

Activity Theory and Social Network Analysis

G. Michael McGrath

(Victoria University, Melbourne)

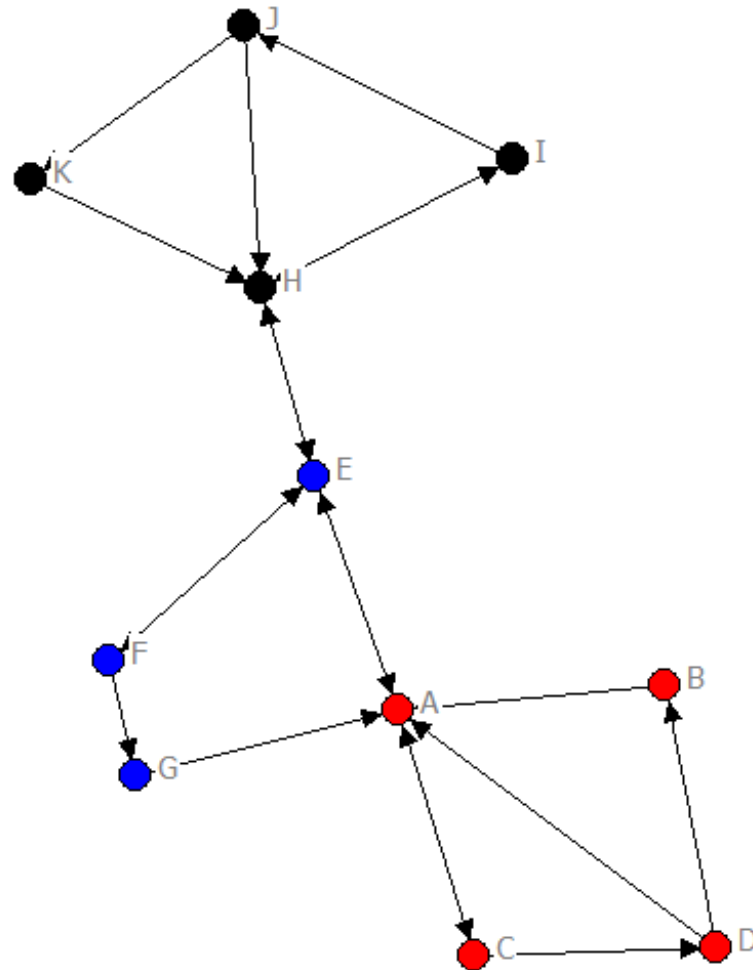
Background: ICT in Tourism Research

- Tourism NSW and Consumer Generated Content (CGC) websites - threatened
- Get rid of them!
- Work with them
- Need to understand them
- Influence the community

Social Network Analysis (SNA)

- Social sciences – 1930s
 - Ethnographic studies
 - Links within and between ethnic groups within neighbourhoods
 - Communication patterns (e.g. in organizations)
 - Identification of cliques
 - Power structures
 - **Centrality!**

Example: A Communications Network



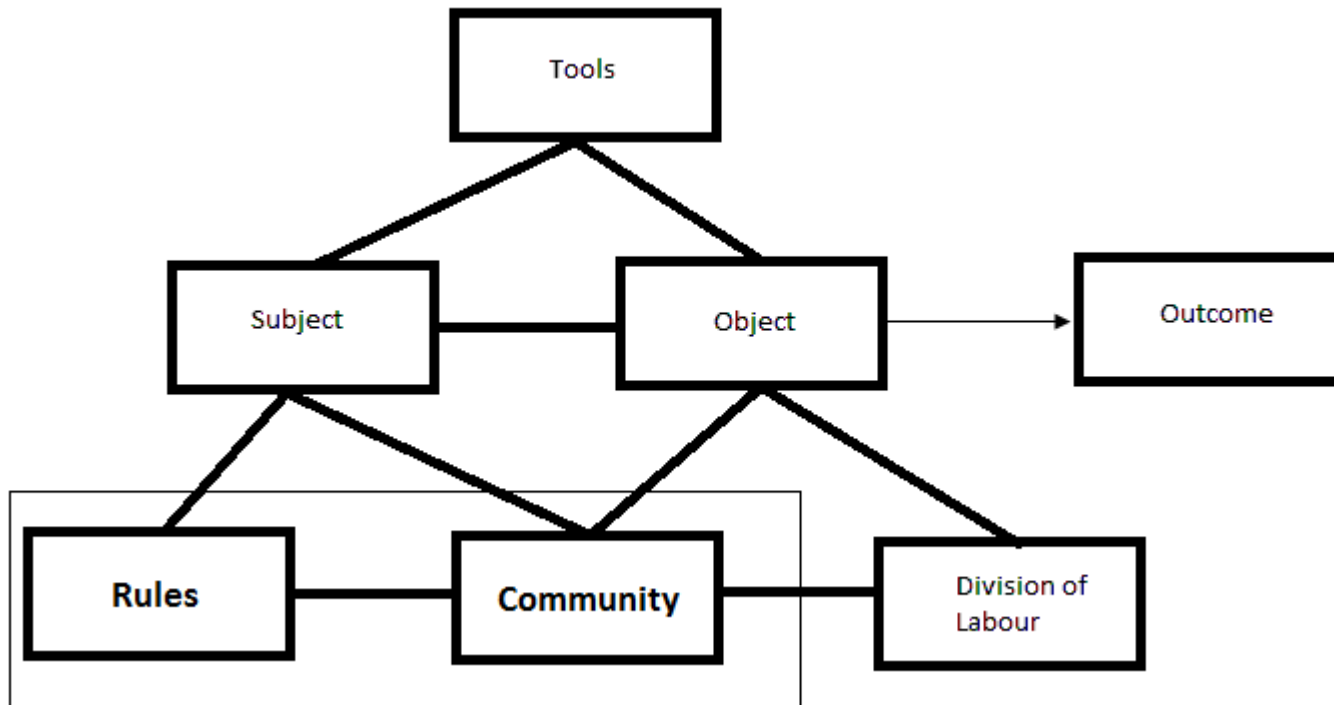
SNA Limitations

- Small bounded networks
- 2-3 types of links
- Many real-world networks:
 - Large;
 - Multi-nodal; and
 - Multi-plex.
- Don't scale well
- Snapshots only

DNA

- Network evolution
- Agent-based modelling and simulation:
 - Network evolution;
 - Network adaptation; and
 - Impact of interventions.

SNA/DNA Using an AT Lens



Aboriginal Community: HCSP Links

- Mentally ill people:
 - Different social networks
 - Half the size of healthy people
 - Small but dense
 - One-way dependence
 - Non-reciprocal relationships
 - Dwindle over time
 - Impact on carers' networks

Multiplex Networks

