

# Exploration macroscopique du graphe social de Twitter

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Comment se propage  
l'information ?

Quels sont les mécanismes  
de l'influence ?

# Amis



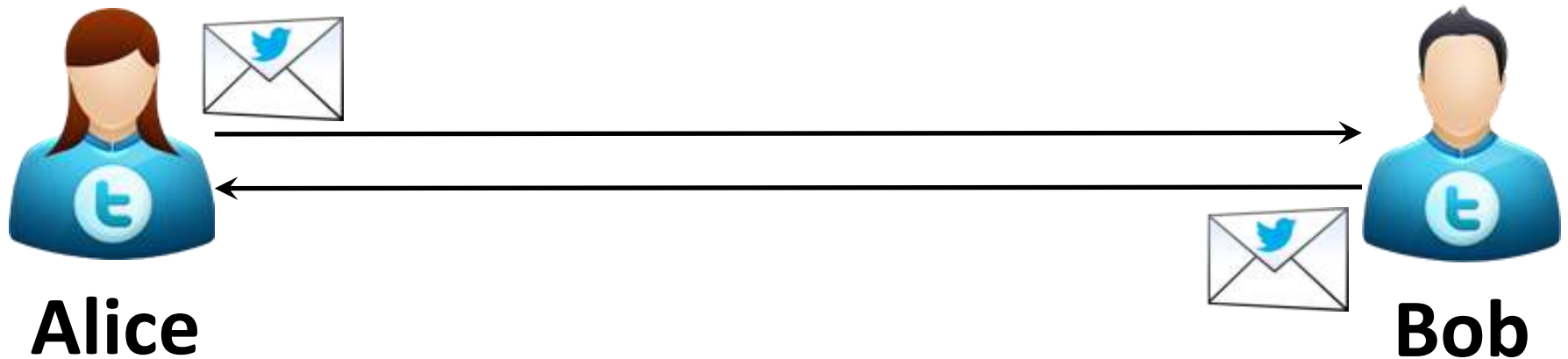


Producteur

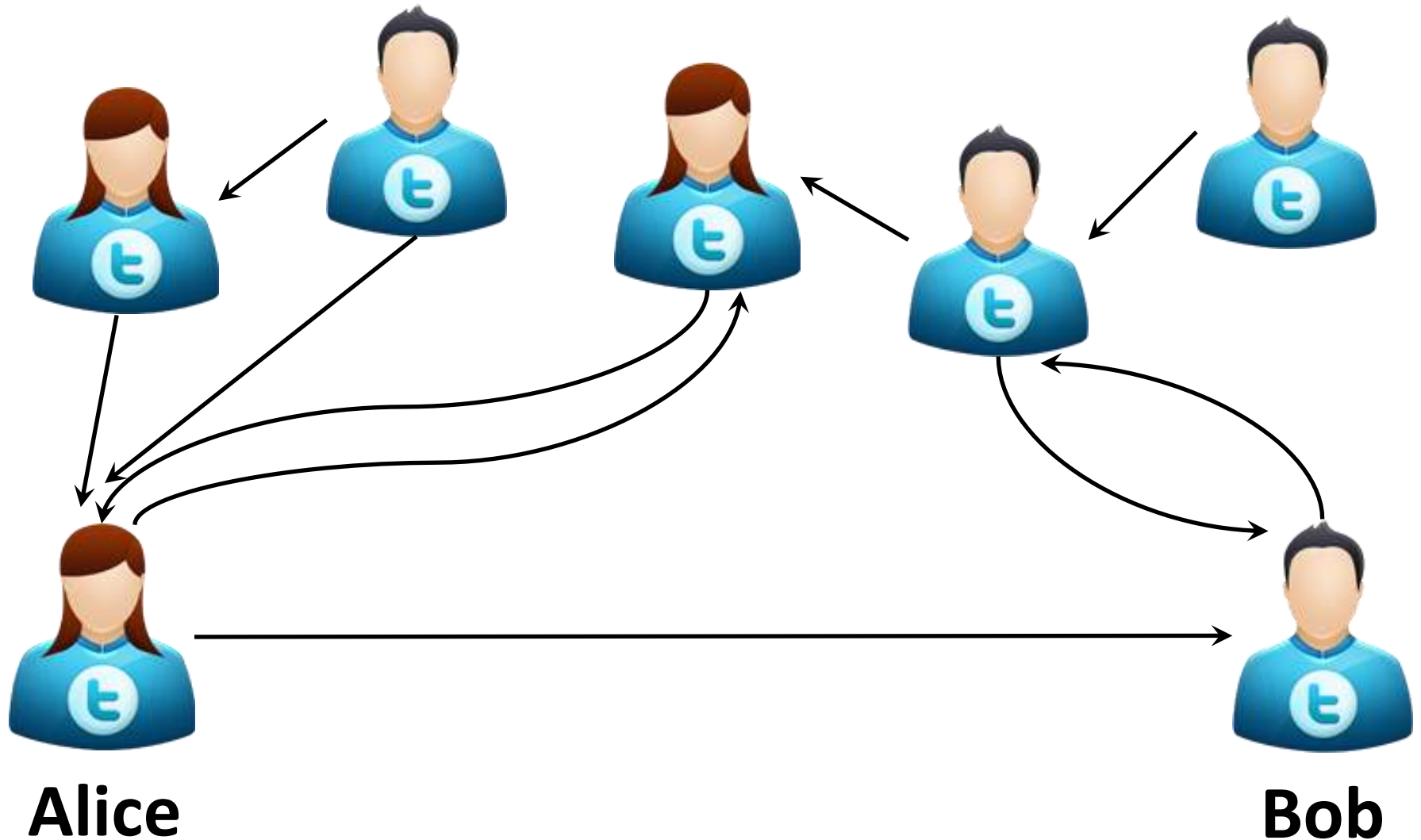
**TFI** consommateurs

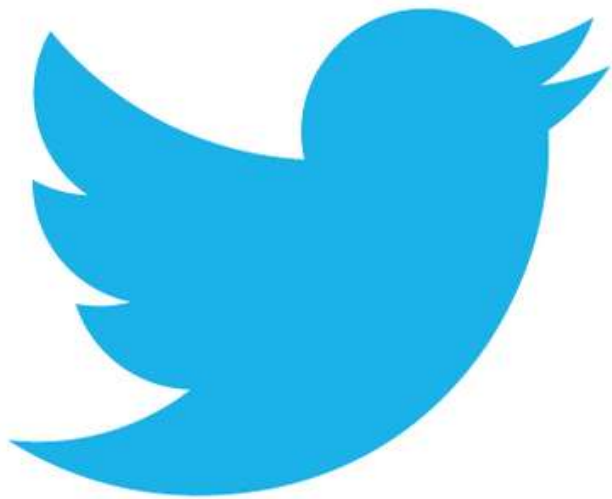
