Human Organisational Network (2)

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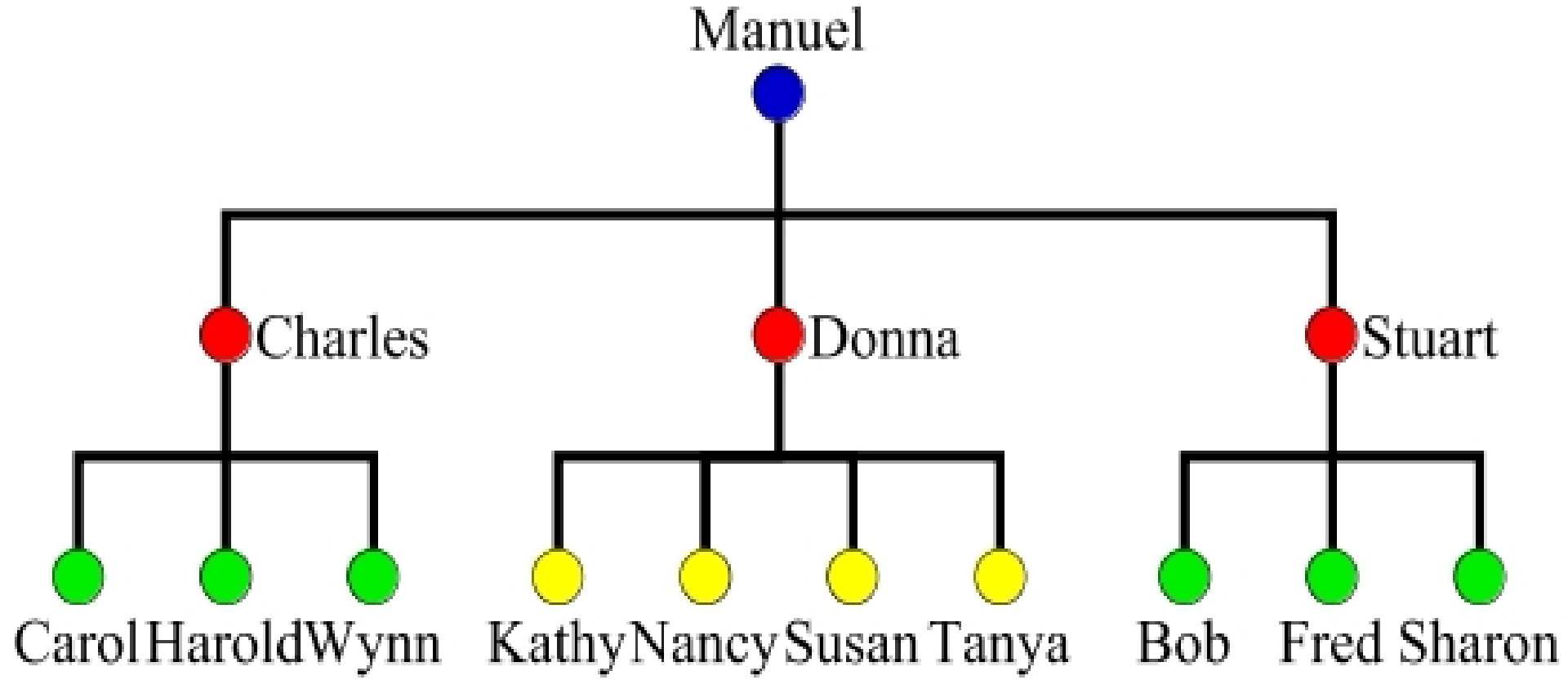
Actor-Actor

Actor-Event

Event-Event

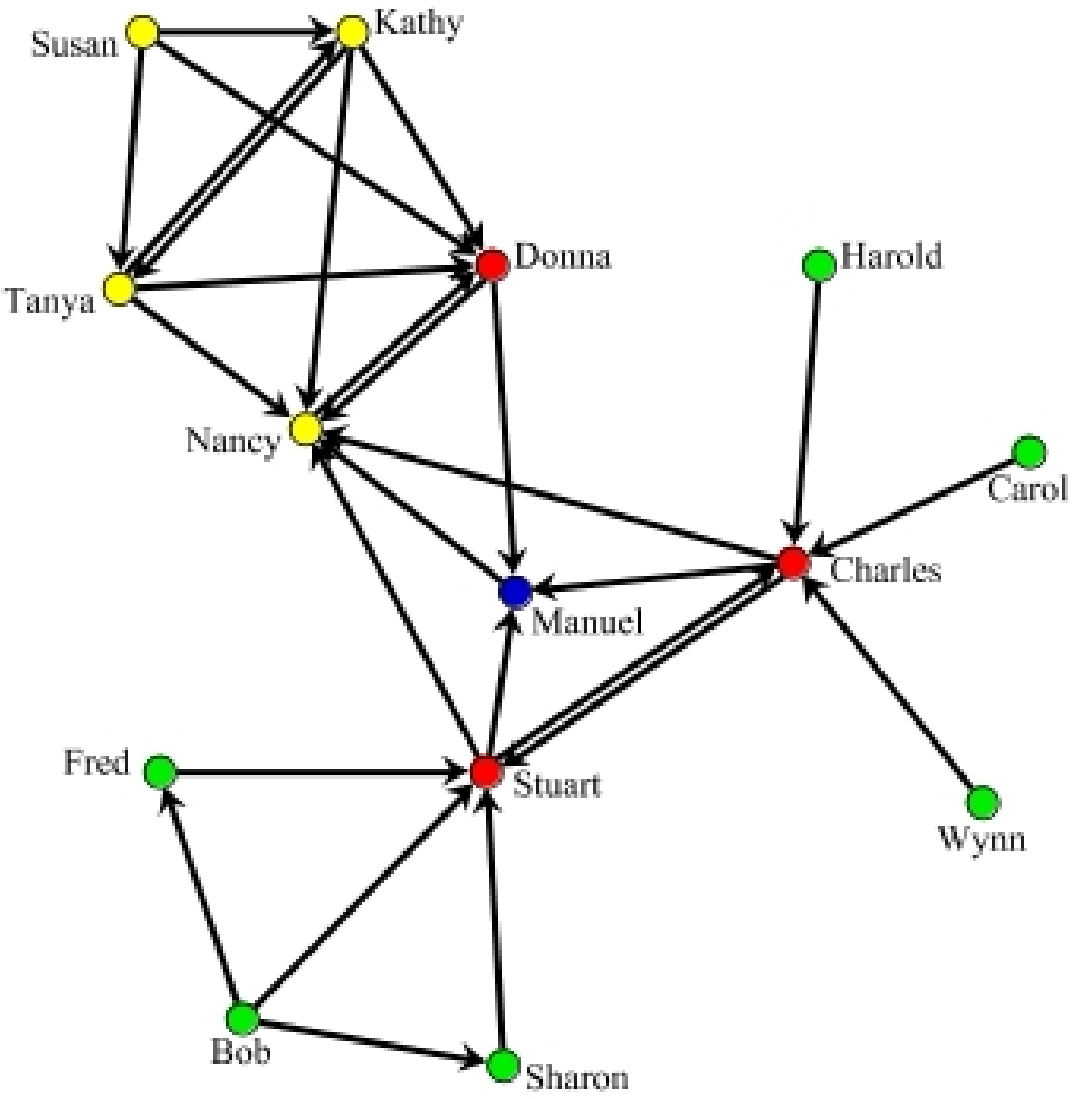
Org-chart shows how authority ties *should* look...



