

# Multi-level Network Research: Realizing the Potential

# Potential...

- Social network analysis has often been touted for its ability to cross levels of analysis.
- With the same data, we can analyze dyads, triads, groups, organizations, etc.
- Have we lived up to that potential?
- Can we generate some future research questions by adopting a multi-level approach?

# Traditional Management Research

$$X_{\text{org}} \longrightarrow Y_{\text{org}}$$

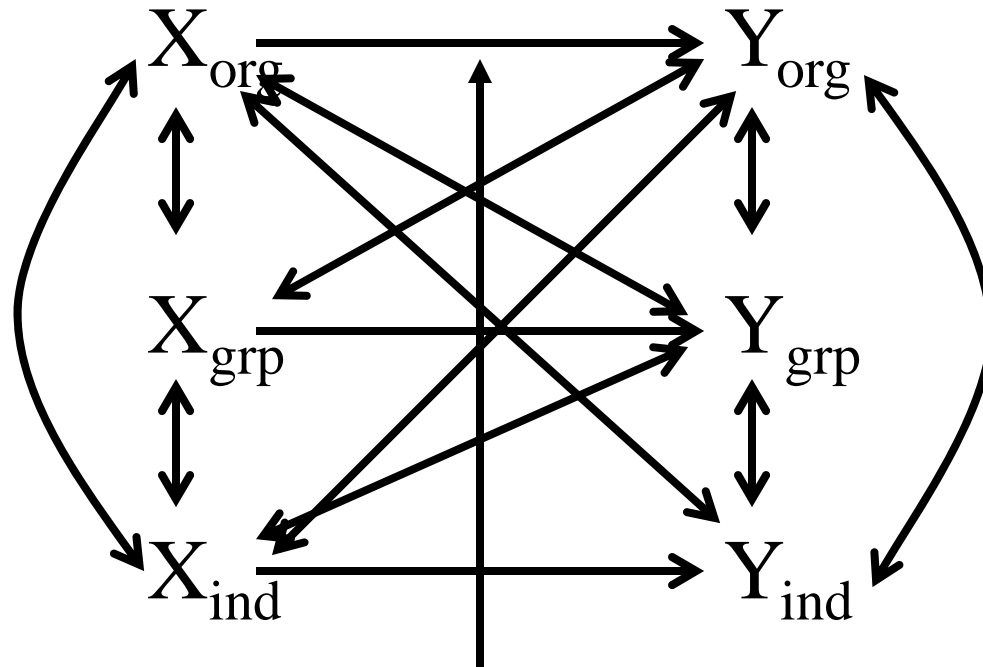
$$X_{\text{grp}} \longrightarrow Y_{\text{grp}}$$