# Relation de suivi dans Twitter

Bob suit Alice  
Alice suit Bob



# Graphe social de Twitter





+500 millions de nœuds  
+24 milliards d'arcs

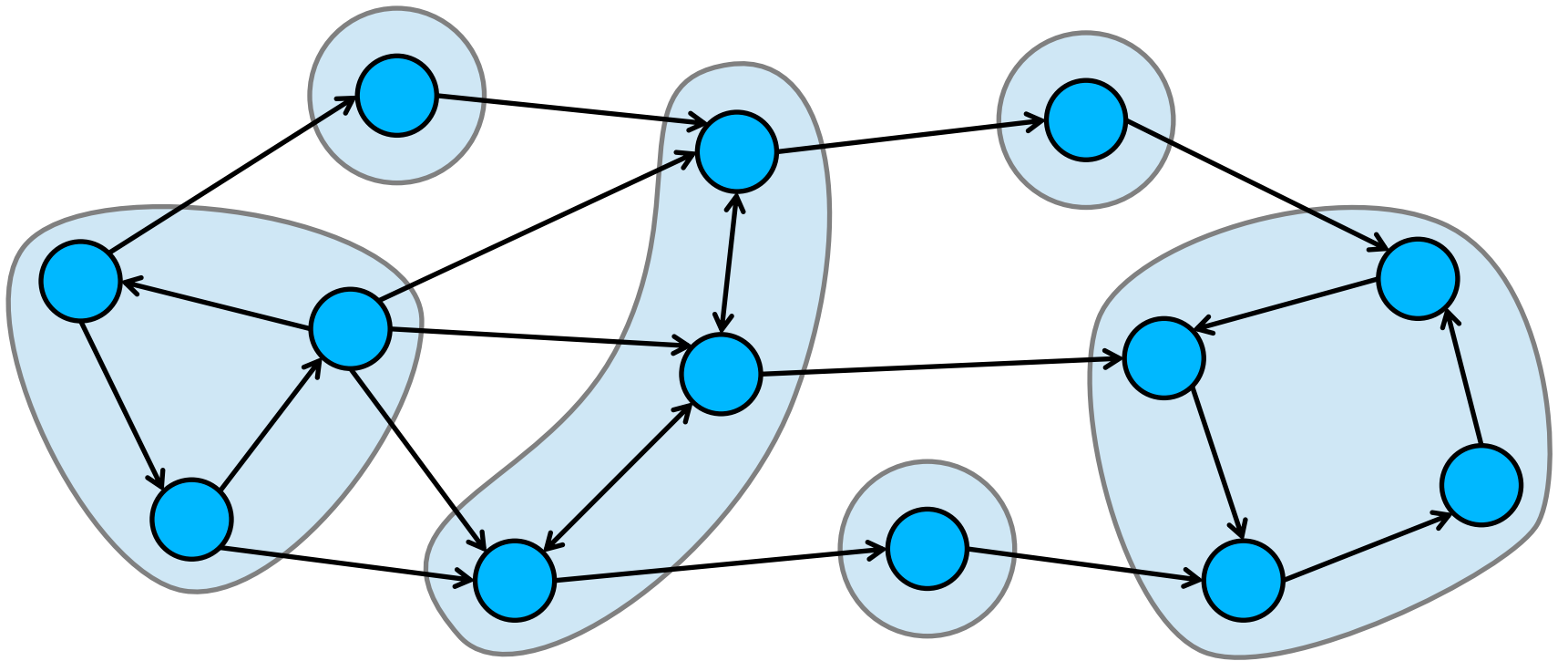
## Challenges

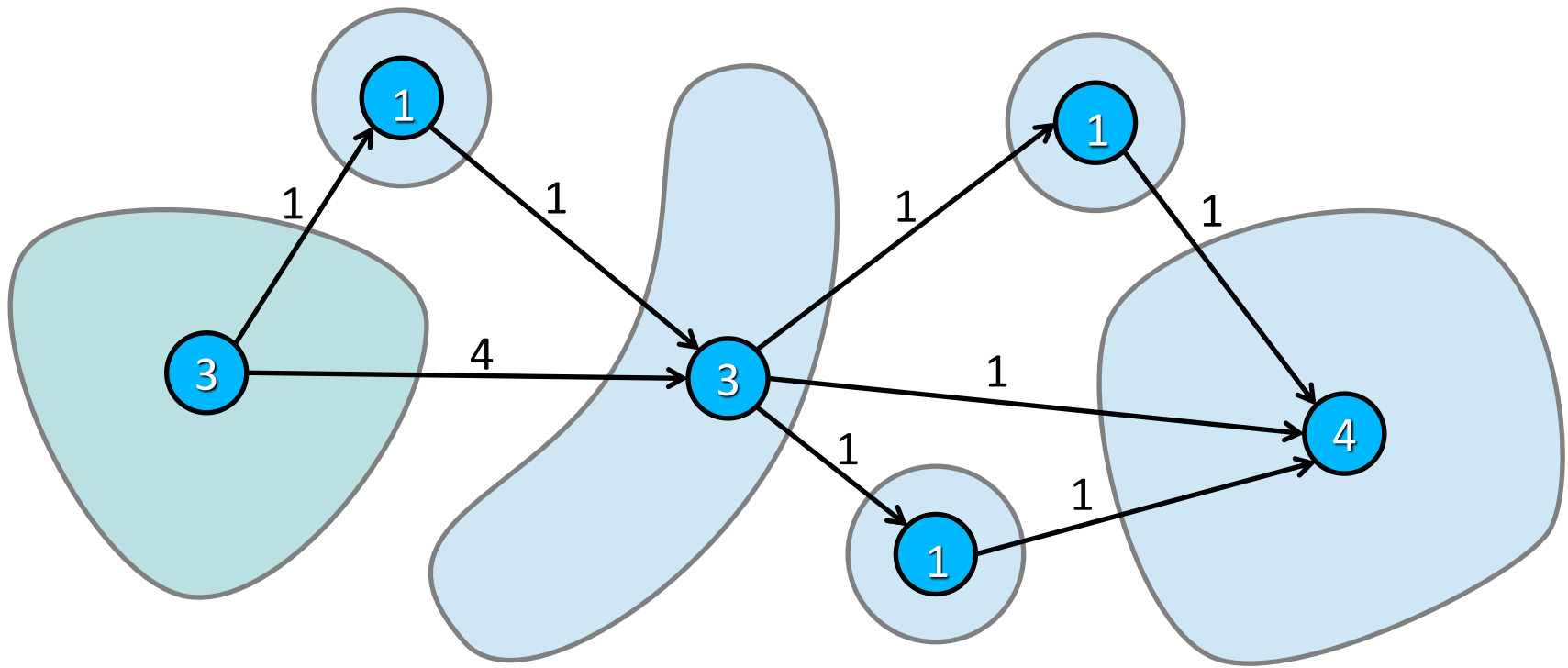
1. Collecter le graphe
2. Décomposer le graphe
3. Donner un sens physique à la décomposition

