Background

- CSCW grew from discontent with single user HCI methods applied to multi-user technologies and settings
- Focus on
  - Workplace activity
  - Understanding nature of collaborative tasks
  - Co-evolution of technologies and communities
- Early apps
  - CAD, computer integrated manufacturing, computer aided software engineering, office automation

What is CSCW?

- Work is a social activity
  - People and their activities are integral to design of technology
- Workers may have social proximity despite physical/temporal distance.
  - The water cooler effect.

CSCW focuses on people working with others

Related Fields

- Behavioural Science
  - Social psychology
  - Organizational science
  - Anthropology
  - Sociology
- Computer Science
  - Distributed computing
  - Networking
  - User interface/visualization
  - Mobile & wireless
- Telecommunications
  - Telephony
  - Video

Related methods

- User Centered Design
  - Focus on user at the interface
- Management Studies
  - Focus on decision making
- Contextual Analysis and Design
  - Interviews in work settings
- Participatory Design
  - Have the user be a designer
- Anthropology/Ethnography
  - Long term study of groups/organizations
Face to Face communication

- Personal Space
- Eye contact and gaze
  - Can convey interest, confusion, boredom
- Gestures and body language
- Back channels, confirmation, interruption
  - Back channels = nods, shrugs, small noises
- Turn Taking
  - Ums, ahhs, pauses
- What happens when these channels are unavailable?

Face to Face vs CMI

Beyond Being There

- What are some advantages of computer mediated collaboration over face to face?

Dimensions of Cooperation

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<thead>
<tr>
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<tbody>
<tr>
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<td>Post-it note</td>
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<td>Letter</td>
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Activity Spectrum

- Awareness
- Shared Experience
- Social Activities
- Informal Interactions
- Locating Colleagues
- Office Sharing
- Meetings
- Focused work tasks

- Loosely coupled activity
- Highly interactive activity

Organizational Issues

- Who benefits?
- Free rider problem
- Critical mass
- Changing power structures

Other issues

- Reciprocity / Symmetry
  - If you do work for a system, you should get some benefit
- Fitting in with organizational structure and values
- Flexibility
- Cost
  - Setup
  - Maintenance

Granularity

- Large
- Small
- Network system with locking
- Chunk size
- Update
- Frequent
- Infrequent

Groupware systems

- Email
- Videoconferencing
- Lotus Notes
- Bulletin Boards
- Google Documents
- ...
**Videoconferencing**

- Where does it fit?

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- Why isn’t it more popular?

**Videoconferencing**

- What are the difficulties?
- How has it failed?
- How has it succeeded?
- How could it be improved?

- Clearboard/Teamworkstation (Ishii et al)
- VideoWhiteboard (Tang et al)