Hawthorne Studies

Bank Wiring Room
Western Electric Plant
1920s & 1930s
Background / Context

- Rationalism of the enlightenment
- Protestantism
- Bureaucracy
- Scientific Management (Taylor, Fayol, etc)
Hawthorne Studies

- Illumination phase
- Relay assembly test room
- Bank Wiring room
Illumination Study

- Effect of light levels on worker productivity
- Test and control groups
  - Light stays same in control group
  - Light levels varied in test group
- Increases in lighting led to increased productivity
  - In both groups!
- Then reduced light below control group
  - Productivity went up! Especially in test grp
- Reduced light down to moonlit night – productivity held
Relay Assembly Test Room

- 5 year study on small sample of women separated from rest
- Varied rest pauses, length of work day, length of work week, wage incentives, supervisory practices
- Results same as lighting – productivity kept improving
- Two principles at work:
  - Experimenter effect
  - Workers became a group
- Other lessons
  - It is the meaning of environmental effects that affects productivity, and meaning is socially mediated
  - Economic rationality not primary
    - Example of the Worker transfer request
Bank Wiring Room

• Observer placed in back of room for several months
  – Took notes on all events, all interactions, got to know the men

• Quickly found elaborate social structure
  – Not necessarily based on formal org
The employees

<table>
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<th>Operator</th>
<th>Age</th>
<th>Birthplace</th>
<th>Nationality</th>
<th>Marital Status</th>
<th>Education</th>
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Bank Wiring Room

Figure 34
Diagram of Observation Room Showing Wiremen's Positions (A & B)
Game Playing Relations

Figure 39
Participation in Games
Fighting over the windows

Figure 40
Participation in Controversies about Windows
Job trading

Figure 41
Participation in Job Trading

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Helping

Figure 42
Participation in Helping
Friendships

Figure 43
Friendships
Group Structure

Figure 45
The Internal Organization of the Group

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Findings

• Subgroup and status structure
  – Front vs back of room cliques
  – Front had more status
    • New people added by mgmt to back of room
  – Wiremen more status than soldermen
    • Outsiders like delivery men were lower status
    • Inspectors were higher class, but excluded

• Helping ties had to do with popularity, not competence
  – W3 most helped but was the most competent
Subgroups & Norms

• Norms
  – Mustn’t be a rate-buster
    • Not economically rational
  – Mustn’t be a chiseler
  – Mustn’t be a squealer
    • Mgmt is the enemy
  – Mustn’t be officious – be a regular guy

• Source of group power is ostracism

• Through group cohesion, could resist change
  – E.g. in rates; like a union

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Groups

• Have internal structures of subgrouping and status
• Group social system is only partially related to formal organizational elements
• Workers need all needs satisfied at work, not just economic
  – Groups provide total ecology of resources
    • Habitats for humanity