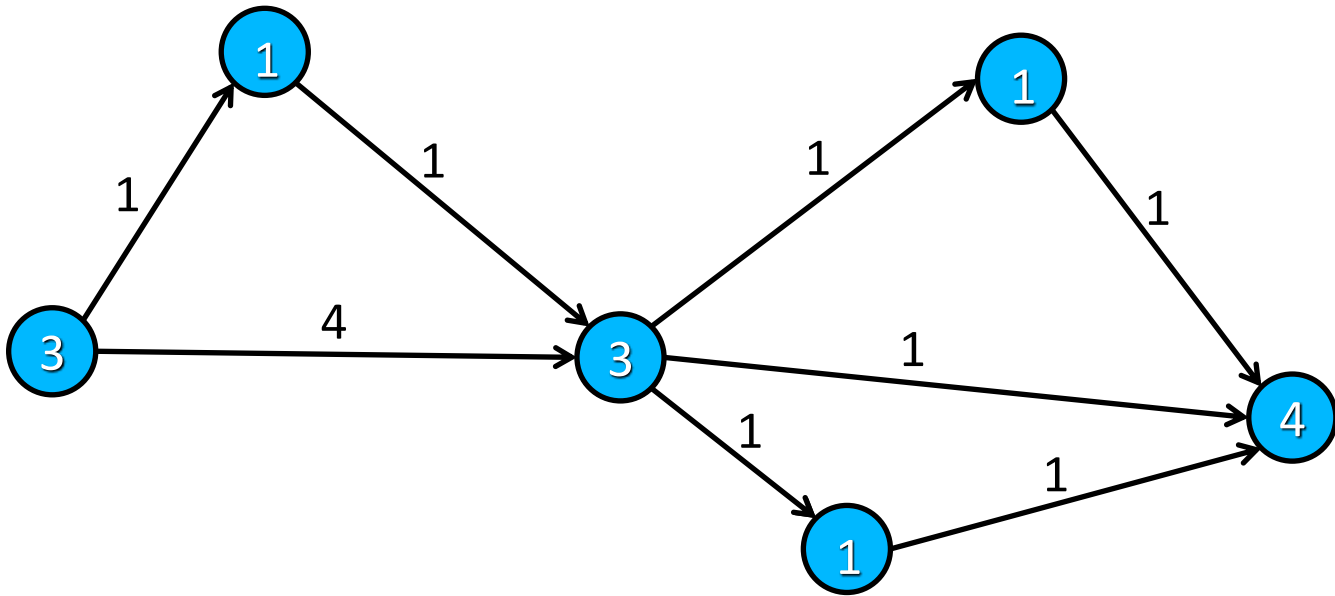
Comment est contrainte la diffusion d'information ?