$$X_{\text{ind}} \longrightarrow Y_{\text{ind}}$$

X independent variable

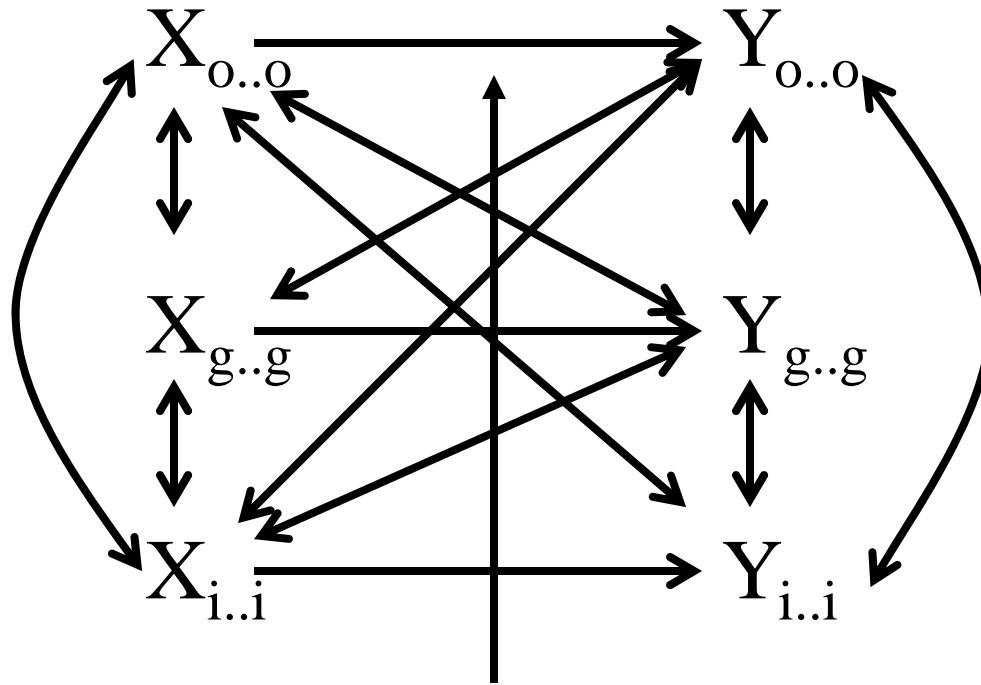
Y dependent variable

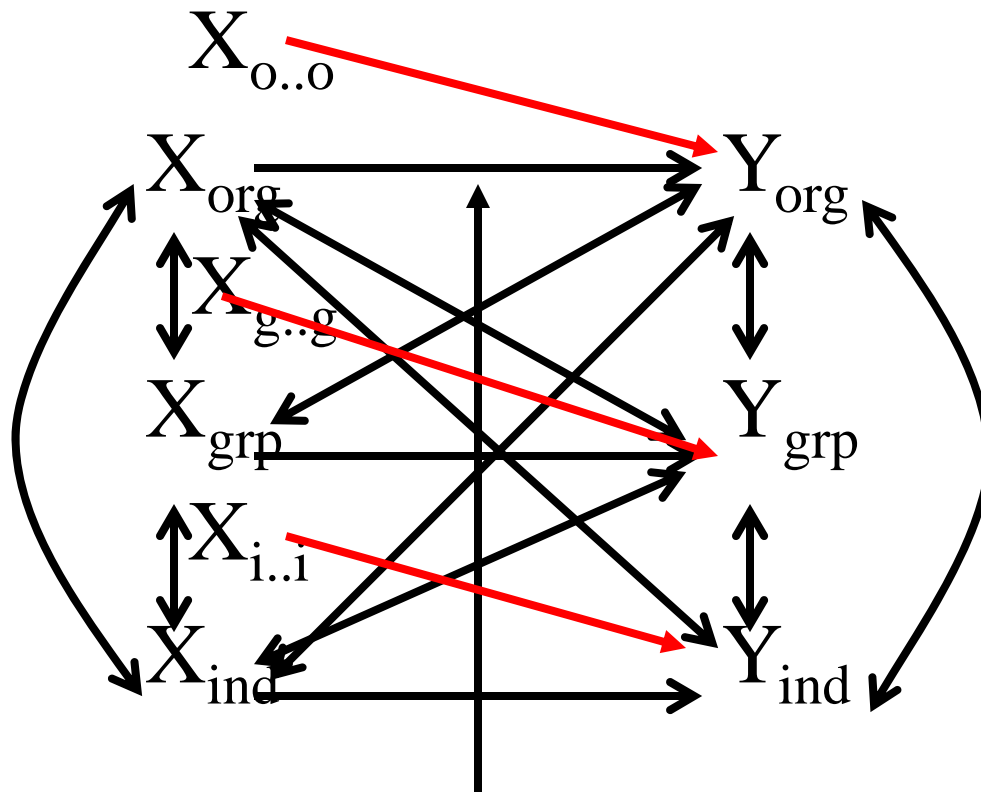
# Multi-level Management Research



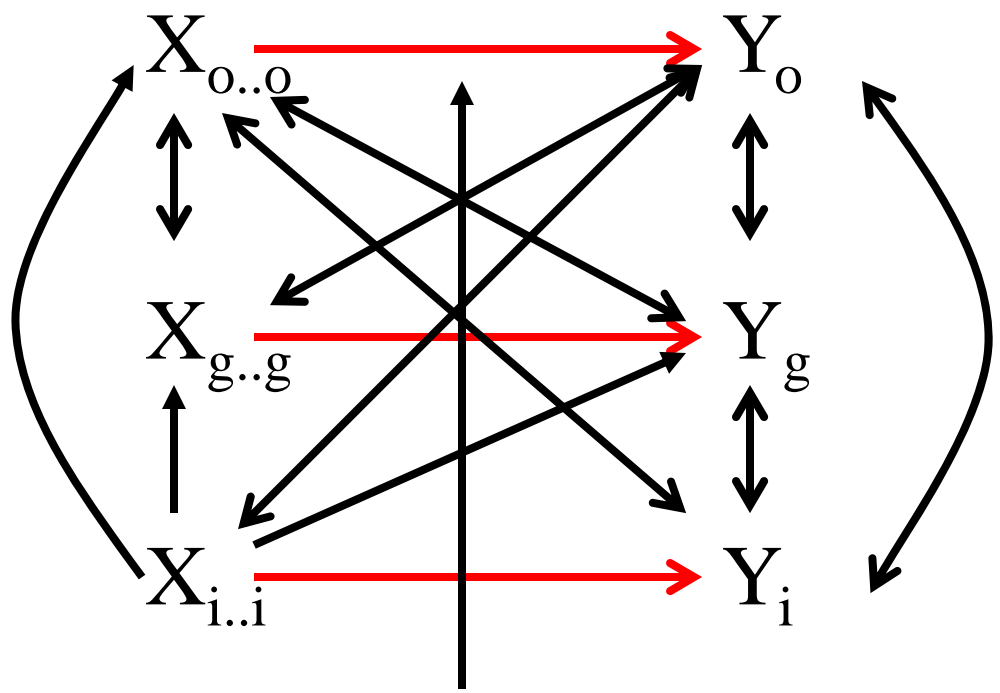
Interaction Effects

