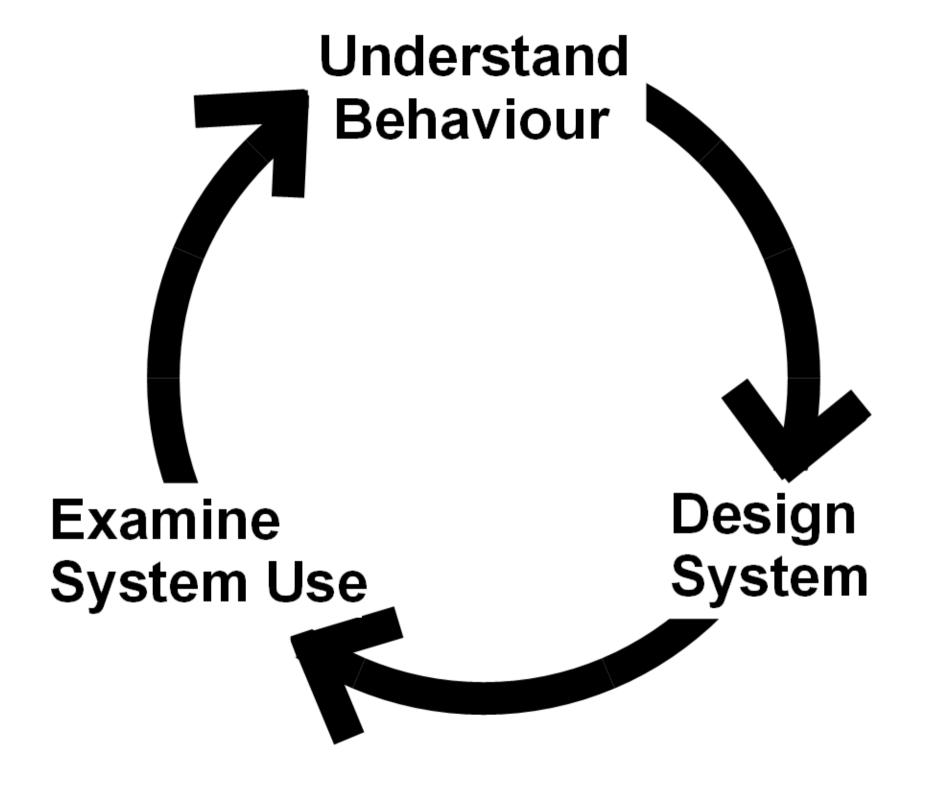
## Methoden empirischer Forschung



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## Aims for today

- Learn about important aspects w.r.t interviews
- Contrast structured, semi-structured and unstructured interviews
- Contrast interviews with surveys
- Understand the relationship between interviews and ethnography
- Learn about interviewing challenges
- Gain practical experience

#### An Introduction to Interviews

A way of getting direct feedback from the user

Direct conversation allows insights, perspectives and data that a survey might miss

Focus Groups

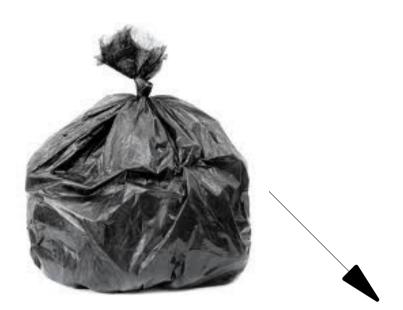
Interviews with multiple people

#### An Introduction to Interviews

Valuable source of insight

#### Lots of challenges

- What you ask
- How you ask
- Who you ask
- All important



## Study



## Strengths

Open ended and exploratory

Similar to ethnography

#### **Flexible**

- Course of the interview can change
- Re-order questions
- Invent new questions on the fly

#### Limitations

- Manage Complexity

  More difficult to perform than surveys
  - Listen, note, direct, elicit information, decide which comments to pursue etc.
  - Focus groups can be even harder

#### Limitations

#### Fewer participants

Restricted by resources

Preparing and Analysing Data is hard and time consuming

 Up to 10 hours per hour to transcribe (Robson, 2002)

How do you separate the good, interesting stuff from poor or useless?