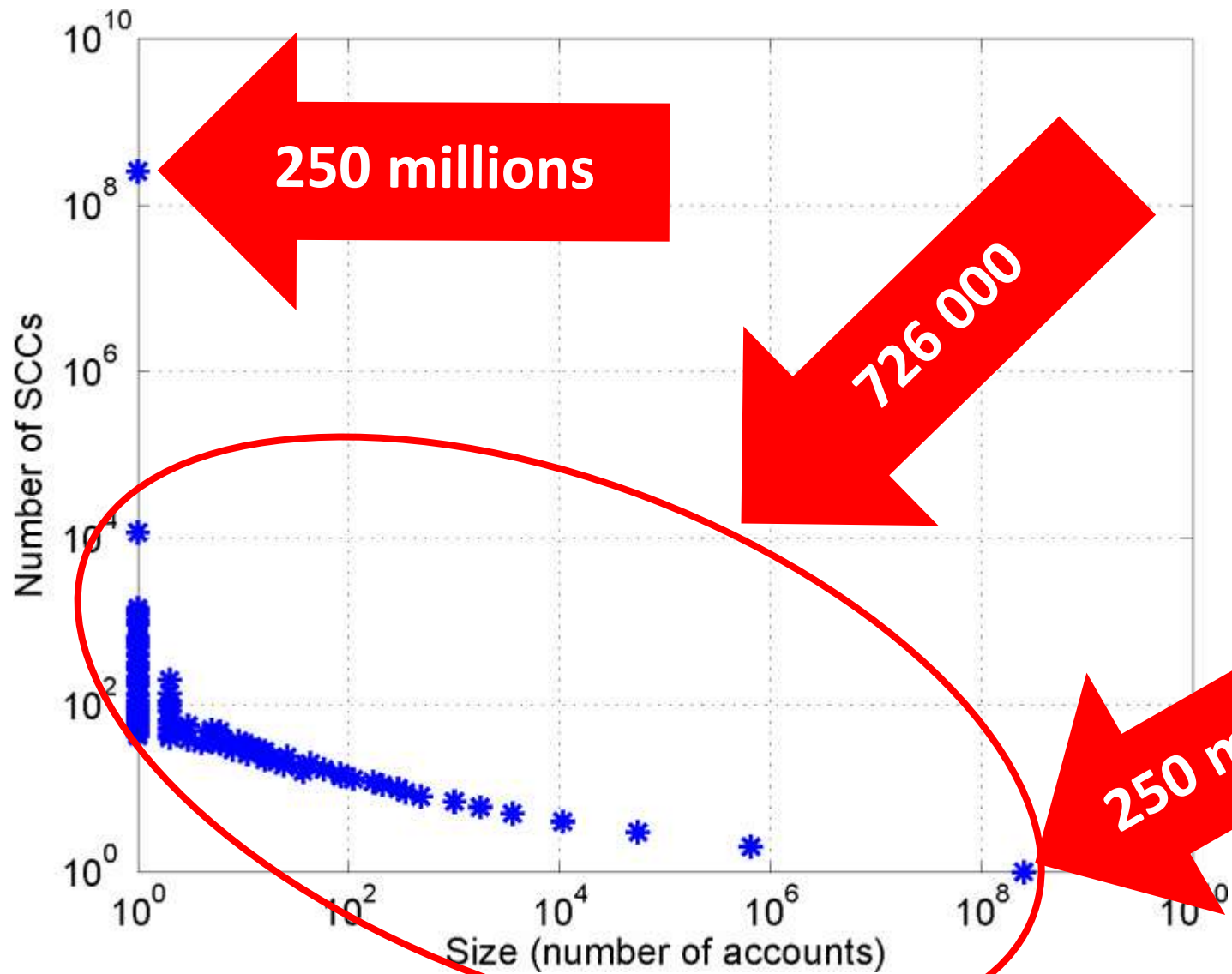
Identifier les autoroutes





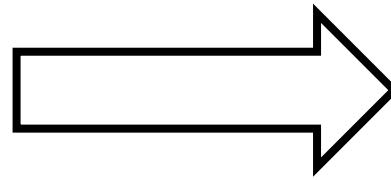




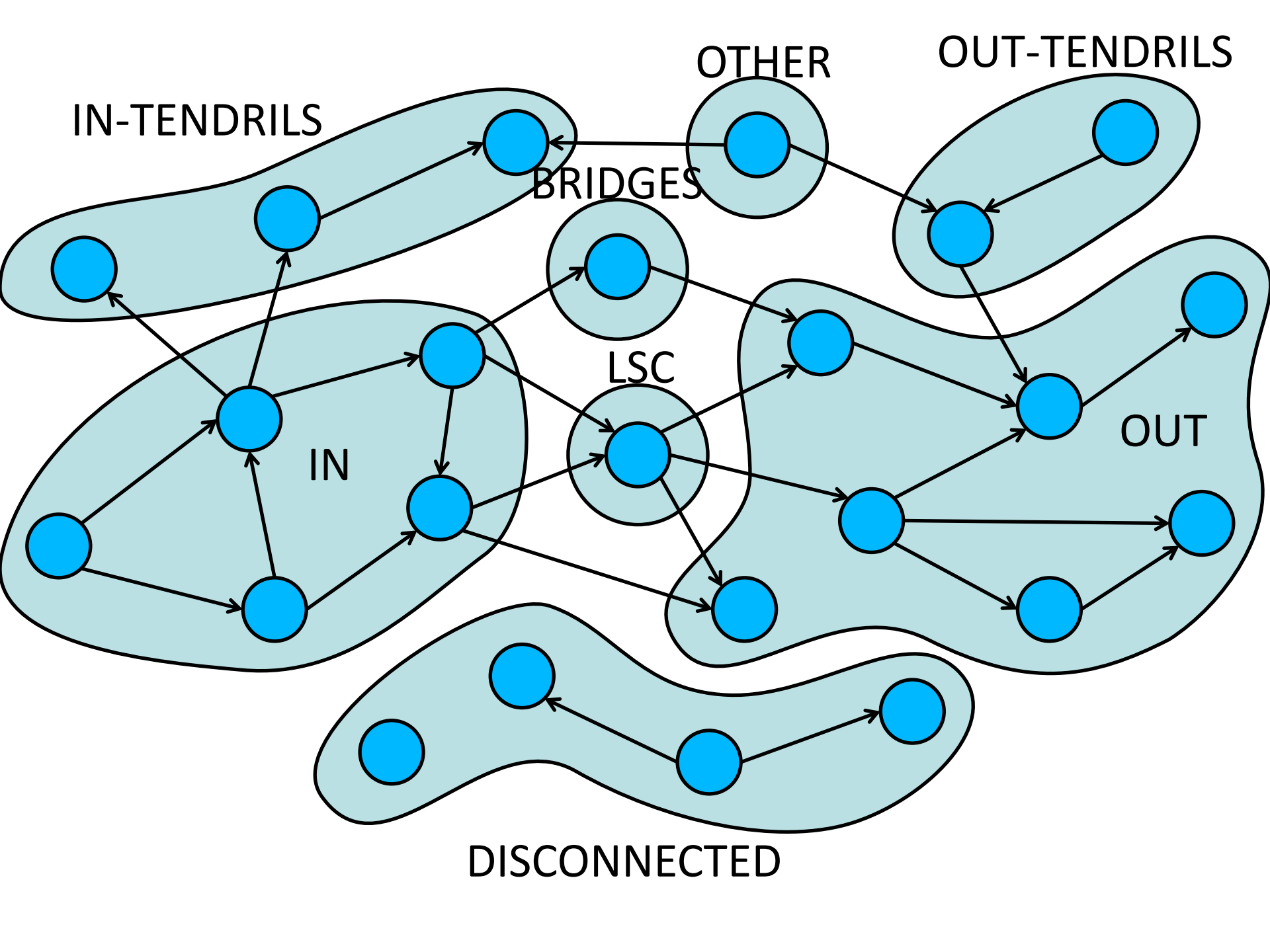


# Macrostructure du graphe social de Twitter

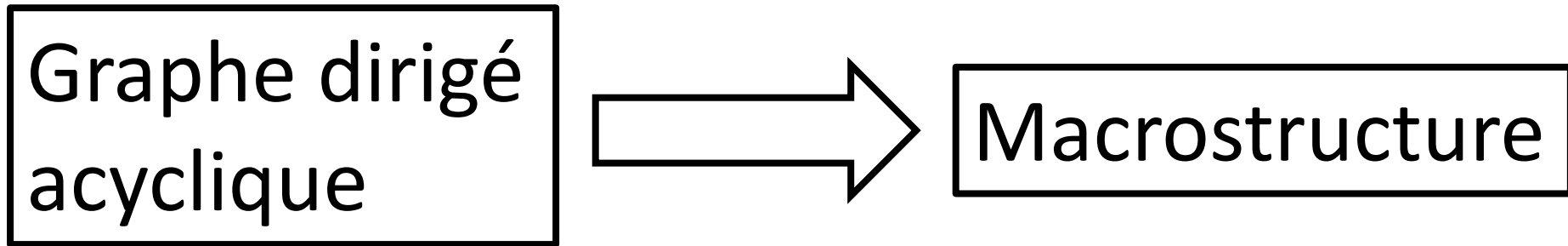
Décomposition  
en **SCC**



Graphe  
