

# MIXING METHODS IN SOCIAL NETWORK ANALYSIS

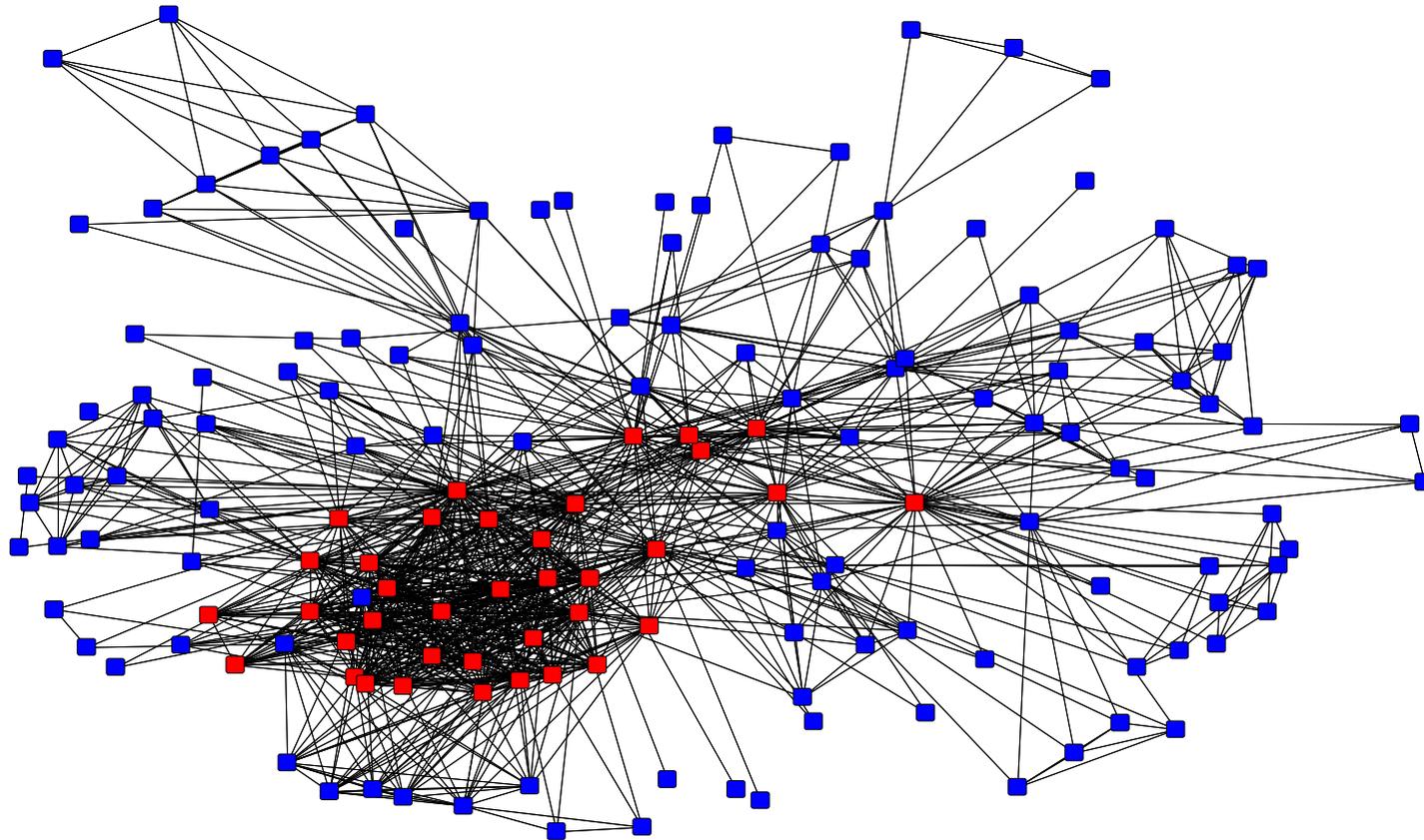
Gemma Edwards and Nick Crossley

# TODAY

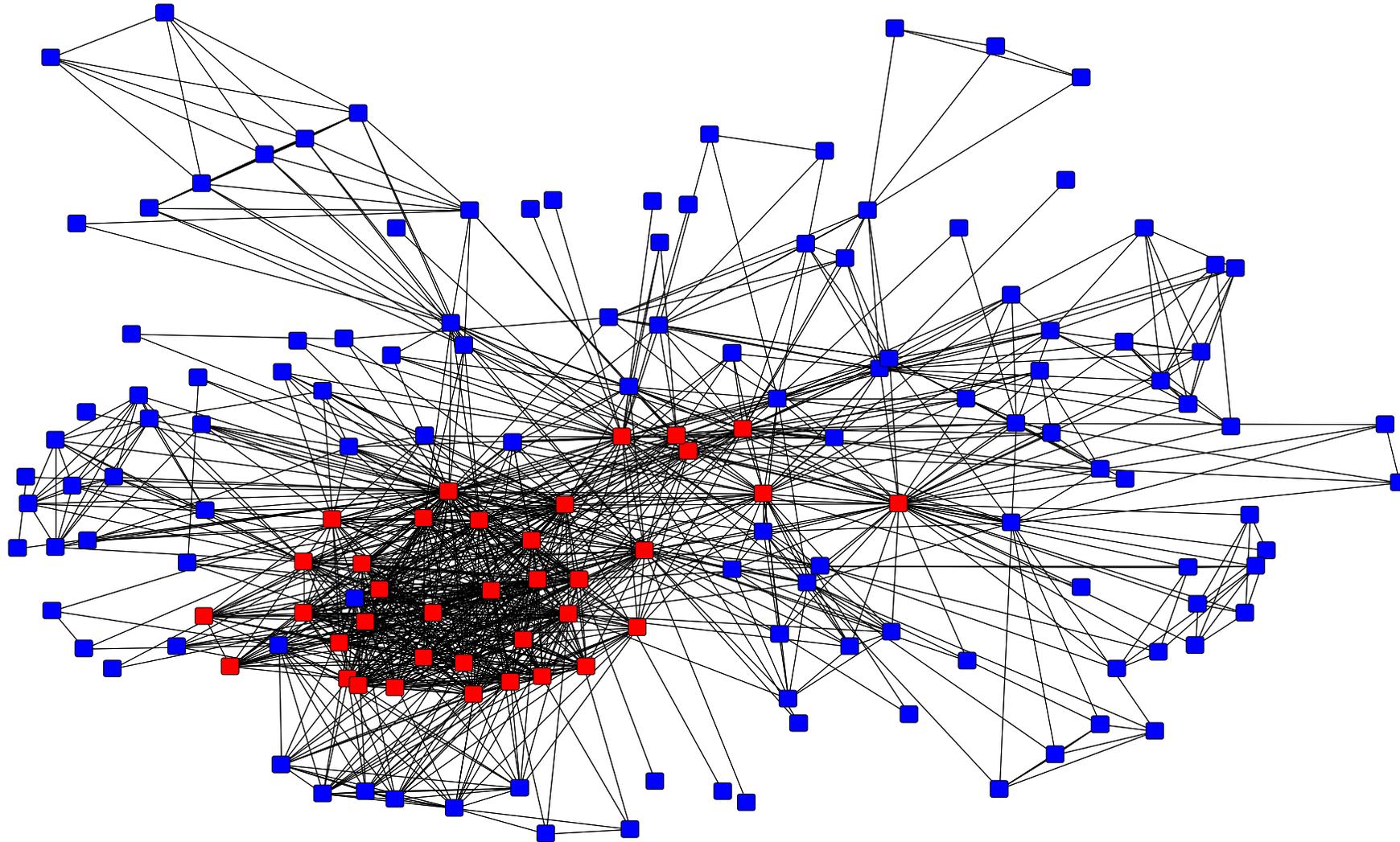
- Brief intro to SNA (Me).
- Qual approaches (Gemma)
- Mixing methods(Gemma).
- Some examples(Me).



# WHAT IS SNA? NODES, TIES AND ATTRIBUTES



# SNA MEASURES (STRUCTURAL) PROPERTIES AT THE LEVEL OF THE INDIVIDUAL, WHOLE, DYAD, TRIAD AND SUB-NETWORK



# BASIC NETWORK TYPES

- Whole network
- Ego-net
- Two/Multi-Mode.



- SNA is rooted in (mathematical) graph theory.
- But it grew, in large part, out of the efforts of ethnographers –including anthropologists here at Manchester- to make sense of complex relational data.
- There have been huge advances on the maths (and stats) side in recent years.
- And computing advances have made these widely accessible.
- But some feel that this has been to the detriment of the once integral qualitative element.



