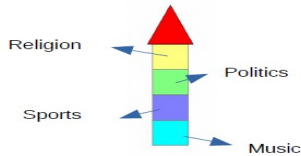
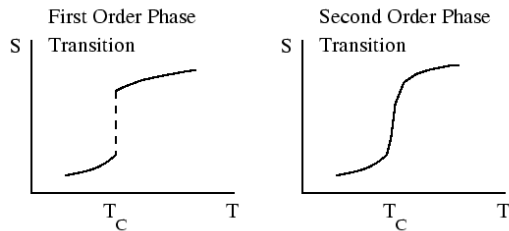


## Potts model



## Axelrod Model

- (1) Choose randomly two nearest neighbor agents  $i$  and  $j$ ,
- (2) calculate the number of shared features (cultural overlap) between the agents  $\ell_{ij}$ .  
If  $0 < \ell_{ij} < F$ :  
then (3) with probability  $\ell_{ij}/F$ , set  $C_{ik} = C_{jk}$ , pick up randomly a feature  $k$  such that  $C_{ik} = C_{jk}$ .

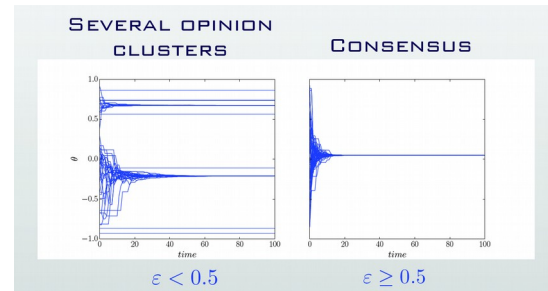
FOR EACH AGENT:  $\theta_I \in [-1, 1]$



**CONFIRMATION BIAS** if  $|\theta_I - \theta_J| < \varepsilon$

**COGNITIVE DISSONANCE**  $\langle \theta \rangle_{IJ} = (\theta_i + \theta_j)/2$   
 $\theta_i = \theta_j = \langle \theta \rangle_{IJ}$

## Bounded confidence Models



## Schelling model (model for segregation)