#### Limitations

Similar to surveys

- Subjective
- Rely on memory

How do we get round this?

## Combining with other techniques

Personal Information Management Combine with tours (Malone,

1982)

In-car navigation

with observation (Leshed et al., 2008)

Finding personal information

with a diary study (Teevan et al., 2004)

# Uses of Interviews #1 Initial Exploration

You have just been asked to investigate possibilities for helping people manage digital artifacts of their lives (videos, pictures, photos etc.)

You suspect that existing tools are insufficient, but you want to build a better understanding of what people do and need

## Interviews for initial exploration

New understanding will lead to ideas for tool design

Start with a clean slate

High-level, non-specific questions

- 1. What sort of recordings do you make of personal events? Pictures? Videos? Audio?
- 2. How do you view these recordings? On a computer? On a TV?
- 3. Where do you view them?
- 4. Who do you show them to? When?
- 5. How do you organise these recordings?

- 6. Do you organise recordings? How?
- 7. Do you ever make multiple recordings for a single event? How do you keep these together?
- 8. Do you share these with family or friends? If so, how?
- 9. Have you ever lost track of any particularly valuable photo or video?

- 10. Do you edit photos or video?
- 11. Do distinguish between recordings that you've made and those that were made by family members or others?
- 12. Have you found yourself interested in doing something with your recordings that your tools did not support? If so, what?

## Interviews for initial exploration

Focus on activities not on specific questions of functionality and design

Understand complex and multi-faceted situation

Similar aims to ethnography



cox (his) top right

"This calendar. I write everything in here so that [the children] know what they were doing at various times: they'll know when they lost their teeth (see inset) and when they started speaking, what their first words were, when they first walked and how many steps they walked and things like that [...] everything is documented."

#### **Uses of Interviews**

#2 Requirements gathering

- User opinion and ideas regarding solutions to identified problems
- Understand user goals in a given situation
- How do current tools (if available) support these?
- What do users want that they currently cannot do?
- What would a dream solution look like?

## Back to digital artifacts

Initial interviews led to the idea of building a digital scrapbook where people can combine photos, audio, video, text and other multimedia.

To build such a tool we need to understand what a user might like to do with it. We need to meet their needs

Ask the participant to imagine they were to create a scrapbook for some purpose (based on previous interview scenarios), give them some time to think and then return for an interview.

- 1. What sort of scrapbook are you making? Will it cover one event or many? Who is it for?
- 2. What would you like to put in your scrapbook
- 3. How would you arrange your scrapbook?
- 4. How would your scrapbook be viewed?

- 5. How would you like to link the scrapbook to other people? Would it be interesting to link it to social networking sites etc?
- 6. What might you like to be able to do with this tool?
- Focus on specific features and not on existing tools
- Focus groups are really good for this purpose

#### **Uses of Interviews**

#3 Evaluation and subjective reactions

#### Interviews for evaluation

- Not ideal *in isolation* for evaluation
- Excellent to get feedback for design iterations
  - Information flow
  - interaction style
  - look and feel
  - Use of language
- Validate approach and identify refinements

#### Interviews for evaluation

- 1. Do you find this interface easy to use?
- 2. Do you understand the menus, icons and language? Why?
- 3. Are any parts of the interface particularly useful or helpful?
- 4. How does the interface compare to your existing tool?
- 5. What (if anything) would you change?



Who to interview?

## Asking the right people

- Last time we talked about sampling
- Smaller numbers mean representative sample is hard
- End users are a good starting point
- Different categories of users with different views
  - Experts, novices, administrators, power users

#### Stakeholders

Anyone affected by the use of a system Think of a university administration system (e.g. LSF).

- Lecturers
- Students
- Secretaries
- Estates Management

Not always end users e.g. patients and family with respect to hospital info system

## **Key Informants**

Larger scale projects may required some people to be repeatedly interviewed

Key informants provide important insights over extended time periods

Need to manage relationship

Need to be chosen carefully

Starting point for ethnography

## Interviewing strategies

#### How much structure?

#### Structured Interviews

- Rigid script, well-defined order
- All participants asked same questions
- No scope for creating new questions on fly
- Similar to a survey, but there are differences (explaining, different access to participants etc)

#### How much structure?

#### Structured Interviews

- Often deliver quantitative data
- Analysed differently
- Often easier to analyse
- You will have answers for all of the questions from all of the participants

#### How much structure?

#### Unstructured Interviews

- No script starting point is a topic
- Participant driven, participant responds as she chooses
- You learn about things important to the participants
- Only when the participant stops do you add a point or topic.