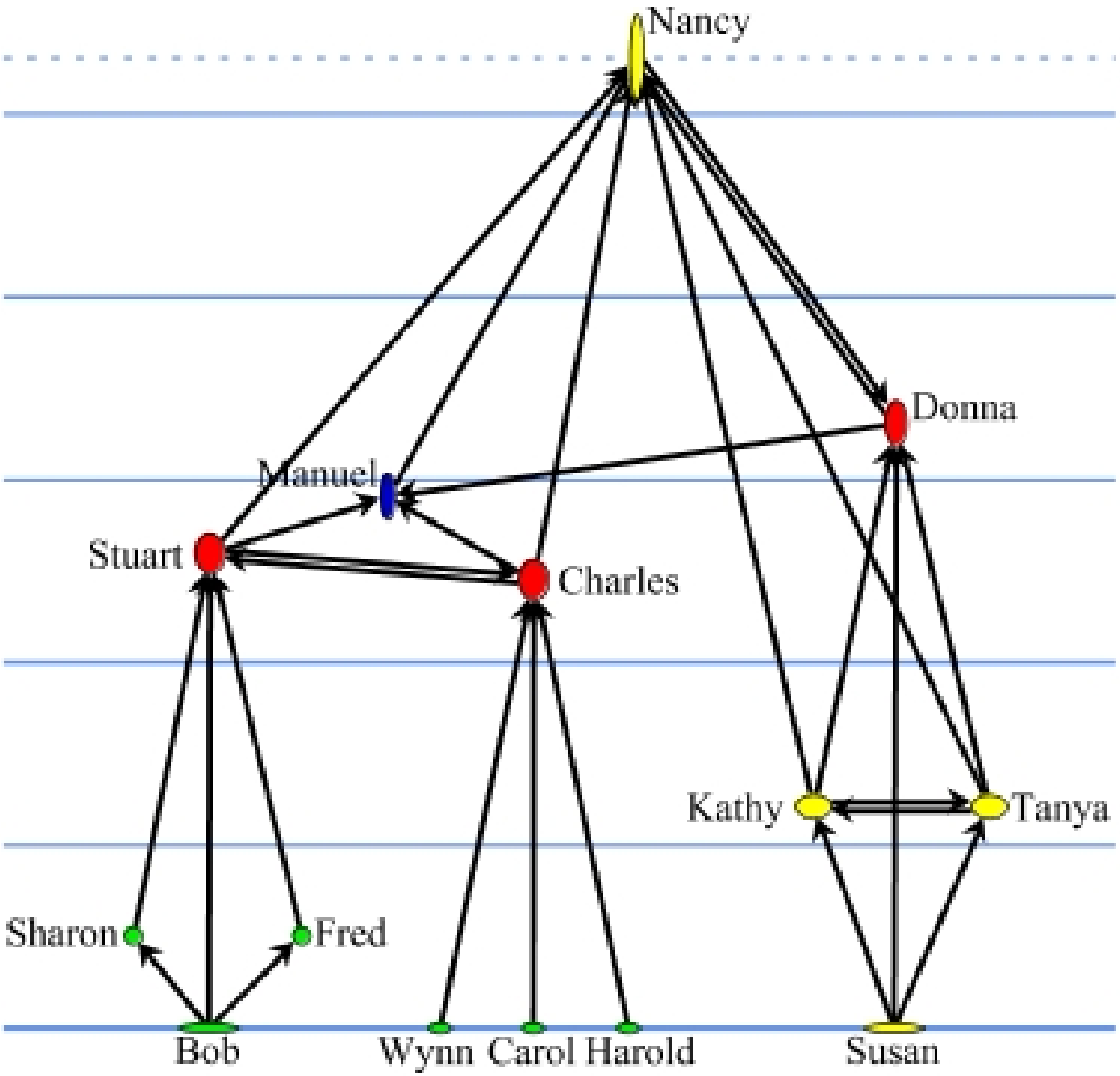
SOURCE: Brandes, Raab and Wagner (2001)