dirigé  
acyclique

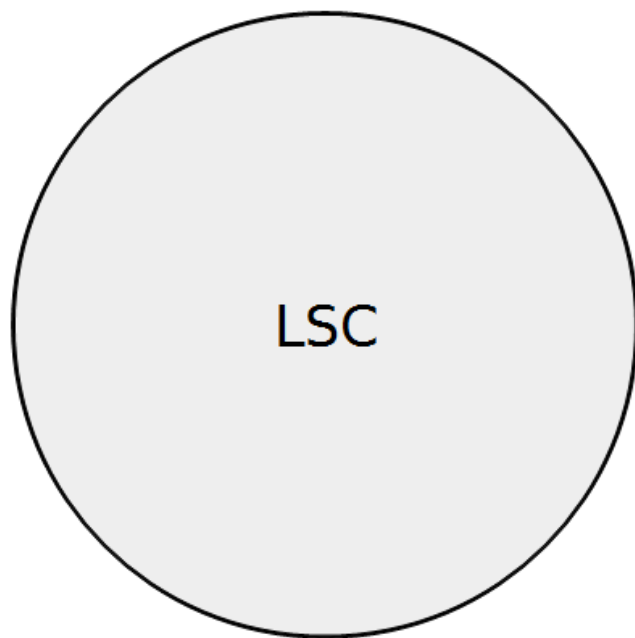


# Macrostructure du graphe social de Twitter

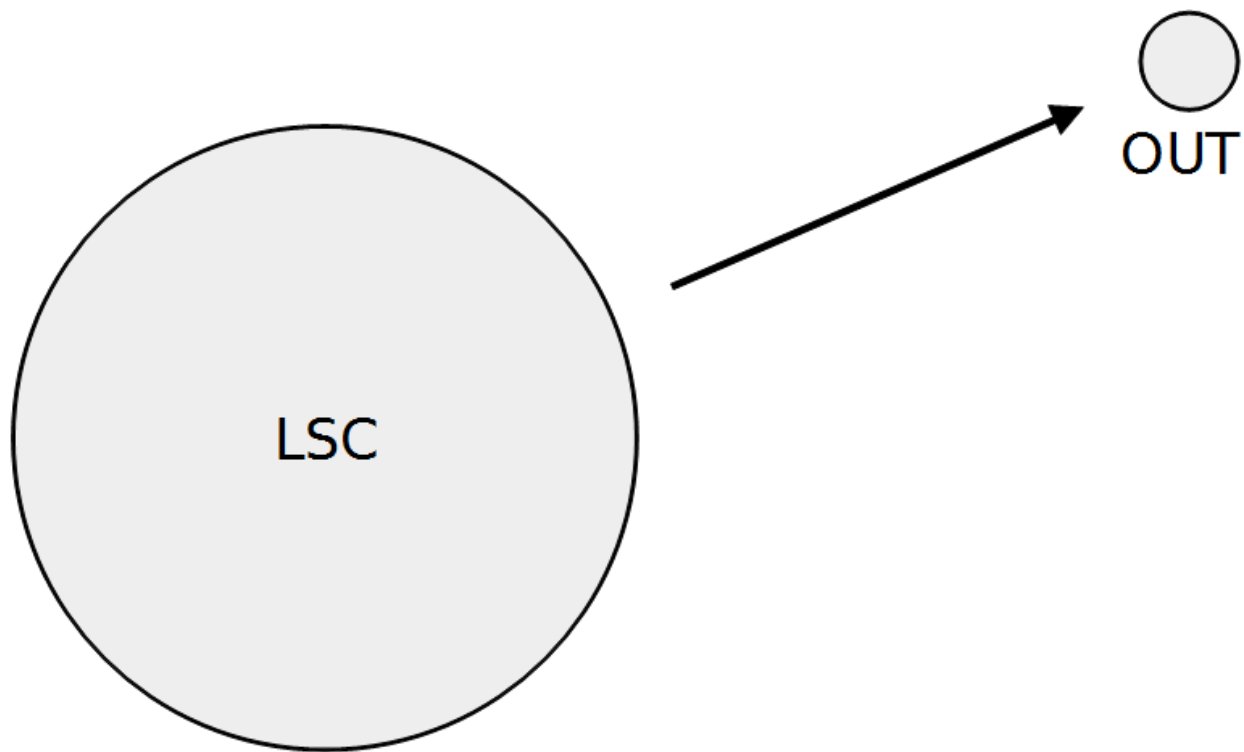


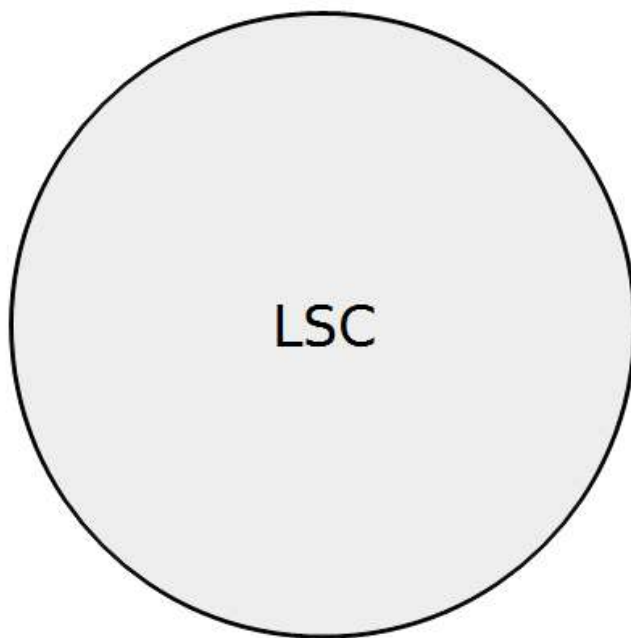
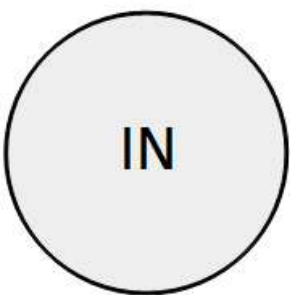
Quel sens physique à la  
décomposition ?