#### How much structure?

#### Semi-structured Interviews

- Loose script but chance to be flexible, can respond to / be directed by participant responses
- Can ask questions you hadn't previously thought of
- Use when you want to focus on depth

#### How much structure?

Fully structured

No structure

Low skill

Easy to analyse

No flexibility

Quantitative data

**Shallow** 

High skill

Hard to analyse

High flexibility

Qualitative data

Deep

#### Focused and contextual interviews

Demonstrate not just talk about something.

 Mail sorting, office tours example (Kwasnik, 1989)

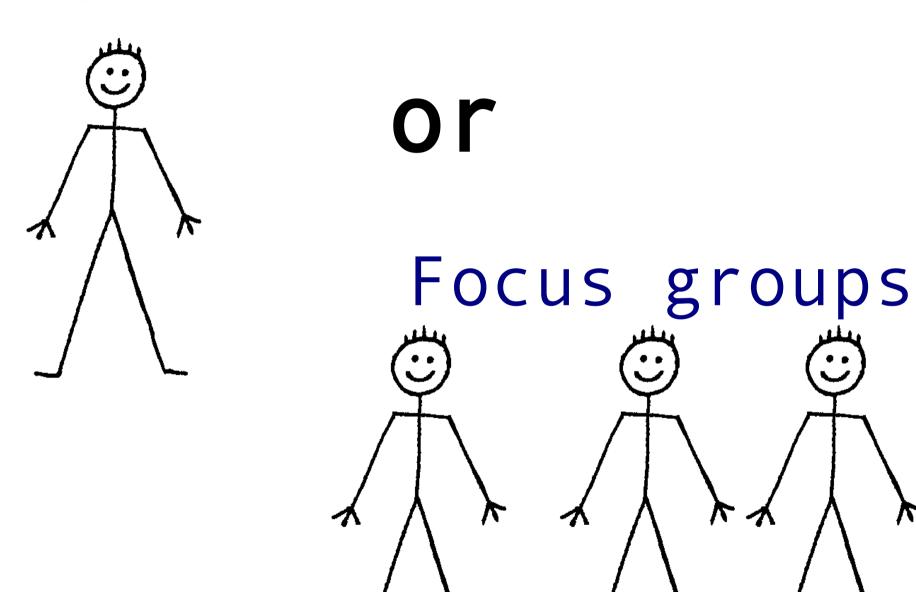
Artifacts as probes

Technology Biographies

Participants discuss past technology uses and speculate about future

Software Prototypes (Hutchison et al., 2003)

#### Interviews



### Advantages of Focus groups

#### Access more participants

- 8-12 (Robson, 2002) 5-7 (Krueger, 1994)
- Get up to 60 participants in a few hours

#### Should hold more than 1 focus group

 Lessen chances of unrepresentative or unresponsive group

## Advantages of Focus groups

#### More access to ideas

Less chance of awkward silent moments

Small does of disagreement / discussion can be really insightful

Participants can encourage other people to speak

Implicitly or explicitly

## Disadvantages of Focus groups

Less questions (conversations take time)
Conflicts between participants
Less opportunity for private topics
Giving equal time to participants