## WHY USE QUALITATIVE METHODS IN SOCIAL NETWORK ANALYSIS?

- Network analysis does not have to mean ‘quant’ SNA. Qualitative network analysis is what many qual researchers are doing (Heath).
- SNA also offers a particular opportunity to mix qualitative methods with quantitative techniques
- Why? Networks are *both structure and process at the same time, and therefore evade simple* categorisation as either quantitative or qualitative phenomena
- Moreover, how people perceive the network, and the *content and meaning* of ties, is essential to understanding network patterns and measures



## THEORETICAL ARGUMENTS FOR USING QUAL METHODS IN SNA PROJECTS

- Some network research questions require qual methods (process rather than structure, change over time rather than snapshot, emerging ties rather than established ones)
- Qual can capture the ‘insider’ view of the network – mixed with quant it creates a more complete picture (Jack, 2010)
- Mische (2003) – networks are discursive formations. Constituted through communicative interactions. We need to understand cultural and communicative processes to understand networks



# WHAT IS QUAL SNA?

- Qual SNA has some of its own methodological tools designed to elicit social network data (name-generators):
  - Participatory mapping
  - Concentric circles
  - Walking interviews
  - Communication diaries
  - Interviews with ego and alters





Participatory Map, Emmel and Clarke, 2009 Connected Lives Project

## Emmel and Clarke 2009, interview discussion of participatory maps:

- *SE: Oh yeah. Er – so ..... [community] Centre, I worked there for six months so I*
- *kinda know people like Ty, he's the manager er, Anna who I'll put down here because*
- *these are all like my work people.*
- *NE: Right.*
- *SE: In a more scary square box (laughs)*
- *NE: Okay.*
- *SE: In a fuzzy nice one. (laughter) So er, so I met Anna there. Well, Anna. Put Anna*
- *er, but I also now work with her.*
- *NE: Okay, that's the [work] square is it?*
- *SE: Yeah. This is [work] – the scariest one of all (laughter)*
- (SE SocMap:10)



## MIXING QUAL METHODS WITH FORMAL SNA

- Whilst you can do qual SNA with pens and paper, computer packages (e.g. UCINET) offer neat and efficient ways to handle the wealth of data you might collect, for e.g. in participatory maps in interviews
- Quant SNA helps to grasp the structure of relations – the ‘outsider’ view of the network
- It can complement qual research which explores the insider view of the network, e.g. from the subjective viewpoint



## Methods can be mixed at different stages of SNA projects

- Using ethnography to inform network survey questions
- Panel studies – mixing interviews and network maps. E.g. Using interviews to collect network data and in a second interview discussing the network map (Lubbers, 2009).
- Comparing network maps in interviews to discuss change
- Using quant SNA to inform qual research, e.g. sociograms used to select interviewees (Hepburn, 2009; Harries, 2010).