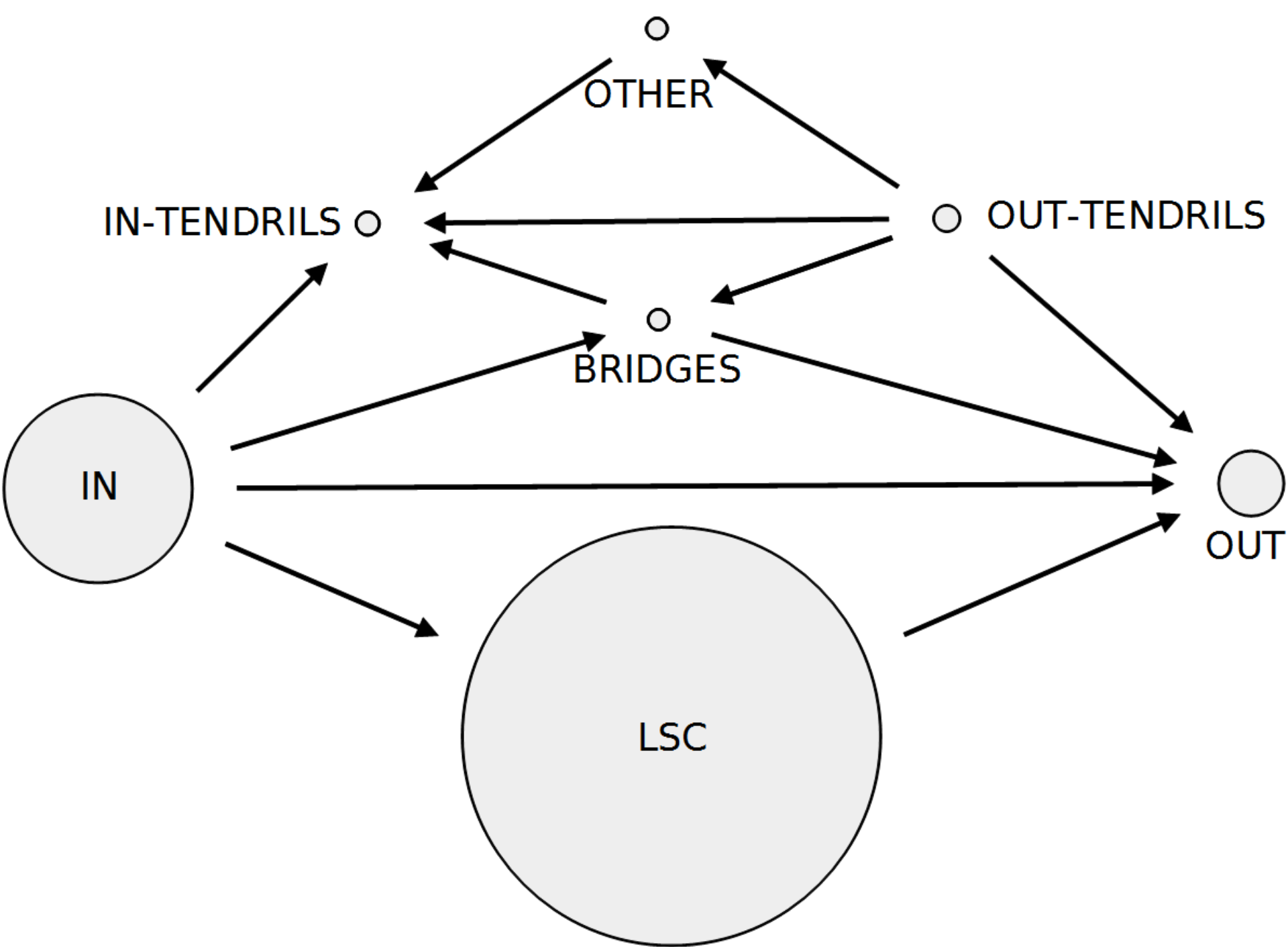


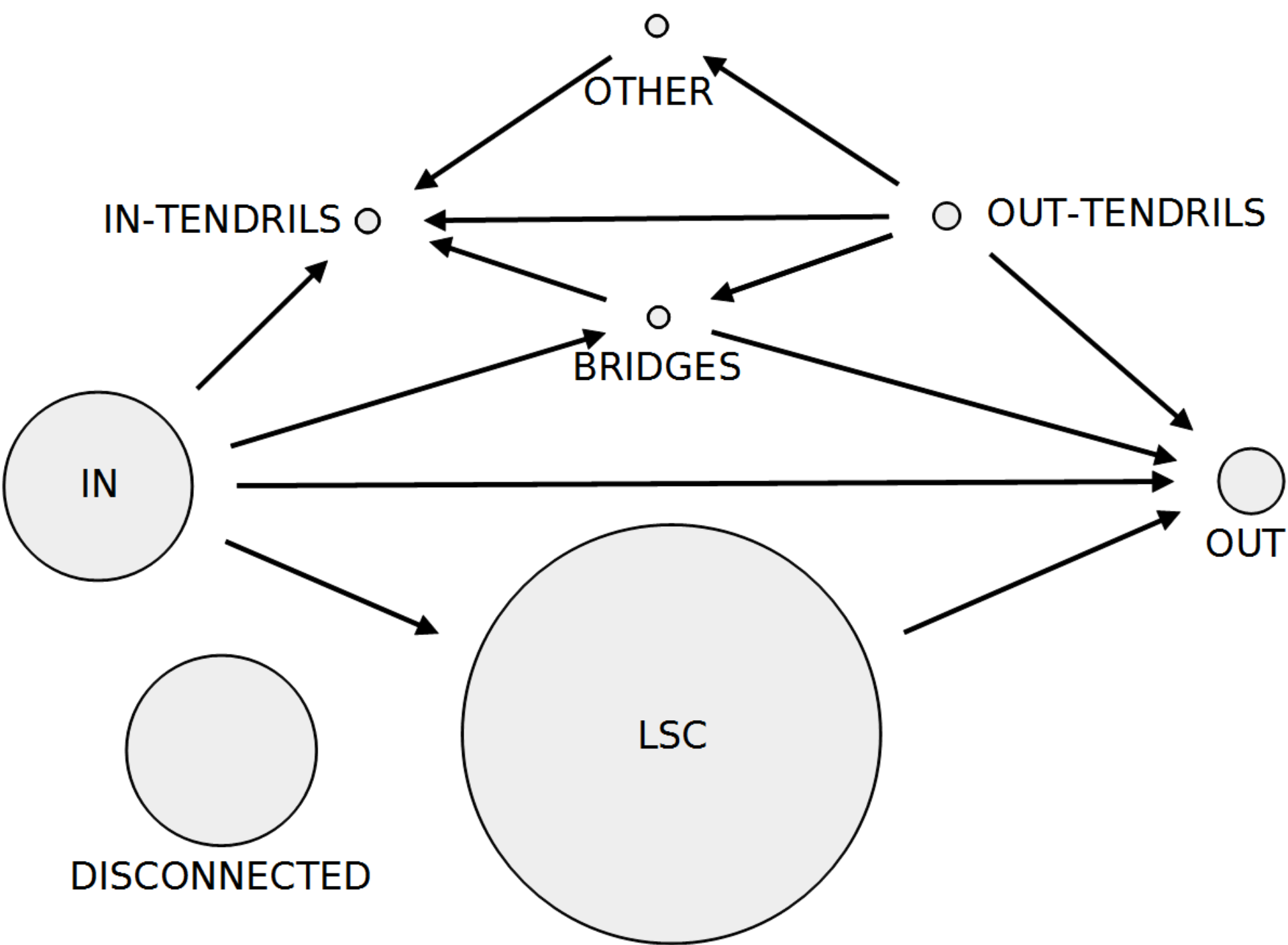
LSC

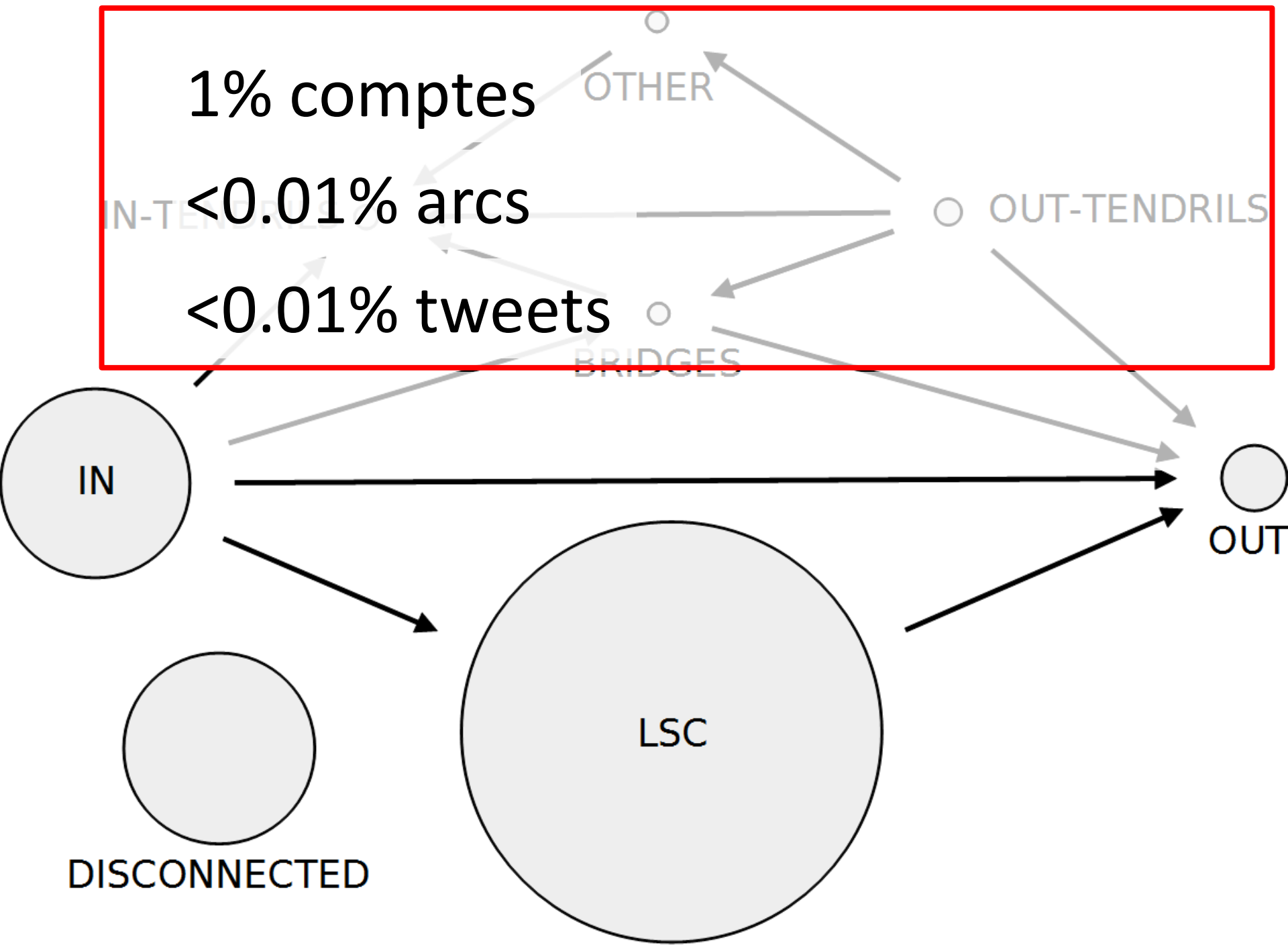




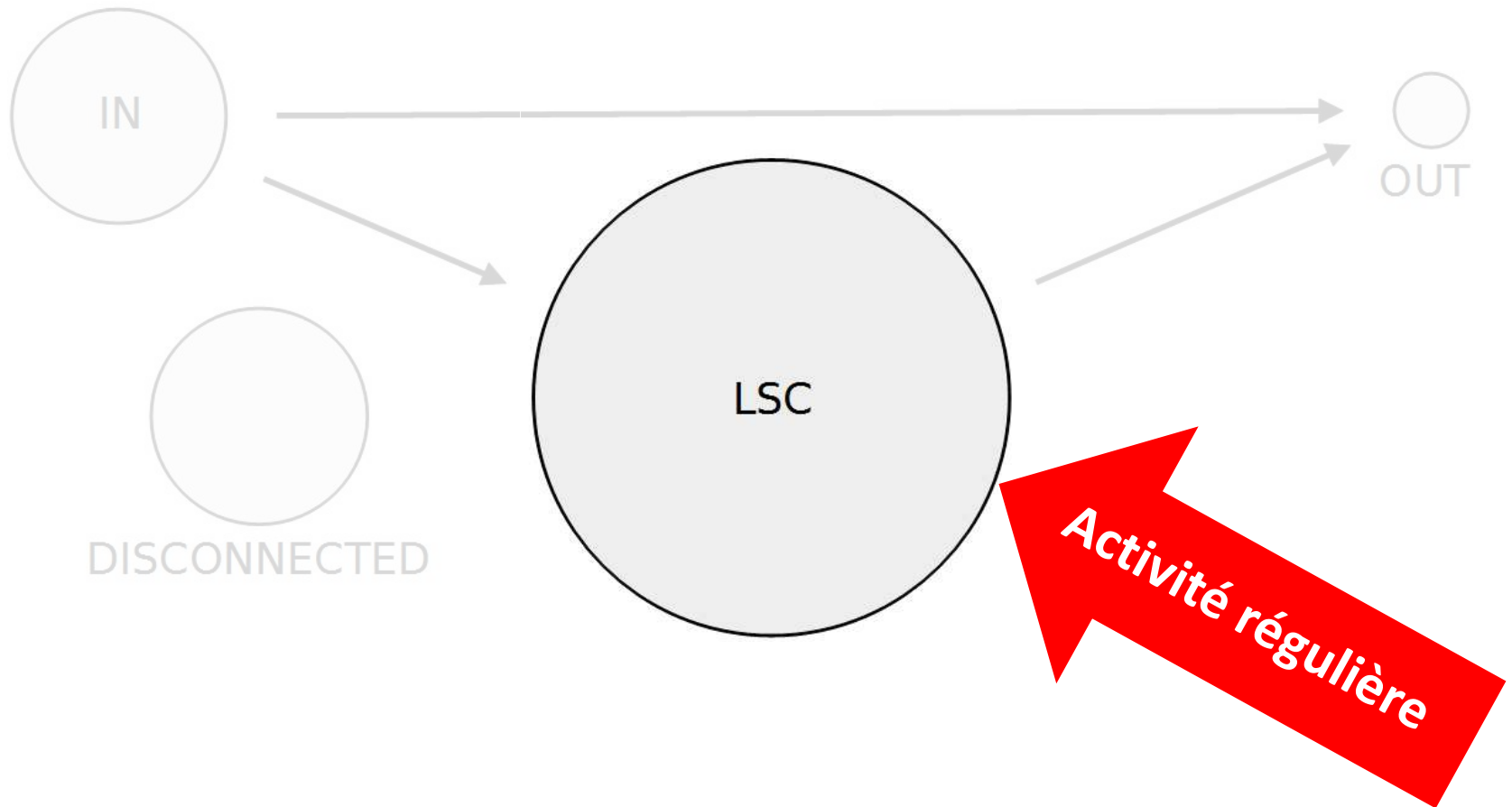
OUT