<http://www.inf.uni-konstanz.de/~brandes/publications/brw-envsd-01.pdf>

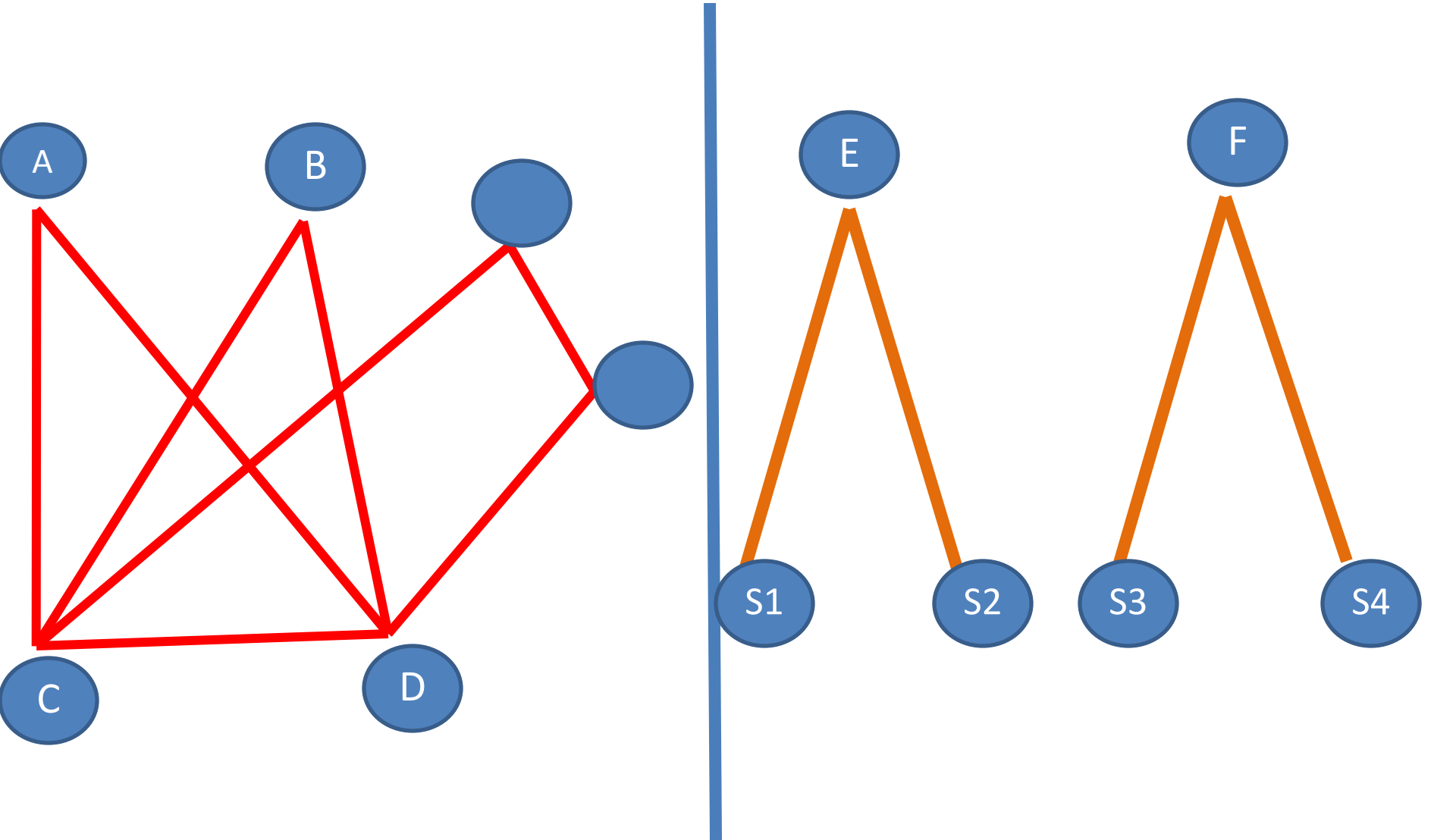
... but the digraph of *actual* advice-seeking ...



... can be restructured to reveal the “real” hierarchy!



Structural Equivalence and Role Equivalence



Why people cluster in particular manner?

