

# CMC - CSCW Applications overview

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# Shared editors

*Examples: Shredit, Aspect*

Several users can access the same document at the same time

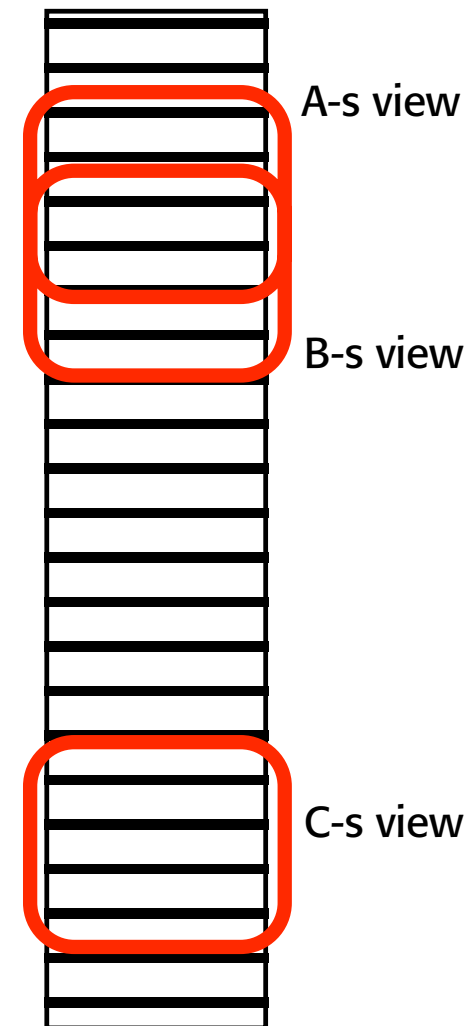
Any change made by any user is immediately shown on the screens of other members

Members need not look at the same window at the same time

Advantage: Flexible, does not restrict usage patterns

Compare to whiteboard, but everyone can write at the same time

Stages with joint viewing and stages with split writing tasks



# Simultaneous meeting support

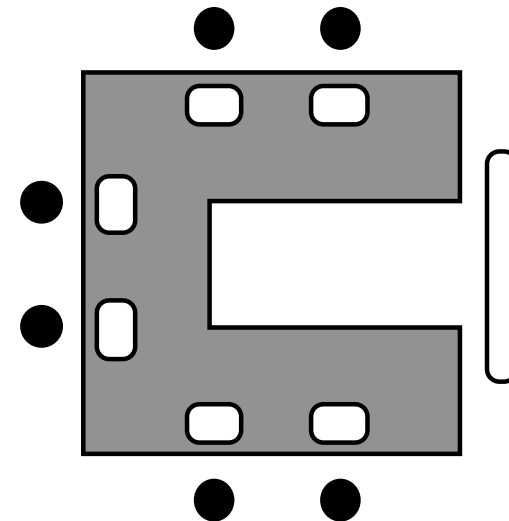
**Examples Visionquest, Ventana, TeamFocus etc.**

## **Typical activity stages**

- Brainstorming
- Sorting and organizing
- Discussion of controversial issues
- Ranking
- Selecting
- Reporting

## **Effects and functions**

- Cover subjects more fully
- Anonymity causes equality
  - But may make system dull*
- Better documentation produced
- Facilitator/moderator important
  - Might approve ideas before making them public*



# Ventana

## Basic tools

Electronic brainstorming

Voting

Topic commenter (participants give comments on topics given by coordinator)

Alternative evaluation

Policy formation (final document production)

Briefcase (collection of small tools, incl. mood meter and quick vote)

Marketed by IBM

Too difficult to switch between tools

Tools too little coordinated

## Additional tools

Stakeholder identification (who will be affected etc.)

Group outliner (Hierarchical structure)

Group writer (Joint editing)

Group matrix (relationship between categories)

Group dictionary (define concepts)

Questionnaire

Market and critique

# Desktop Video Privacy Issues

Background: Everyone has a workplace with a computer screen, a video monitor and a video camera

