

Introduktion til interaktionsdesign 2009

Lektion 12



The designer as facilitator of social interaction

Læringsmål

At forklare etnografisk tilgang og social computing i Dourish' embodied interaction tilgang

At få en analytisk og teoretisk overbygning på etnografiske inspirerede metoder

At relatere til den Skandinaviske tradition

Indhold

Dourish' framework (gentaget)

Social computing

10:45 Pause

Den Skandinaviske tradition

Kort om kursusevaluering

Kort om eftermiddagens præsentationer

11:50 Slut

Dourish igen: Two Recent Trends

“Tangible computing”

- physical interaction

- augmented environments

- computation as part of the physical world

“Social computing”

- using social understandings of interaction

- enhancing interaction with computation

Social Computing

Incorporating sociological understandings
context: organisational, cultural, etc.

Sociological methods and reasoning
In design, development and evaluation
Sociologists and technologists working
together in the design process

Why study structure and function of society?
Important in understanding of *context*



Ethnography and sociology

The Chicago School:
Studied urban cultures / subcultures
Working practices
CSCW (1986: Gerson & Star: office work)



Sociology in HCI

Cognitive psychology

-> social psychology (individual perspective)

Understanding what goes on when working with computer -> understanding reflected back on design

Social psychology: Affect of individual thoughts and emotions in interaction with others



“From Human Factors to Human Actors” – Bannon (1991)

Broaden the scope: context of the activity that the user was engaged in

Evaluations should not be de-contextualized (take place in labs, performance evaluation)

Distinction between *work processes* and *work practice*

Practice is always dynamic

the design of interaction

the improvised sequential organisation of conduct (rather than social trends)