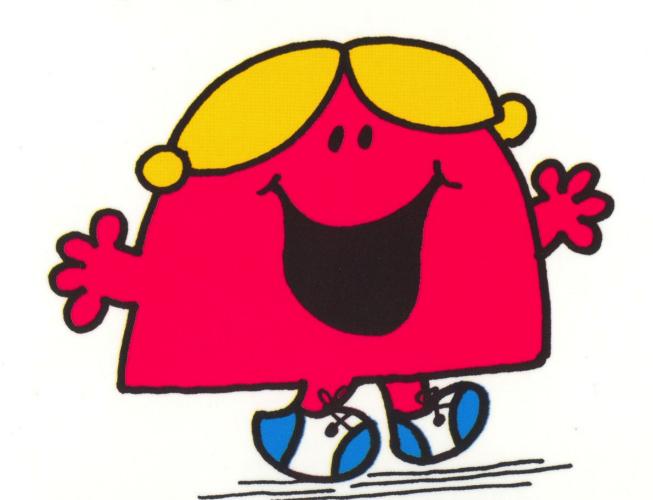
- Group dynamics are important
- Selection of focus groups is an art!



## Types of Interviewe http://www.uxmatters.com/mt/archives/2011/04/when-interviews-go-wrong.php

# LITTLE MISS CHATTERBOX

by Roger Hangreaues



#### The chatterbox

- Give lengthy responses to every question
- Won't stop talking—either because they're uncomfortable with silence or unaware they're rambling Go off on irrelevant tangents Answer every question with a story, because they enjoy chatting and revealing their whole life story

## Tips for chatterboxes

Initially it is good to have someone willing to talk, but to save precious time you need to get them to focus.

- "Earlier you mentioned..."
- "I'd like to go back to..."
- "Hold that thought and tell me more about..."
- "Okay, I understand your thoughts on that now. What can you tell me about...?"

## LITTLE MISS SHY

by Roger Hargreaves





## The clam (shy and quiet)

- Give monosyllabic answers

  Speak only when you ask them a direct
  question
- Nervous, which may make them inarticulate or cagey about what they reveal
- Can you get enough information?
  Will you have enough time to go through all of your questions?

## Tips for the clams

#### Try to relax them

- they are not being tested, explain your goals
- check your body language
- nice, friendly questions

#### Use open questions

 so it isn't possible to give short answers Make sure you are neutral i.e. they don't associate you as the designer of a system being discussed

## Scripts for the clams

- "Don't hold back. I didn't design this, so you won't hurt my feelings if you have negative feedback."
- "This is not a test. There really are no right or wrong answers here. Tell me how this design could perform better for you."

## Scripts for the clams

"It's very important to get lots of different perspectives on this design. Lee, your contribution is going to make this product easier for people to use in the future."

"I really need a quotation, summing up your feelings on this issue."



Mr Too Happy to Be True

## Mr too happy to be true

- Seem overly optimistic or positive about a product or design
- Excessively sympathetic and gentle, so not completely candid
- Refuse to acknowledge or comment on design or process flaws
- Opinions don't match the results of their tasks

## Dealing with Mr too happy

- "So, you don't have any issues with this design, but what about your mother? What problems might she encounter with it?"
- "There are no right or wrong answers to these questions. I'm looking for your honest thoughts, so we'll know what would be good and bad for other users in the future."

## Dealing with Mr too happy

"I didn't design this, so please don't hold back. I need to report how we could improve this design. We'll keep your comments confidential."

"It's interesting that you say you like it, because it seemed to give you a lot of difficulty."

## Preparing the interview

#### Pilot testing

- Find the right questions
- Get a feel for the length
- Can be done with focus groups too (colleagues, first group)

#### Guides

Don't want to miss something out
 Contingency Plans

## Summary

- Direct conversation with end user
- Different purposes
- Different strategies
  - Structure
  - Focus / context
  - How many people (focus groups?)

Relation to other methods

#### Practical exercise

You want to design a tool to help people manage their weekly food shop. You suspect that current tools / methods (lists, fridge checks etc.) could be bettered to improve quality of life and save time.

Prepare a 10 minute interview

- What type? What questions might you ask? What might be important? How much structure?
- Think about why?

#### Practical exercise

How similar were the questions asked?

How similar in terms of interview personality were you and your partner?

If you were to perform the interview again would you do anything differently?

What did you learn from the answers?

#### To think about

How do relate to other kinds of research methods, such as ethnography, surveys, diary studies, lab studies?

What are the similarities, differences Where are the boundaries? Do these methods complement each other when combined?

#### To think about

How do you think you might evaluate data collected from interviews?

We are going to deal with this next week!

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