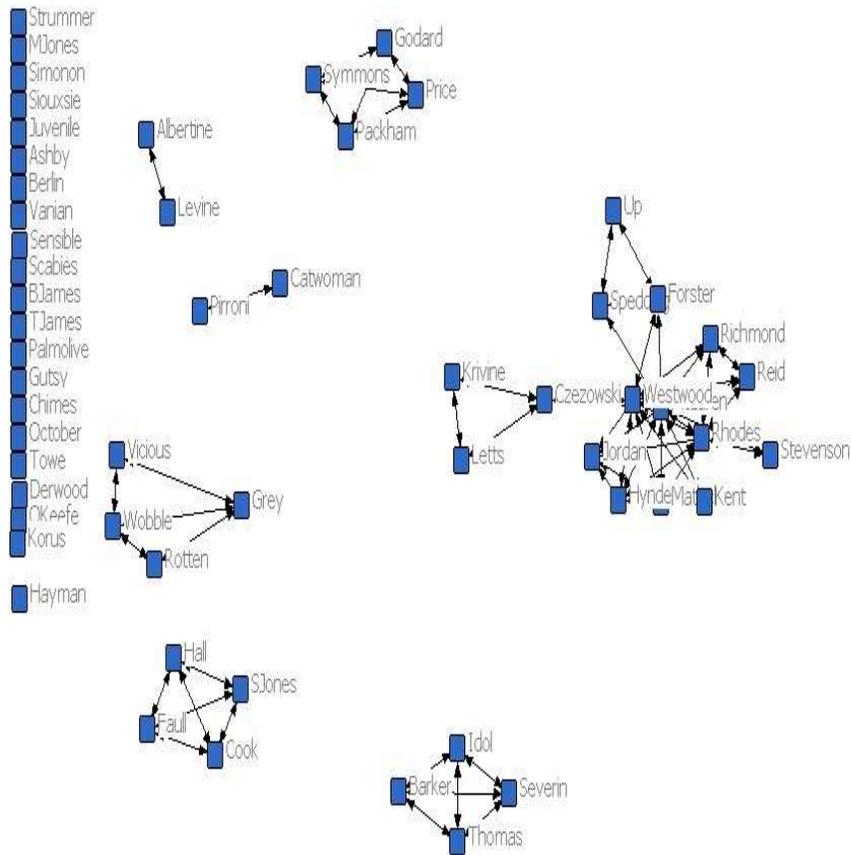


## USING QUAL METHODS OF DATA COLLECTION AND ANALYSIS

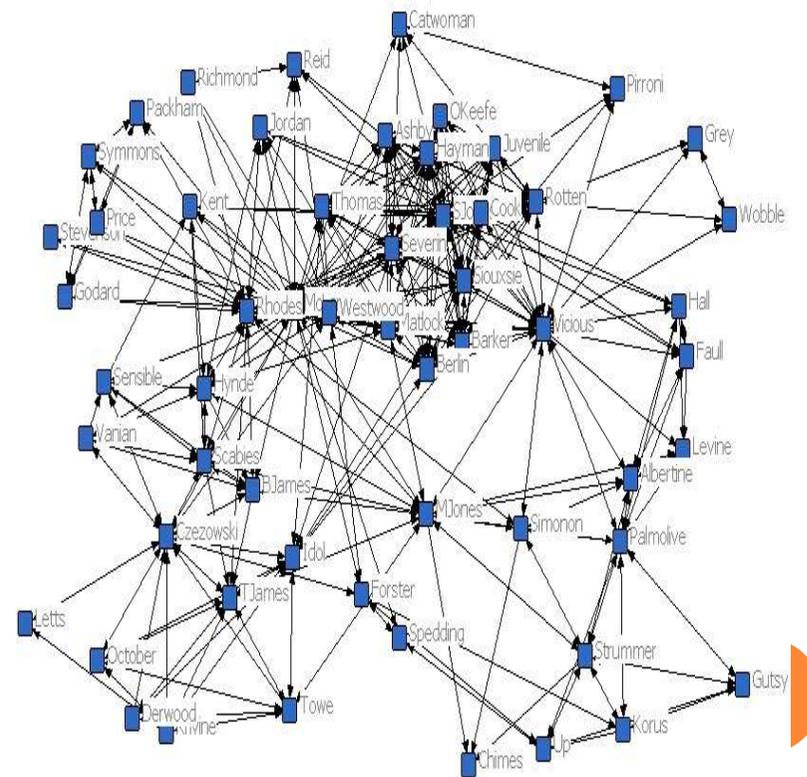
- Qual methods extremely useful in data collection stage – allows for qual and quant analysis
- Coviello (2005) – quant data is ‘uni-dimensional’ so more restrictive. Qual data allows for a ‘bifocal approach’ to network analysis
- Qual methods used to interpret meaning of network diagrams and measures (e.g. by interviews with actors)
- Using participant observation alongside name-generator surveys (Conti and Doreian, 2009)
- Qual methods enable: an awareness of context, an appreciation of change in ties and their meaning over time

# PUNK PROJECT: GETTING LONGITUDINAL DAT FROM SECONDARY SOURCES (BOOKS AND OTHER DOCUMENTS) AND IDENTIFYING FORMATIVE MECHANISMS

1974



Dec 1976



## EXPLORING CONTENT OF TIES

- ...we're generally just a big friendship group .. go for curries, we go drinking together, live together [laughs] ... we play Xbox really [laughs] (Interview Five)
- ...when you have friends that aren't activists they can't understand why you're getting up at six o'clock to go to a picket line or to knocking on doors campaigning in the various groups but and so its good to around people who understand why you're doing it. (Interview Five)



# EXPLORING CONTEXT OF TIES



## EXPLORING EFFECTS OF TIES

- “I came from because I think it was erm a small town and the school I went to was quite middle class. There wasn’t really much going on and I think university, partly because you meet so many people, new people who have got different views or come from different backgrounds.” (Interview Ten)
- “...he had really long hair. We rehearsed him every night for a week, and on the Friday night he still had long hair and flared trousers. We were begging him. The afternoon before the gig, he says, ‘Okay’. We took him down to a hairdresser’s and had his hair cut off in the nick of time.” (James in Savage 2009, 282)