Social Computing - example



Ethnography in Air Traffic Control

- focus on the work and the setting of the work

- Location important

- two roles of flight strips

 - a representational role

 - a coordinational role

- making work visible

 - “cocking out” the strip

 - public availability of action over flight strips

 - strips as a record of history

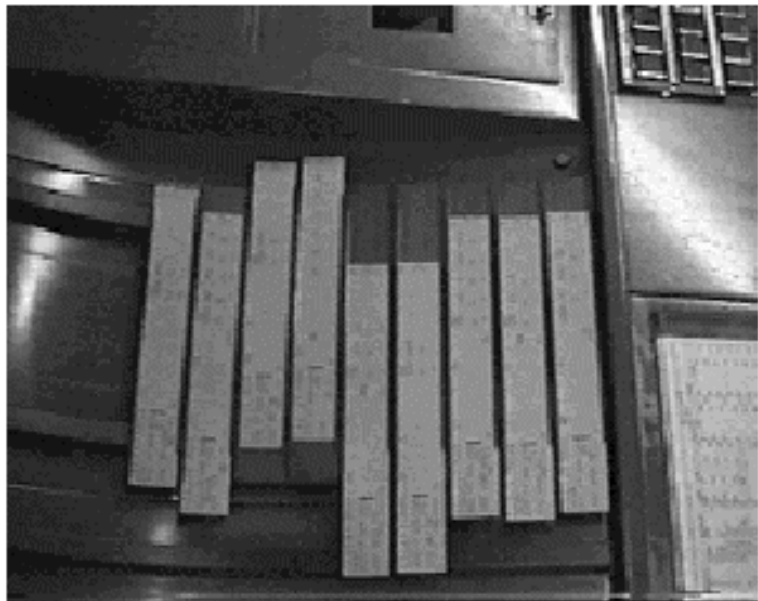
- work and the setting are intertwined

- > embodied performance of physical activity

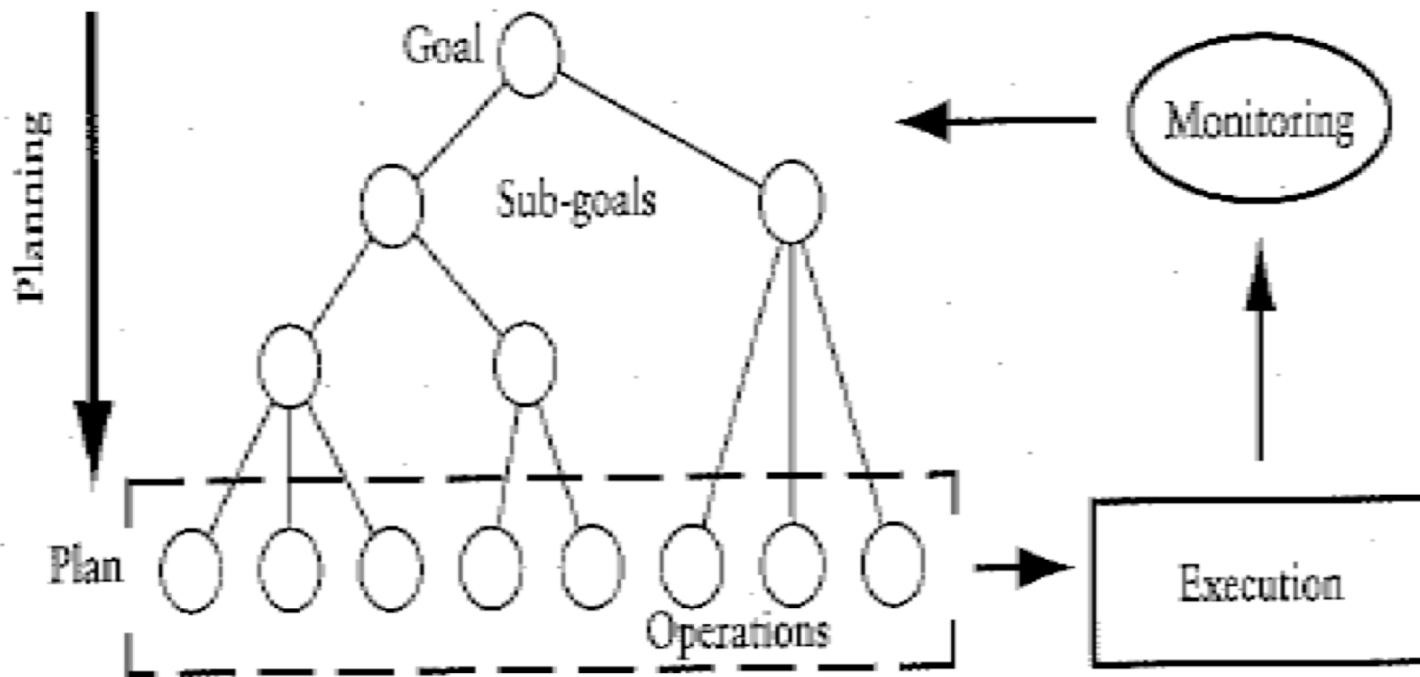
- Other examples?

Air Traffic Control – flight strips

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Description of some procedure



What's wrong?

An analytic perspective – Lucy Suchman

Plans and situated Actions (1987+2007)

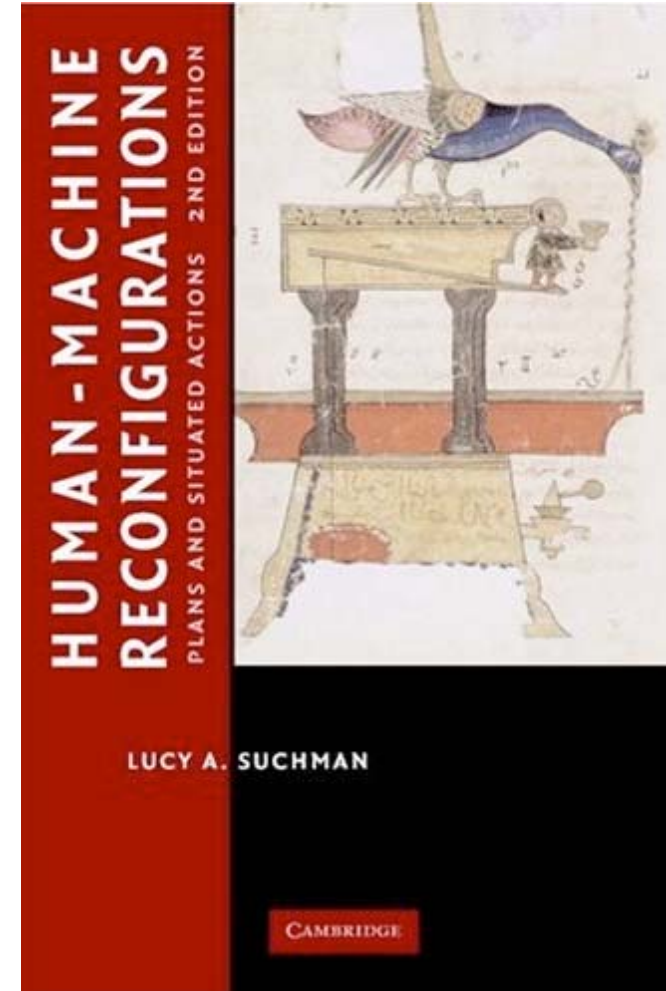
Planning paradigm (p. 72) in AI vs
situatedness:

Active interpretations of the world
formed in response to specific settings
and circumstances

Sequential rather than hierarchical (planned)
organisation of behaviour

From purely empirical to analytic perspective

-> ethnomethodology (sociological position
within HCI)