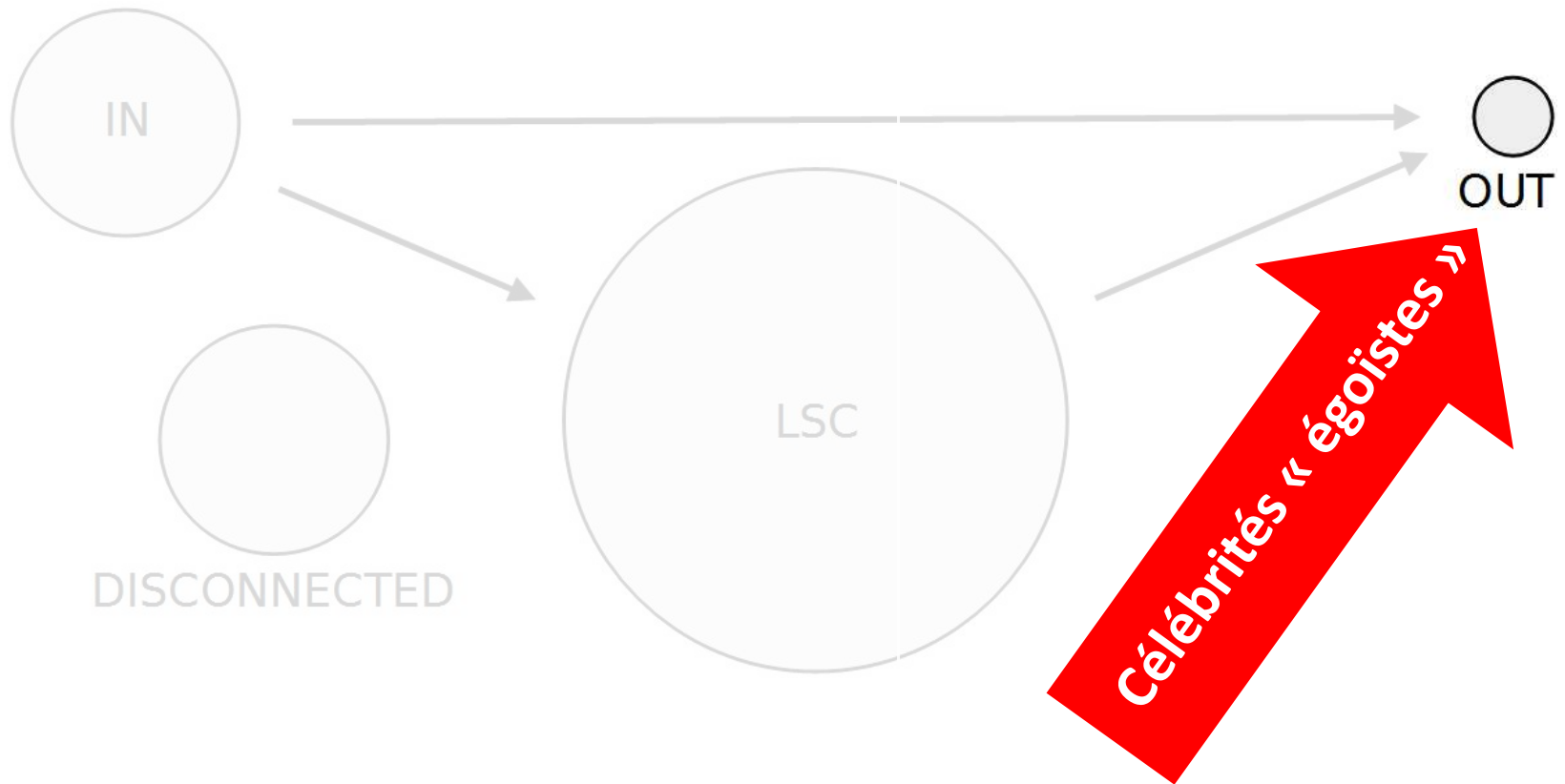




98% des tweets  
98% des arcs  
50% des comptes

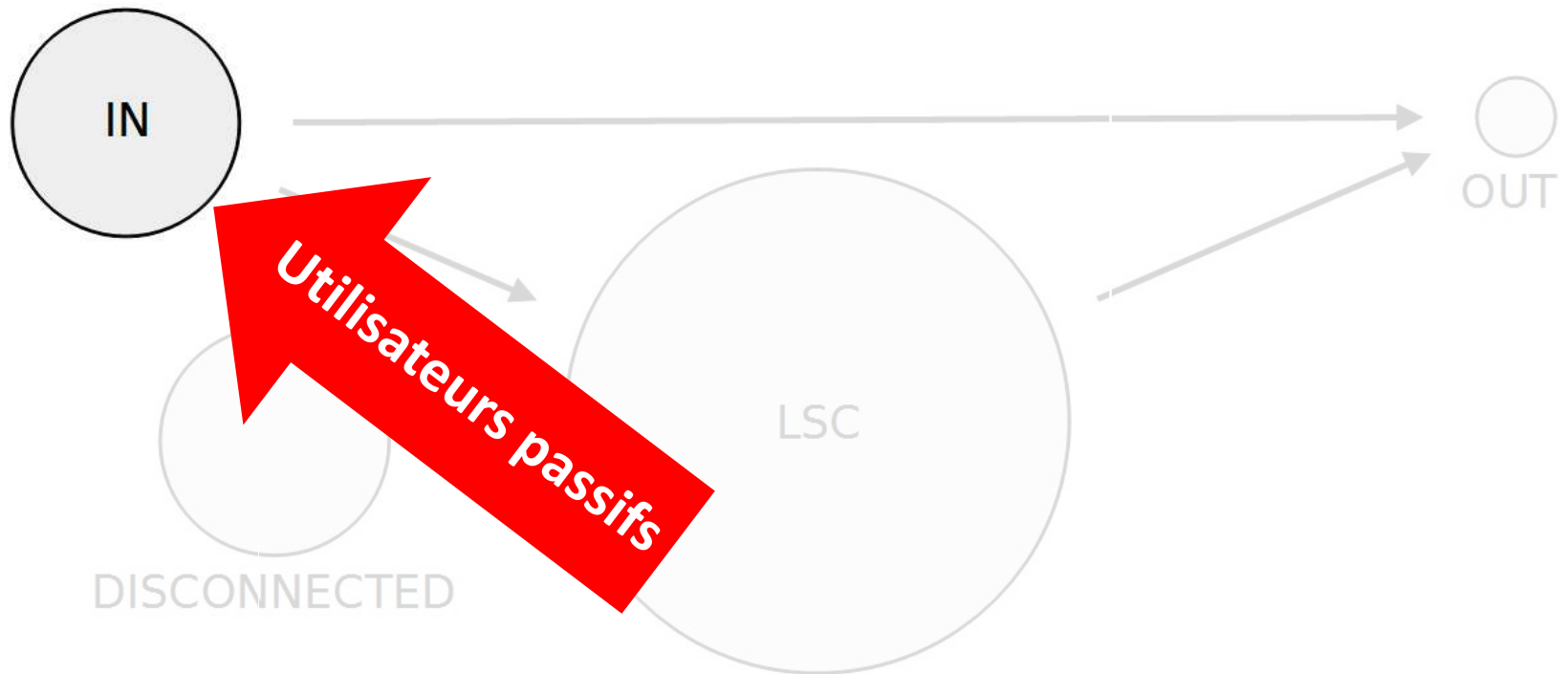


1,5% des tweets  
5,3% des comptes  
0% d'arc sortant