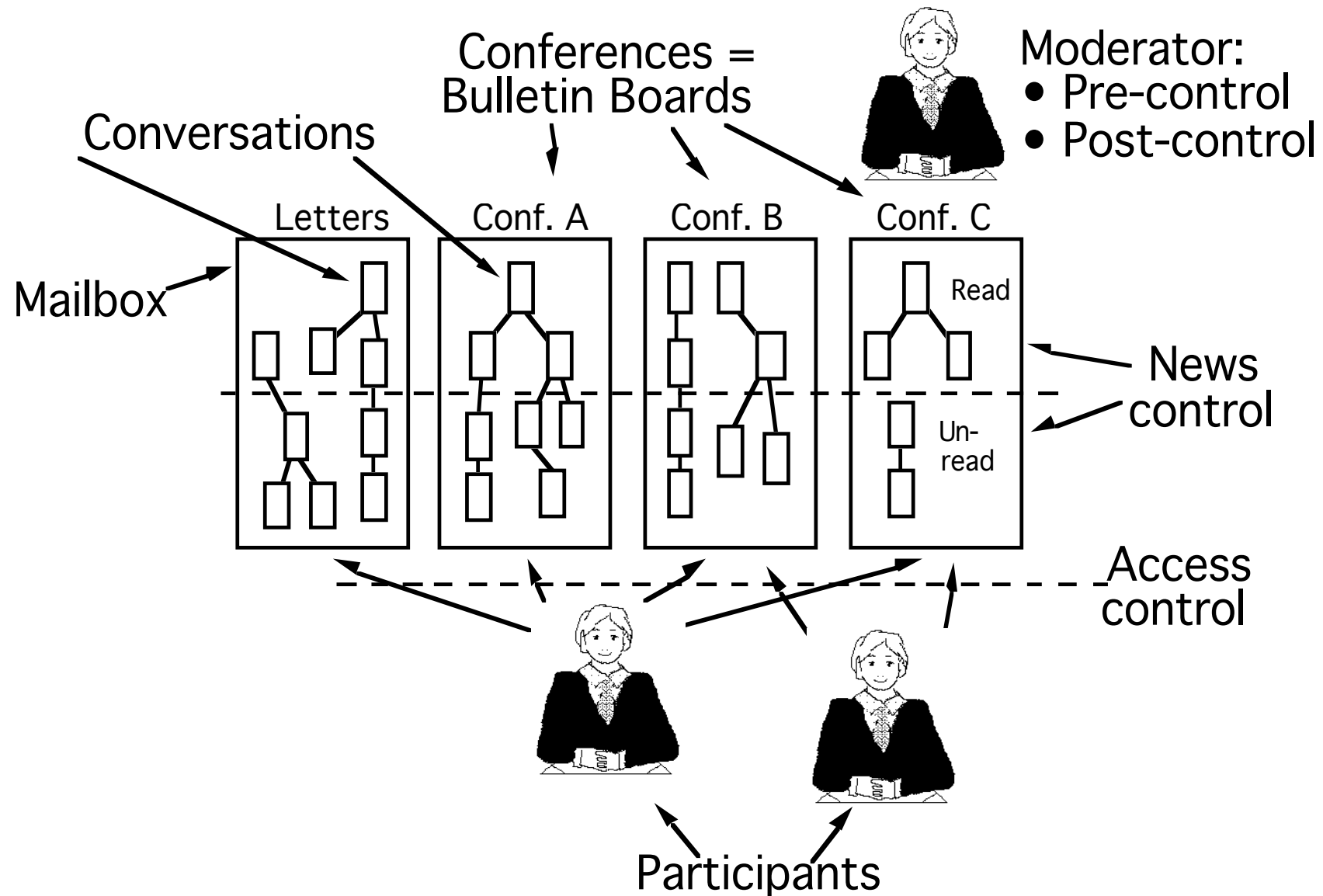
Problems: Who is watching me?

If I see you, can you see me?

Is anyone listening to what I am saying?

Am I aware when someone is watching me?

# Forum systems (non-synchronous)



# Forum systems data objects

Forums=groups=conferences=activities=news groups=applications

Open (public)

Closed (private)

Open to a restricted set

Write-protected

Can non-members submit?

Are anonymous and pseudonymous contributions allowed

Users

Contributions

# Basic forum system functionality

Submit contributions to forum name

Remove or modify your own contribution

Sending one contribution to more than one forum

and not forcing recipients to read it more than once

Subscribe to open (public) forums

Moderator can add members to closed (private) forums

Members can unsubscribe from forums

Members can retrieve old and new contributions

even those written before the member joined the forum

various retrieval functions may be available

Read contributions in a structured way

By conference, by conversation etc.

