 for all simulations.

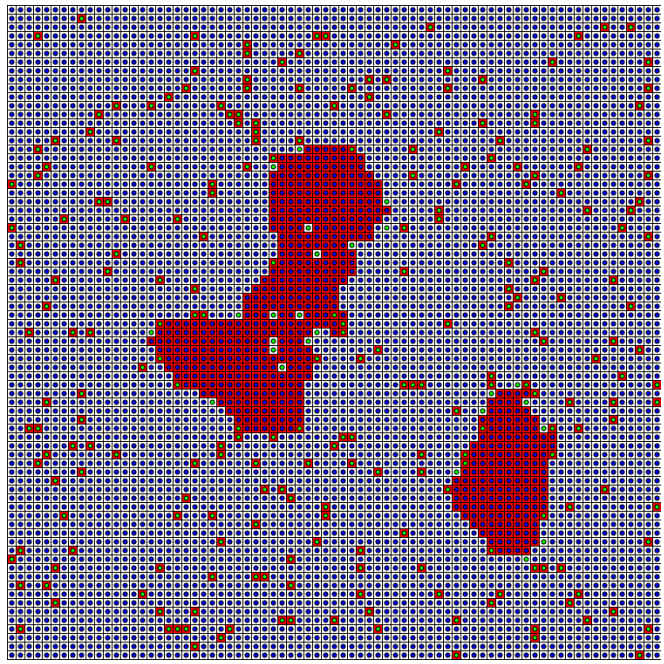

Figure 2. Typical Opinion Cluster at 5% Anticonformists with Noise. This visualization is of the last (2000^{th}) step in a simulation with the parameters used in Experiment 2. Each cell represents a different agent. The red and white cell colors represent the two possible opinions. Agents with blue circles are conformists and agents with green circles are anticonformists.