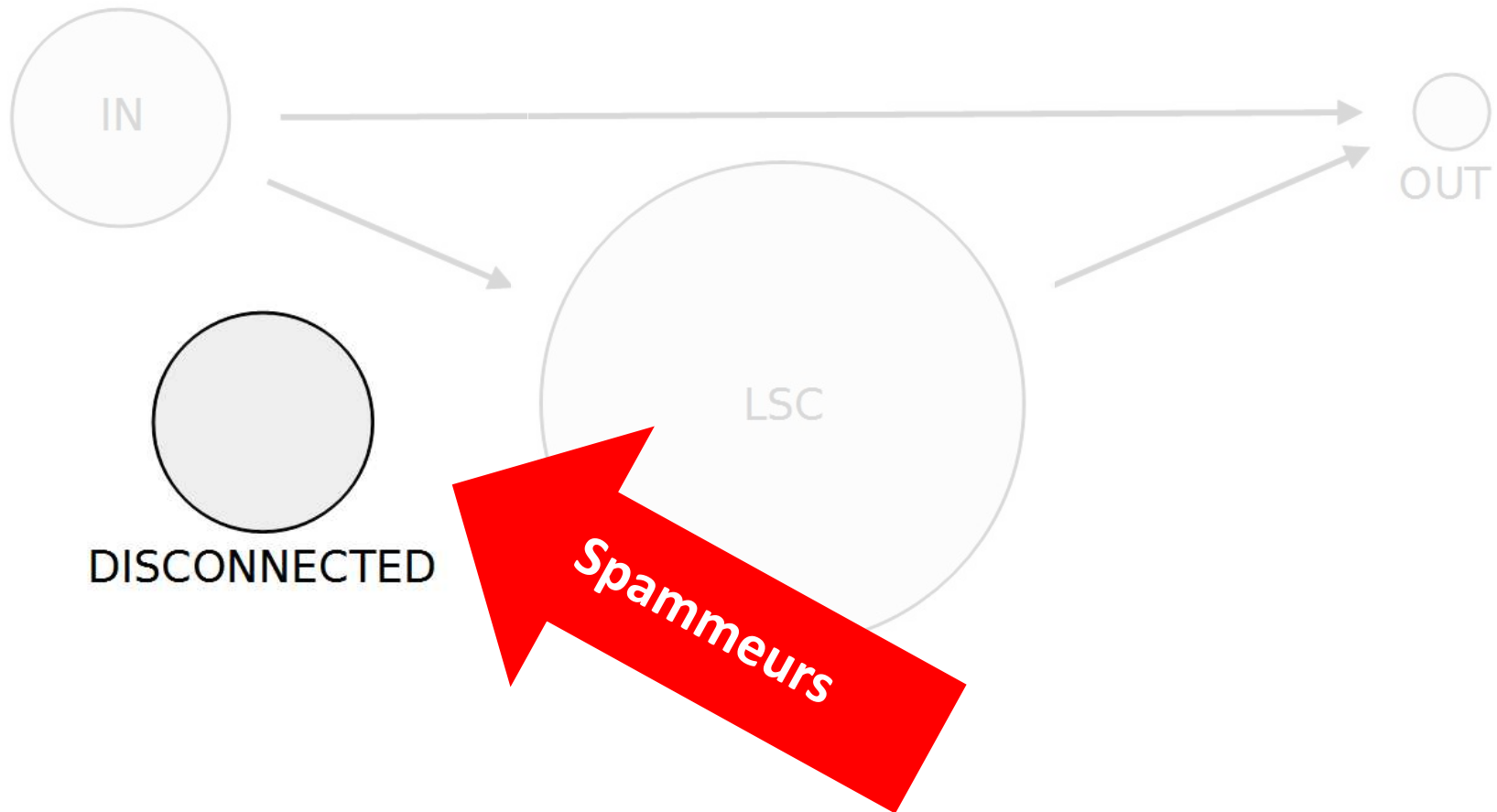
21,4% des comptes  
0,25% des tweets



21,6% des comptes

99% aucun arc

80% aucun tweet



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