Ability to skip part of the discussion

By time, by forum, by conversation

Moderator can remove unsuitable contributions, or move them to a more suitable conference

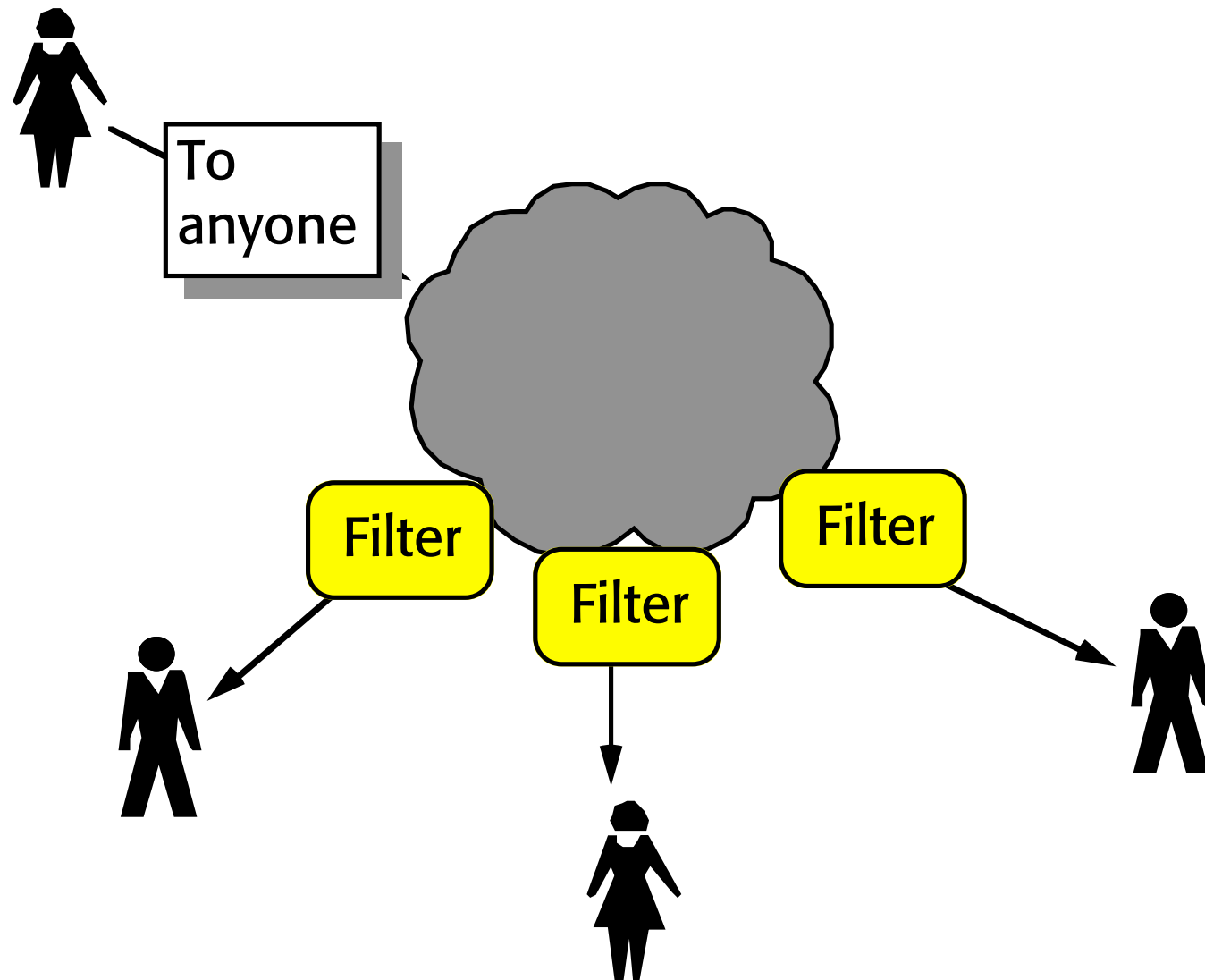
Ability to start new conferences, and to split and merge existing conferences

In pre-moderated forums, contributions must be approved in advance by the moderator