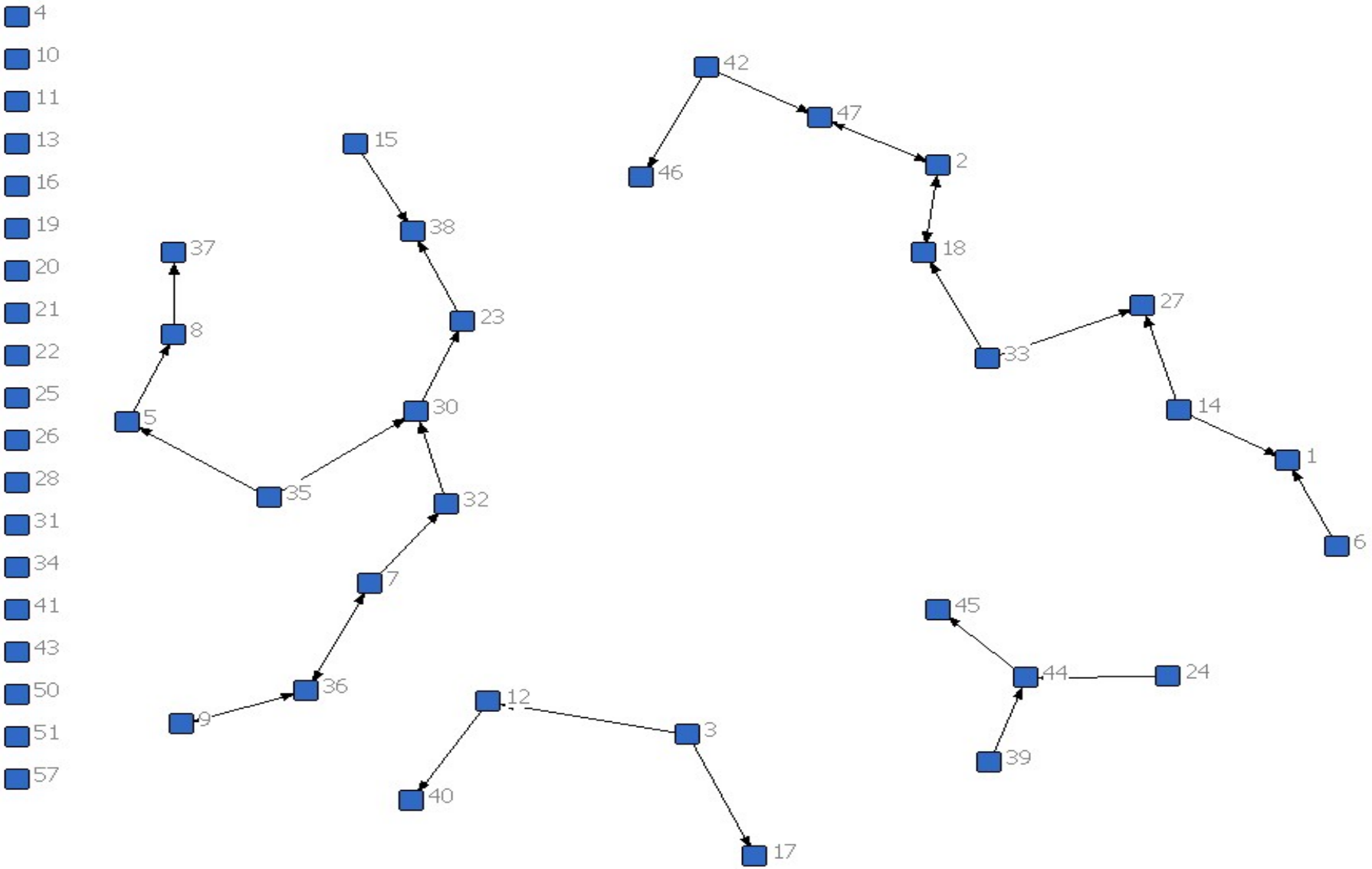
Homophily *vs* Heterophily

- ‘Like meets the like’;
- What happens when there are many similar minded people in one organisation?

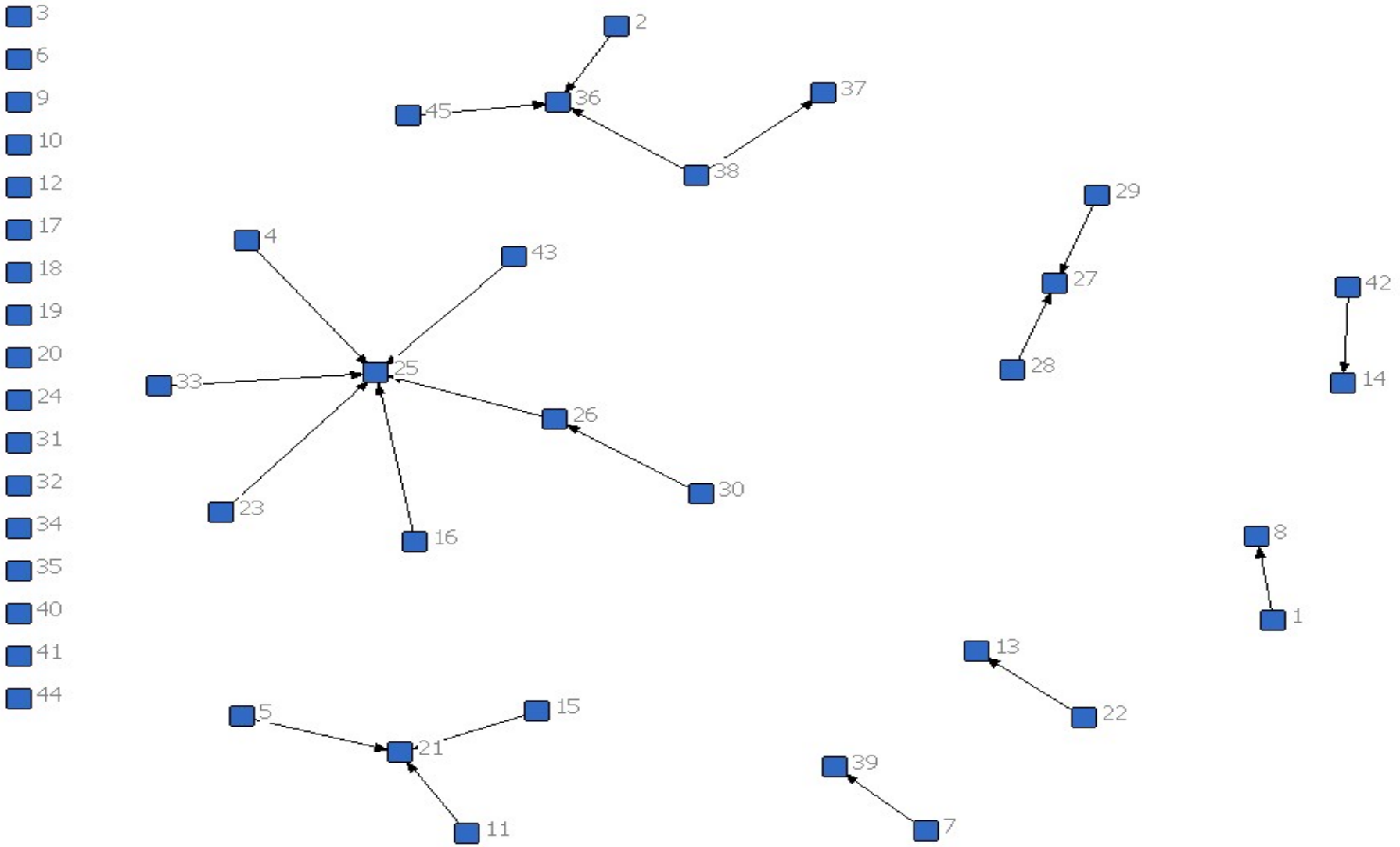
- Attraction towards ‘stranger’.