# Multi-level Network Research





Interaction Effects

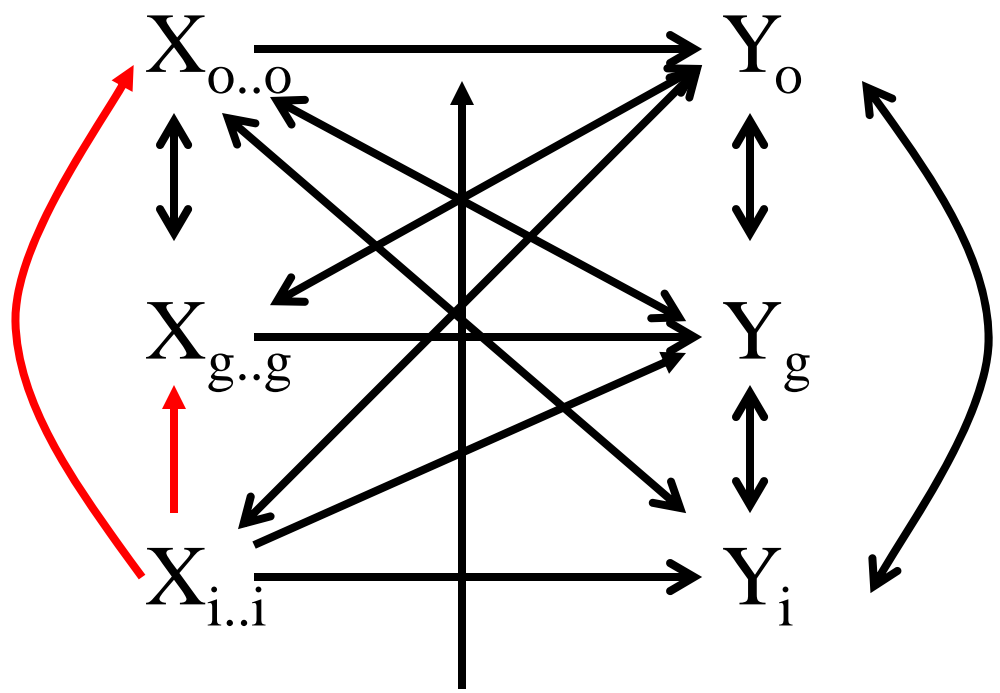


# Isomorphisms

- E.g., Burt - structural holes; Coleman - closure; Grannovetter
- Kilduff & Krackhardt 1994 “basking”  
Podolny 2001 “prisms”
- What can macro network researchers learn from micro network researchers, and vice versa?