E-mail interface



# The Information Lens



Also partly formatted documents

# Lotus Notes

Conference system

Data base system

Conference = file

Formatted entries

Adaptable view

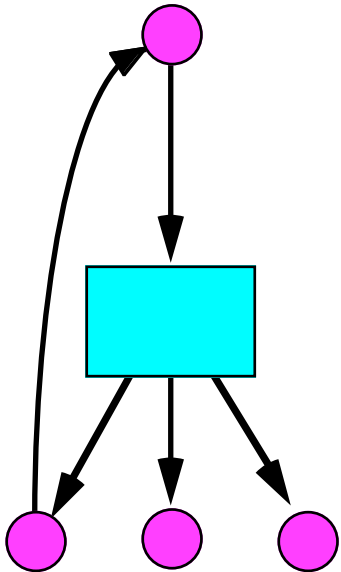


Per forum

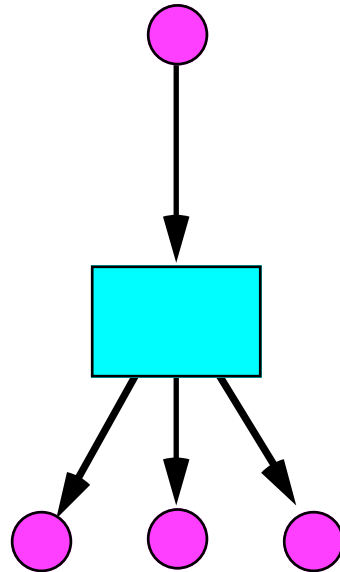
Text and drawings

Replicated data base

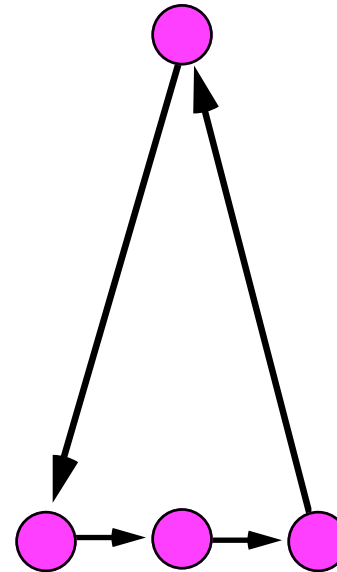
# Help desk



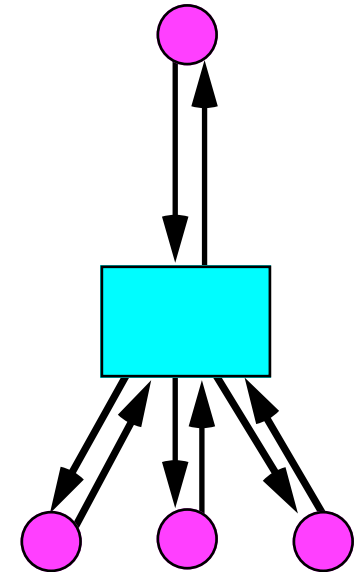
# Mailing list



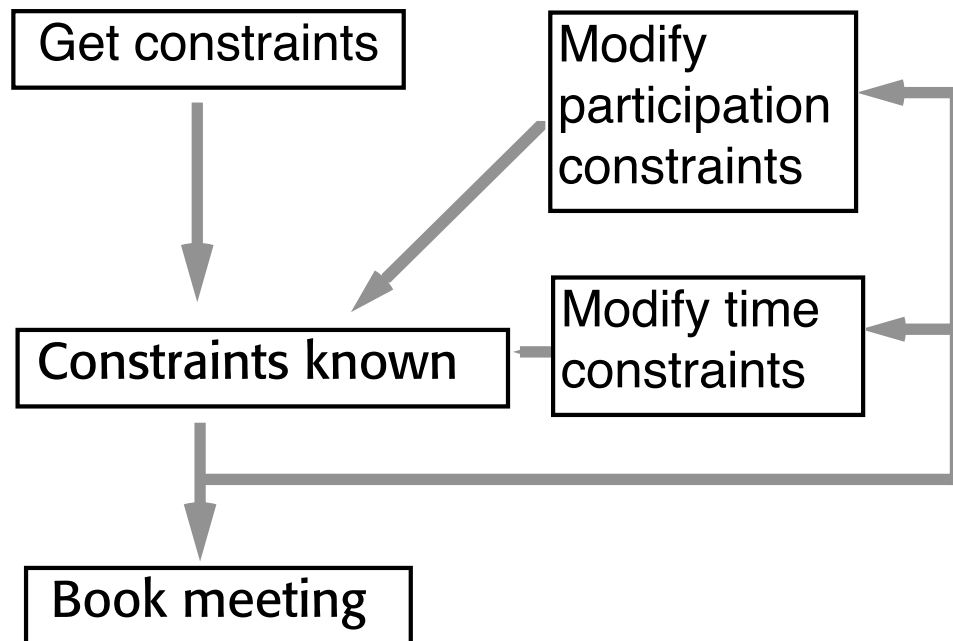
# Circulation list



# Voting



# Scheduling meetings example:



Ask all participants to indicate preferred/inconvenient times.

Find a meeting time suitable to all and book a meeting room.

If no meeting time suits all, ask participants to relax their requirements.

If still no meeting time suits all, find meeting time which suits most or the most important participants.

# Additional special cases

Important and less important participants.

Priority meeting: May reschedule other meetings.

Need for more than one meeting room.