Community networks are more complex than organisational networks

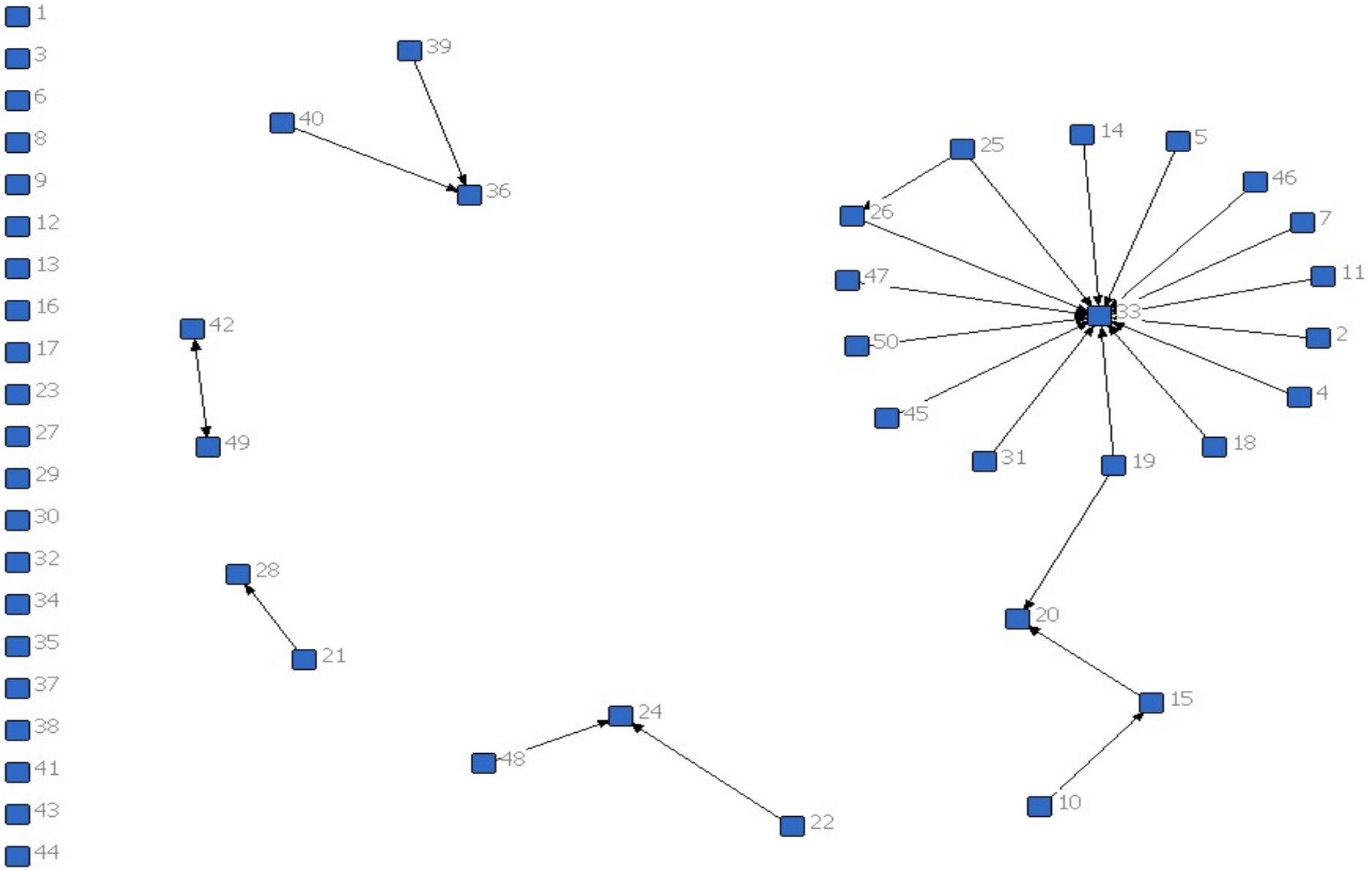
Agricultural info seeking network (Uttaranchal)