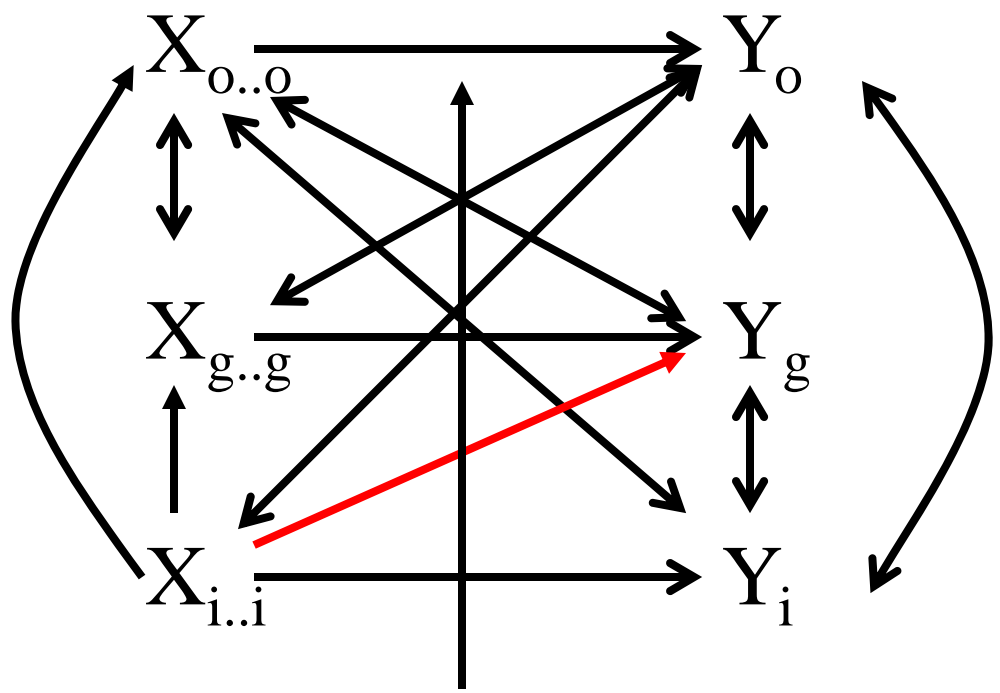
# Isomorphisms

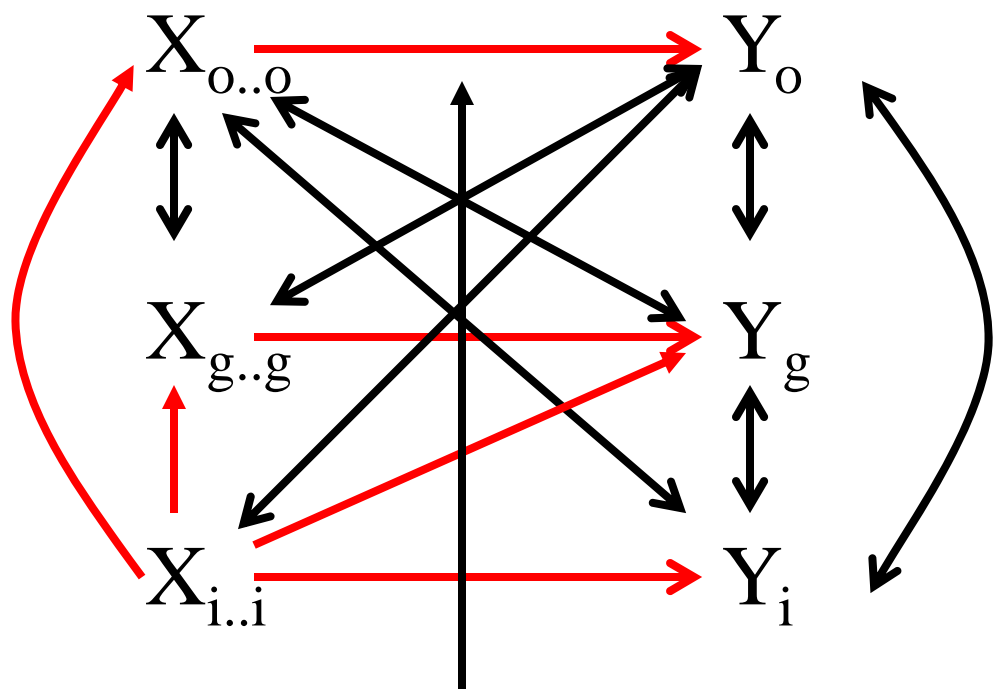
- A node is a node is a node...  
Or is it? Are nodes at different levels fundamentally different?
- Are the mechanisms at different levels the same? Or, fundamentally different?



# Composition

- Breiger – the duality of persons and groups.  
When two people interact, they not only represent themselves but also any groups that they are members of. Individual interaction is group interaction.
- Or is it?





# Interactions

- How do characteristics of nodes interact with networks to predict outcomes.

Networks provide the opportunities and constraints, but what nodes take advantage?

- How do networks at different levels interact?  
E.g., Central individuals in centralized group structures? Or, central individuals in central groups?