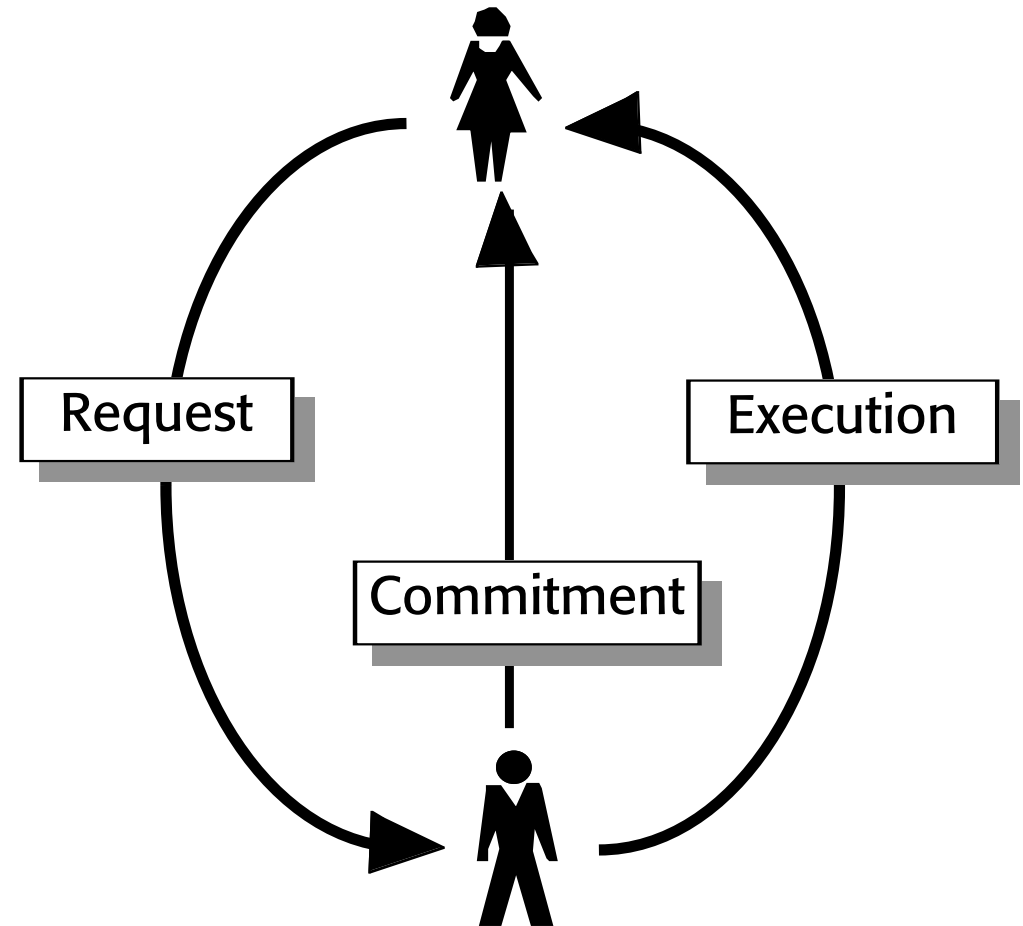
## Objection

This idea of applying computer science methods to social modelling will lead to bankruptcy. Even in a very simple case, the complexity of all the special conditions will be too large. People will not always be able to specify all the conditions. Listen to results from social and organizational research and give up the idea of CS modelling of tasks.

# The coordinator

## Semantic actions:

- Request
- Commitment
- Execution
- Question
- Answer



## Too controlling or a useful aid?

(Fernando Flores: Management and Communication in the Office of the Future, Logonet, Berkeley)

(R.P. Carasik, A case study of CSCW in a dispersed organization. CHI'88 proceedings, ACM-0-89791-265-9---788/004/0061)

# **Lucy Suchman: Do categories have Politics? The Language/Action Perspective Reconsidered**

Categorisation: The organisation of people or their activities into a more or less simple typology.

Categorisation is politics. Categorisation is a tool to impose your view on other people, and forcing other people into roles prescribed by certain people on other people.

Speech act theory categorisation is a tool to enforce a simplistic categorisation on people and their actions.

Compare with military discipline: A tool for converting humans into machines, controllable, efficient, reliable, not threatening to authorities.