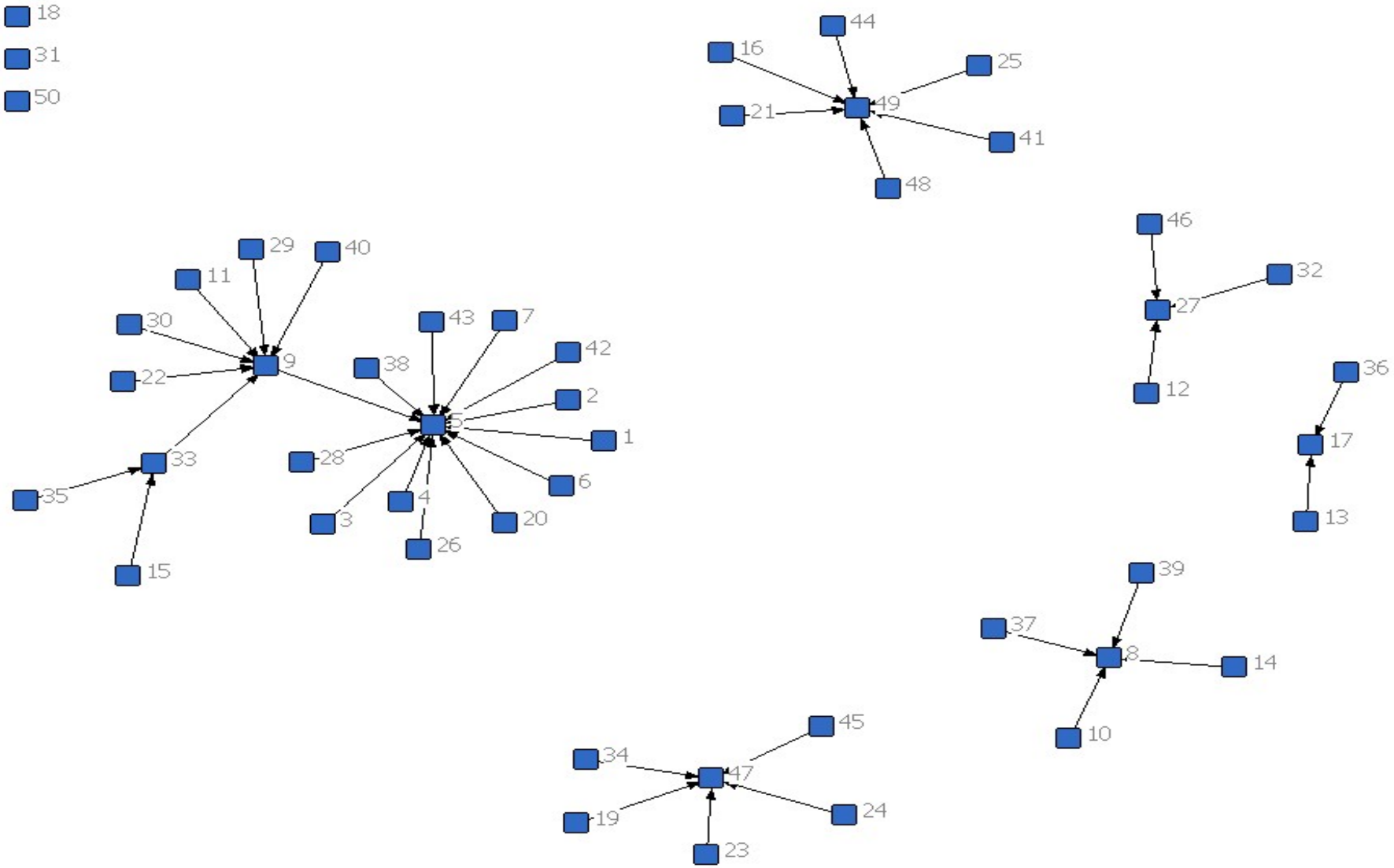
Credit networks (Andhra Pradesh)



Health information seeking networks (Uttaranchal)



Mobile technology adaptation network (Raiasthan)



Shapes speak a lot

How about explaining an outcome?

Explaining differential access to anti-poverty programmes

	Ineligible people	Eligible people
Receiving	38%	32%
Not receiving	--	68%

Mapping community power structure

- Nomination ranking; Reputation ranking

0 = antagonistic relation

1 = greets each other

2 = shares information

3 = shares resources

4 = vouches for each other

Info sought from ego, alter, and neutral. Level at which at least two agreement takes place is accepted.

Centrality

Betweenness

Number of paths passing through a node.

g_{ij} = # of geodesics from i to j; g_{ikj} # of geodesics from i to j via k; c_k = sumi sumj $\{g_{ijk}/g_{ij}\}$

- In diffusion

Node with high betweeness can act as gatekeeper.

- In exchange

Node with high betweeness can act as broker.