Ethnomethodology – Garfinkel

Studies in ethnomethodology (1967)

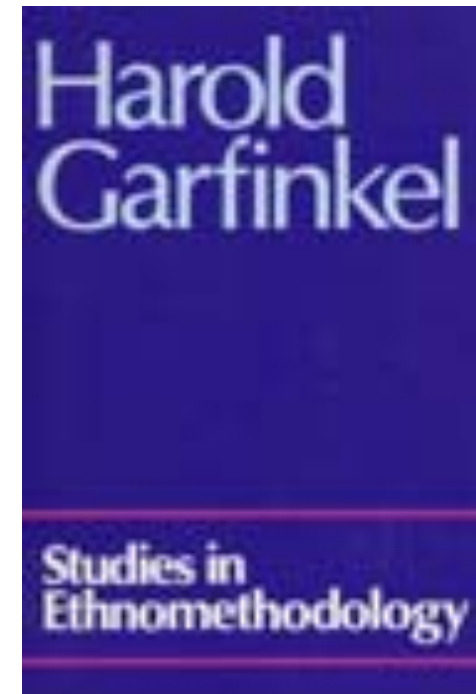
Inspired by phenomenology (experience of everyday world rather than abstract reasoning)

The problem of social order

Finding evidence for the ways in which people achieve orderly social conduct

Emergence of social order

Conversation analysis



“Technomethodology”

Dourish & Graham Button (1998)

Combining areas of both technical and
ethnomethodological issues

Accountability

Abstraction

Accountability and abstraction I

accountability in ethnomethodology

abstraction in software design

modularity and information hiding

abstraction in user interface design

hiding information

“accounts” are representations that systems offer of their own activity

A good idea to build systems that tell you what they are doing...? (Mac / Windows OS)

Accountability

... being a competent member of some setting is being able to engage in action in ways that are recognizable to other members ...

Abstraction

... all software based systems are based on abstractions. Software / interfaces hide implementation (formalization)

Accountability in interface abstractions

A program is “performance” of the representation

Abstractions II: Space, place and locales

Spatial models and metaphors

In interactive and collaborative systems

Metaphors we live by (Lakoff & Johnson 1980)

Distinction between space and place

Space: physical properties, how people and artifacts are configured in a setting (ex lecture room, stage)

Place: the way that social understanding convey an appropriate behavioral framing for an environment

From structure to activity (from plan to situatedness)

Place: Emergence of practice (vs work processes)

Place cannot be designed, only designed for

Community of practice: practice that constitute a place (ex Roskilde festival)

Features of Social Computing - summary

Beyond single-user interactions

users act in cultural, social, organisational contexts

Orientation towards settings

where and how work gets done

Focus on practices

A Common Theme – embodied interaction

Exploiting human skills and experiences

Direct participation in the world

- a world of physical and social reality
- unfolding in time and space

Focussing on context

- settings in which action unfolds
- how action is related to those settings



Pause

Den Skandinaviske tradition

... I forhold til Dourish og Interaktionsdesign
-> Participatory design

Yngve Sundblad:

From Utopia 1981 to Utopia 2008

Rødder i Norge i 70'erne

Pelle Ehn: DEMOS, DUE, UTOPIA

UTOPIA, Pelle Ehn 1981-1986

KLIV, Hillgren & Björgvinsson 2004-2008

Fra arbejdspladsteknologi
til hverdagslivsteknologi

Fra mainframe til små håndholdte
computere



Kristen Nygaard, 1926-2002,
Simula, NJMF, EU-modstand

UTOPIA folket

Typografiske fagforbund

Forskere

Radikal tilgang til deltagelse

Opkvalificering: Opruste typografer til at beherske nye værktøjer

- Gensidige læreprocesser (mellem typografer og forskere)
- Fælles studieture (Xerox Parc, Stanford – Winograd)
- Kravspecifikation til nyt avisproduktionssystem
- Pilotinstallation på Aftonbladet
- Resultatspredning i Skandinavien



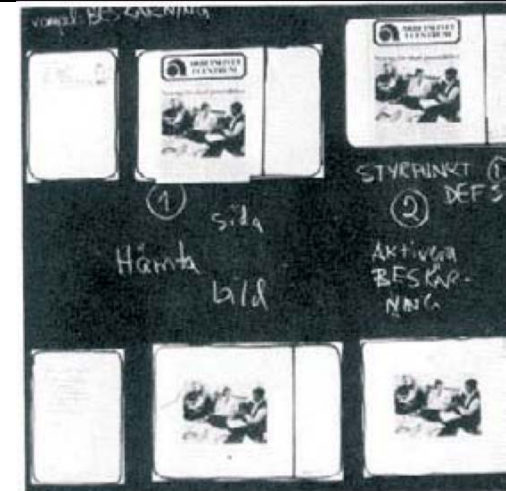
Metoder og resultater

Dias og OH-mockups med billedsekvenser
(scenarier)