# JP-s comment on 'The coordinator' controversy:

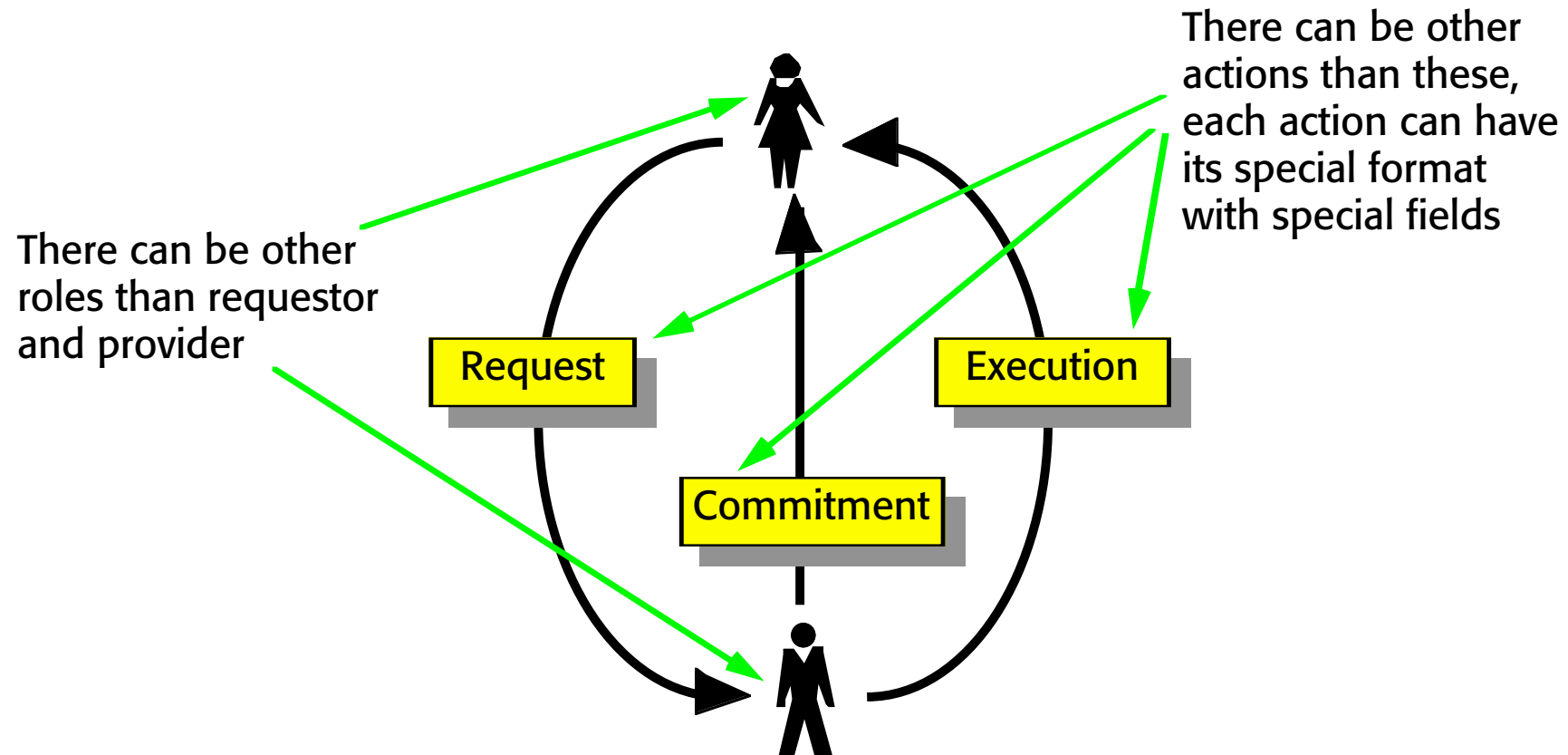
It is a well-known fact that decision making and achieving agreement is more difficult in asynchronous text communication. Thus, tools to make this easier would be useful.

Any successful different time-different place systems must include e-mail which is at least as good as other e-mail systems, so that people can use the new system as a replacement for e-mail with added functionality.

Speech act theory provides one way of structuring interactions which is suitable in some cases. But it is better to allow users to create their own structuring as required by their tasks. Example: Instead of request–commitment, some tasks are better aided by problem-solution-pro-con-structuring.