Local and Global centrality

Block modeling

	A	B	C	D	E
A	1	0	1	0	1
B	0	1	0	1	0
C	1	0	1	0	1
D	0	1	0	1	0
E	1	0	1	0	1

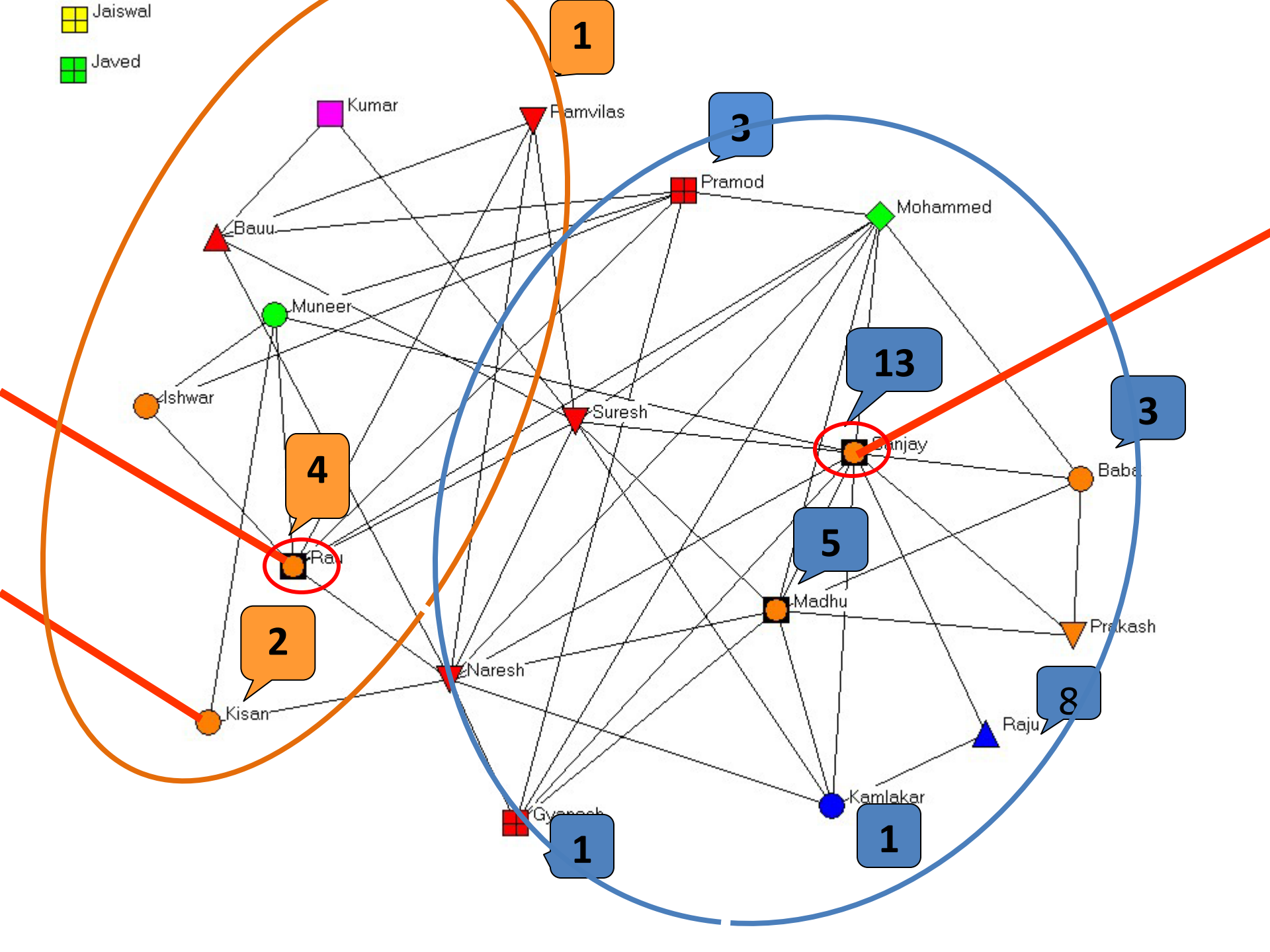
Rearranged graph

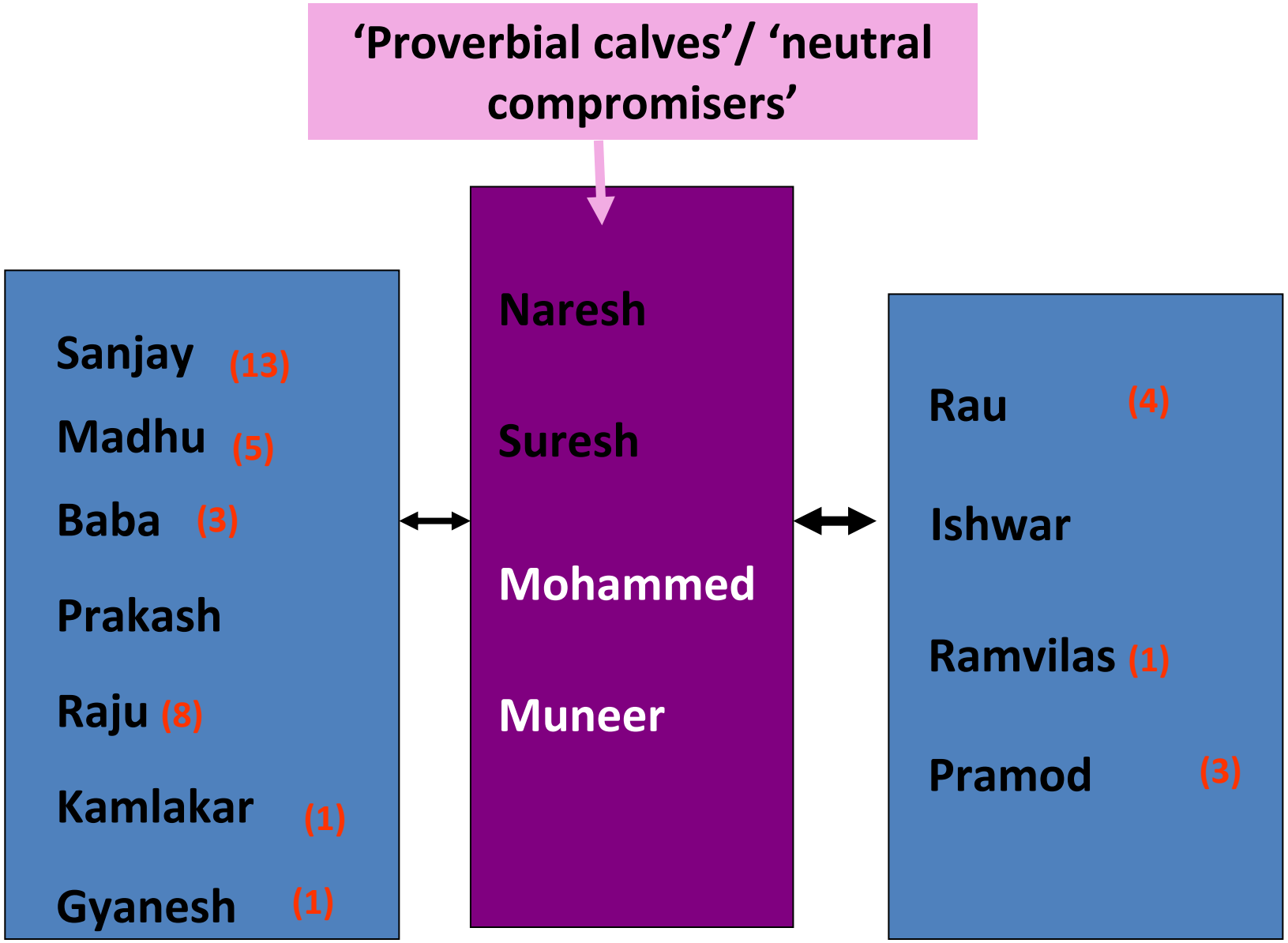
	A	C	E	B	D
A	1	1	1	0	0
C	1	1	1	0	0
E	1	1	1	0	0
B	0	0	0	1	1
D	0	0	0	1	1