Mockups af mus, printer, computer, skærm i pap,
træ, papir og andre low-tech materialer

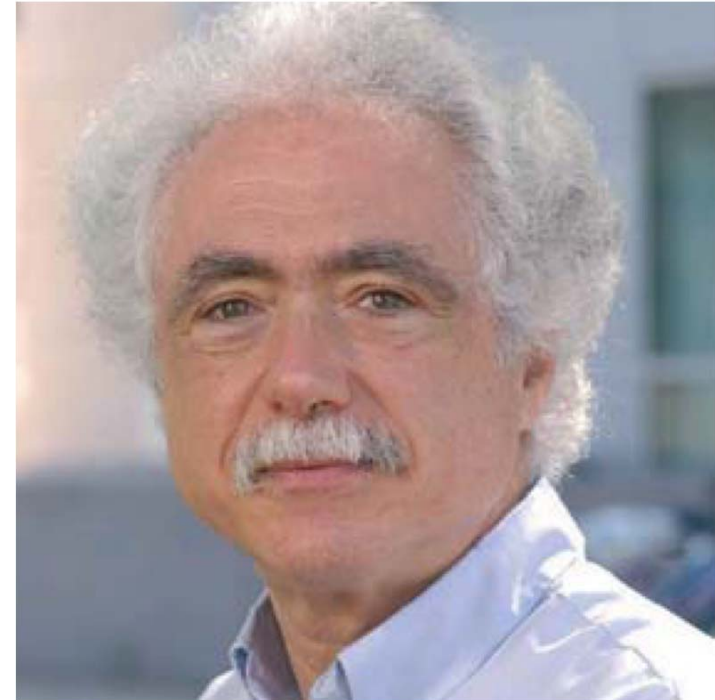
Grafisk arbejdsstation til udvikling af digitale
prototyper

Værktøjskasse med kort til at eksperimentere
med arbejdets organisering



UTOPIA indsigter

- Where workers craft technology (dengang blasfemi i lederkredse)
- Setting the stage for design in action (metodisk forløber for interaktionsdesign)
- Playing the language game of design and use (teoretisk forståelse af design med brugere / Wittgenstein)
- Bringing design to software (hvordan designtænkning kan bringes ind i softwareudvikling)



Terry Winograd

UTOPIA 2008: KLIV

Teknologien har forandret sig, men stadig traditionelle arbejdspladser

Digital teknologi på arbejdspladsen i dag

- Stadig dårlige digitale værktøjer

KLIV (Kontinuerligt Lærende inom Vården)

Hillgren & Björgvinsson, K3, MAS



Brugerdeltagelse i design

Det er vigtigt at have brugeren med gennem hele designprocessen – ikke bare i den afsluttende test

Den Skandinaviske tradition har haft stor indflydelse på de metoder som anvendes inden for interaktionsdesign

Brugerdeltagelse skal ikke anskues fra designerens/forskerens mulighed for at få adgang til brugerne, men hvilke muligheder brugerne har for deltagelse.

Vigtigt at skabe en ramme hvor alle involverede parter har adgang til *meningsfuld* deltagelse

Make use of head, hand and heart ... i alle områder i livet



Afsluttende præsentationer 25/11

12:45-17:00 i Aud2

6 minutter til præsentation

6 minutter til feedback

Ekspertpanel:

Hugo Tietze, Københavns Kommune

Karin Schultz, Sundheds- og idrætskonsulent i ÆldreSagen

Lone Olsen, Design Anthropologist hos Hatch & Bloom A/S,
arbejder med projektet "Motion i ÆldreSagen"

Jon Trier Skakke, informant, gruppe 8

Afsluttende præsentationer 25/11

Præsentationen skal redegøre for:

- konceptets navn
- konceptets grundide, hvordan adresserer det designudfordringen for "Mænd i bevægelse"
- konceptets målgruppe
- konceptets begrænsninger

Præsentationen skal vise/demonstrere:

- en prototype som både adresserer look&feel og role
- konceptets anvendelse i en konkret brugskontekst, herunder interaktionen med prototypen

Afsluttende præsentationer 25/11

12:45 - 13:40: introduktion + gr 1-4

10 minutters pause

13:50 - 14:40: gr 5-8

25 minutters pause

15:05 - 15:55: gr 9-12

10 minutters pause

16:05-17:00: gr 13-16 + afrunding

Test *alt* inden præsentationen, da vi har et stramt program

Præsentationer



Slut.