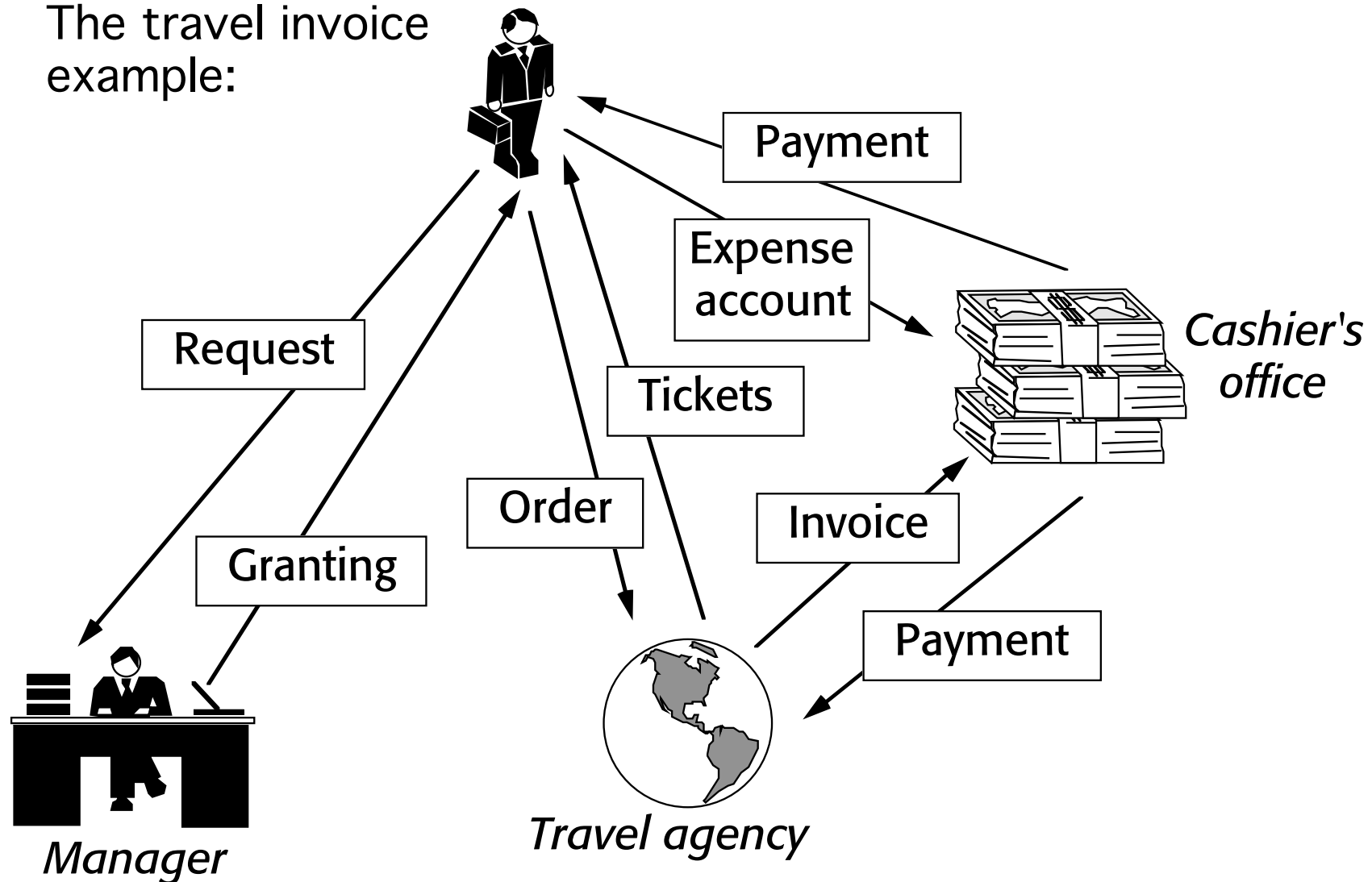
# Workflow ("Ärendehantering") is more general than the Coordinator



Examples of work flows with special actors: Travel expense, patent handling, etc.

# Work Flow applications

The travel invoice example:



# Medical Informational Pages Production

Medical expert writes answer in Swedish

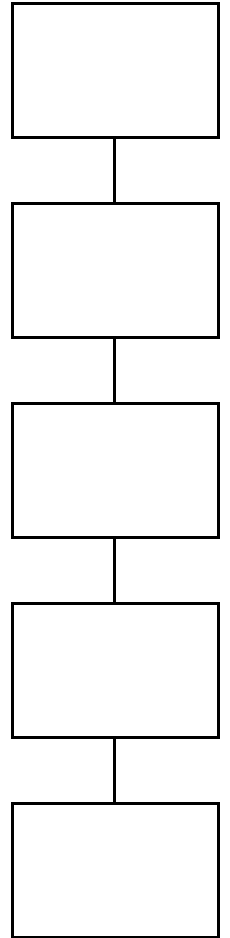
Translator translates to English

Medical expert checks the translation

English-language medical experts checks the translation

Medical expert publishes the page


Other examples: Rewriting of text from medical expert by journalist




# User interface example

 [Sheldon Litt](#)

## Review wanted :

↪ [Re: Always Tired](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 10:38

↪ [Re: help](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 10:31


↪ [Re: Stay With Or Leave Him ??????????](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 10:29

↪ [Re:](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 10:23

↪ [Re: relationships, love](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 10:04

↪ [Re: Hypnagogic Hallucinations](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 09:52

↪ [Re: failed relationship](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 16 Jan 09:48

↪ [Re: My boyfriend and I love each other but just can't take it anymore](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 15 Jan 20:31

↪ [Re:](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 15 Jan 20:26

↪ [Re: homeopathic drugs for schizophrenia](#)  , [Gunborg Palme, Leg. psykolog, Leg. psykoterapeut, Telefon 08-664 60 92](#), 15 Jan 20:19

# Requirement on good work-flow application systems

1. Simple support for all state transitions, both normal *and* non-normal
2. Easy to define revised work-flow state diagram
3. Easy to see the status of each work item
4. Easy to know which items a certain person has pending
5. Support for more than one person doing certain state transitions

# Content Management Systems

Manage informational objects with multiple attributes and in multiple languages.

