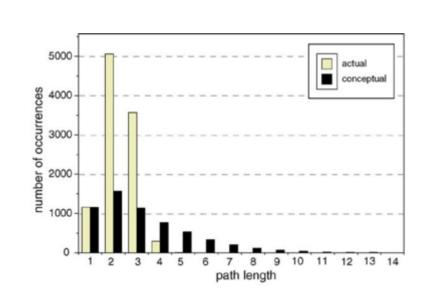
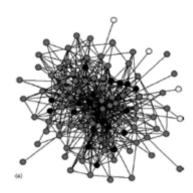
## How Badly do They Fail?

- Map social networks within a telecom firm
  - Compute actual geodesic distances between all pairs of nodes
- Ask the employees to enact an internal "small world" experiment
  - Compare efficiency of "conceptual" paths to actual geodesics





- How well did the "conceptual" paths do?
  - $\sim 50\%$  longer
  - Only 32% were "accurate"
  - Chose wrong next step ½ the time