Mapping access network

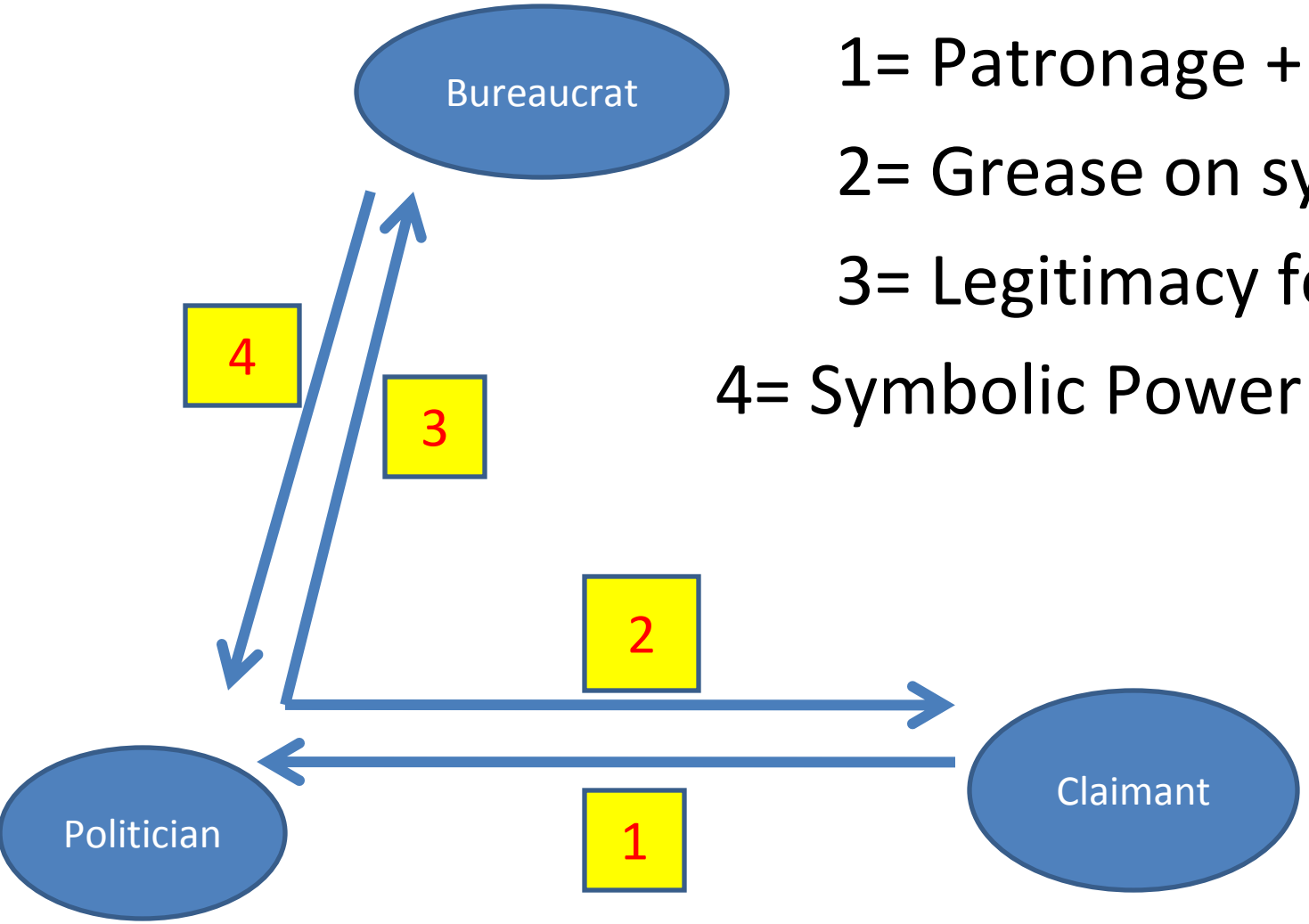
- 1) Survey of all those who are receiving anti-poverty benefit (social pension); Categorised this population as eligible ineligible at later stage from survey information.
- 2) Survey those eligible families but not receiving anti-poverty benefit (social pension).

- Detailed questionnaire on stages of application making and different people who helped (or blocked) in different stages.


Jaiswal
Javed
Kumar
Ramvilas
Pramod
Mohammed
Bauu
Muneer
Ishwar
Suresh
Sanjay
Baba
Raju
Madhu
Prakash
Naresh
Kisan
Raju
Kamlakar
Gyanesh
1
3
13
3
4
5
2
8
1
1


‘Proverbial calves’/ ‘neutral compromisers’
Sanjay (13)
Madhu (5)
Baba (3)
Prakash
Raju (8)
Kamlakar (1)
Gyanesh (1)
Naresh
Suresh
Mohammed
Muneer
Rau (4)
Ishwar
Ramvilas (1)
Pramod (3)

Interdependency in corruption network



1= Patronage + vote

2= Grease on system

3= Legitimacy for allocation

4= Symbolic Power recognition

Summary

- Revealing the mechanism of how competition (for limited scarce goods) below is managed through structure of relations.

- Argument against ‘decentralisation’ frenzy activists by showing how policy gets crippled at the stage of implementation.

How about idea-idea network?

Group adjacency matrix of block models of factions in Bajgaon

	Banu	Raju	Kumar	Ramvilas		Ishwar	Muneer	Kisan	Pramod	Rau		prakash	Suresh	Gyanesh	Sanjay	Naresh	Baba	Kamlakar	Madhu	Mohamm
Banu	X		X	X					X				X			X				
Raju		X													X			X		
Kumar	X		X										X							
Ramvilas	X			X						X			X			X				
Ishwar						X	X		X	X										
Muneer						X	X	X	X	X					X					
Kisan							X	X								X				
Pramod	X					X	X		X	X				X						X
Rau				X		X	X		X	X			X			X				X
Prakash												X			X		X		X	
Suresh	X		X	X						X			X		X	X		X	X	X
Gyanesh									X					X	X	X			X	X
Sanjay		X					X					X	X	X	X	X	X	X	X	X
Naresh	X			X				X		X			X	X	X	X		X	X	X
Baba												X			X		X		X	X
Kamlakar		X											X		X	X		X	X	
Madhu												X	X	X	X	X	X	X	X	X
Mohammed									X	X			X	X	X	X	X		X	X

Density table for three factions

	Faction 1	Faction 2	Faction 3
Faction 1	0.33	0.10	0.19
Faction 2	0.10	**0.70**	0.16
Faction 3	0.19	0.16	**0.67**