Export to web pages in different formats, static and/or dynamic, web media, printed media and other formats.

Simplify updating of existing information.

Support workflow where needed.

Split the tasks of layout and content production between different people, so that each can do what they are best at. Content experts need less technical knowledge than without content management systems:

- Different kinds of tasks
- Managed by different people
- Change independently of each other
- Easier to reuse both content and layout

# Content Management Systems concepts

- Personalisation
- Localisation
- Workflow
- Metadata

## General techniques

- Open-source or commercial products (hundreds of each)
- Active Server Pages (ASP) and ASP.NET
- Java Server Pages (JSP)
- WebDAV
- XML

# Related products

- Document Management Systems
- Enterprise Content Management Systems
- Web log or blog
- Knowledge Management
- Data Mining



# Components of Content Management Systems

Data repository

User interface

Editorial tools

Workflow scheme

Output utilities

# Example: The Web4Health Content Management System

## Main objects:

Informational texts

## Main attributes:

Unique id (same in all languages)

Title

Question

Body

Author

Indexing

Summary

## Additional objects

Synonym lists

Ignore word lists

Export templates

Etc.

## Export formats

For reading

For printing

Sources

**Go to:**[All forums](#)[Web4Health FAQs](#)[FAQ production](#)[Sexual Problems Range](#)[Who are present](#)[Show History](#)[Administrate Sexual Problems Range](#)[Start chatting](#)

## Modify: Sexual Problems Range

Language: Title: [i](#) [Help](#)Question(s): [i](#)Identifier: [i](#) Date-created: [i](#) Date-last-modified: [i](#) Body: [i](#)

In the Netherlands, an estimated two percent each year go to their general practitioner with questions and complaints about their sexuality. Half of these people have sexual problems. The extent to which the general practitioner and the gynaecologist are open to questions and complaints about sexual issues determines the number of reported complaints. In mental welfare many patients also have problems in the sexual field. Among the patients of the regional institutes for mental welfare (in Dutch "RIAGG") an estimated two-thirds of them suffer from sexual problems.

**Author:** ⓘ

Wendy Moelker, psychologist in charge of Emergis, Goes, the Netherlands.

**Sources, references:** ⓘ

Spector, I.P., Carey, M.P.,. Incidence and prevalence of the sexual dysfunctions: A critical review of the empirical literature. Arch sexual Behav 1990;19:389-408.

<p>

Diemont, W.L. e.a. Prevalence of sexual problems in a Dutch population.

Abstracts van de International Academy of Sex Research, Rotterdam, 1996.

</p>

<p>

Slob, A.K., Vink, C.W., Moors, J.P.C. en Everaerd, W. (1998) Leerboek

**Required:** ⓘ

\$sex ; \$disorder \$bad ; \$incidence

**Priority:** ⓘ

\$incidence

**Optional:** ⓘ

unwell\* troubl\* agoni\* epidemiol\* often suffer\*

<a href="#">Home</a>	<a href="#">Search</a>	<a href="#">Categories</a>	<a href="#">Discussion</a>	<a href="#">Ask the Expert</a>	<a href="#">Unseen</a>	<a href="#">Login/out</a>	<a href="#">My account</a>
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Two percent each year go to their doctor because of sexual problems.



Independent  
medical  
expert  
answers

Intelligent natural language question-answering  
in the area of psychology and psychiatry.  
Ask a simple question [Info](#)



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Written by: Wendy Moelker, psychologist in charge of Emergis, Goes, the Netherlands.

First version: 22 Jul 2003. Latest revision: 03 Sep 2003.

### Question(s):

How often do sexual problems occur?

### Answer:

In the Netherlands, an estimated two percent each year go to their general practitioner with questions and complaints about their sexuality. Half of these people have sexual problems. The extent to which the general practitioner and the gynaecologist are open to questions and complaints about sexual issues determines the number of reported complaints. In mental welfare many patients also have problems in the sexual field. Among the patients of the regional institutes for mental welfare (in Dutch "RIAGG") an estimated two-thirds of them suffer from sexual problems.



[Sources, references](#)

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# Anonymity server

