Observations

Jule Ziegler, Sven Unnewehr
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Contents

• Definition
• Participant Observation
• Systematic Observation
• Observation in HCI
• Conclusion
• Discussion
Definition

- “to watch”, “to pay attention to”
- data generation method
- different kinds of observation
## Types of observation

<table>
<thead>
<tr>
<th>Covert</th>
<th>Overt</th>
</tr>
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<tbody>
<tr>
<td>Observed people do not know it</td>
<td>Observed people know it</td>
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<td>Researcher is like a spy</td>
<td>Researchers can ask questions</td>
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<td>No explanation for presence of observer is given</td>
<td>More ethical because people give consent</td>
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<td>The observed behave naturally in an undisturbed setting</td>
<td>Feedback possible</td>
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- **Covert**
  - Observed people do not know it
  - Researcher is like a spy
  - No explanation for presence of observer is given
  - The observed behave naturally in an undisturbed setting

- **Overt**
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  - Researchers can ask questions
  - More ethical because people give consent
  - Feedback possible
Participant observation

- covert or overt
- researcher is involved
- rich description
- gain understanding about behavior
- prior to other data collection
Types of participation

- Complete observer
- Complete participant
- Participant observer
- Practitioner researcher
Planning an observation

• Try to consider:
  ✓ identity
  ✓ privacy
  ✓ confidentiality
  ✓ purpose
Planning an observation

• Responsibilities:
  ✓ complete understanding of the study
  ✓ do not affect observing people
  ✓ do not call attention to yourself
  ✓ identify key informants
Conducting an observation

- try to observe everything
- focused observations
- develop a theoretical model
Conducting an observation

• **How?**
  ✓ individually, in pairs or in a team

• **Where?**
  ✓ daily environment

• **When?**
  ✓ mostly at the beginning

• **How long?**
  ✓ depending on the question
Documentation

• detailed Field Notes as soon as possible
• difficult in covert observations
• avoid interpretation
• make both objective and subjective notes
• share the notes with the research team
Expand the notes

• transform raw notes as soon as possible
• expand the shorthand into sentences
• compose a descriptive narrative
• identify questions
• review the notes
Validity

• Problems:
  – selective recall
  – selective perception
  – accentuated perception

• Strength the validity by:
  – quotations
  – triangulation
  – reflexivity
Systematic Observation

• pre–defined system (counting, timing)
• quantitative data (**what**, not **why**)

Meeting    Queue    Sample of people

• observe frequency / timing of events
## Schedule (group meeting)

<table>
<thead>
<tr>
<th></th>
<th>Person A</th>
<th>Person B</th>
<th>Person C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leading, e.g. proposing plans</strong></td>
<td>II</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Constructive, e.g. helpful suggestions</strong></td>
<td>I</td>
<td></td>
<td>II</td>
</tr>
<tr>
<td><strong>Obstructive, e.g. criticizing</strong></td>
<td></td>
<td>II</td>
<td></td>
</tr>
<tr>
<td><strong>Joking</strong></td>
<td>I</td>
<td></td>
<td>IIII</td>
</tr>
</tbody>
</table>
Checklist for your Schedule

✓ Items are obvious
✓ Items are relevant
✓ Include all possibilities
✓ No overlap
✓ Easy to record

Do pilot studies!
Working with other Observers

✓ Make sure observation is the right tool
✓ Do a well designed schedule!
✓ Choose them right
✓ Train them
Observation in HCI
Think aloud protocol
About usability testing

• If you want great software, you’ve got to test
• Testing one user is 100% better than testing none
• Testing one user early is better than testing 50 near the end
Do it yourself

Continually throughout development

Fix serious problems

It doesn’t have to be expensive!
How many users?

• User observation is **qualitative**, not quantitive
• You don’t need to find all problems
• Choose a wide audience (not only experts!)

You don’t need many users!

Three per session are usually enough
People and equipment

Participant  Facilitator  Observer

What you need: computer, microphone, screen sharing software, screen recording software, (camera)
The Observers

• Write down the three most serious problems
• After observation: classify the problems and decide what to fix
What to fix

Concentrate on serious problems!

Don’t add new features based on feedback

Don’t add explanations, rather reduce clutter
Structure of the test

• Welcome (4 minutes)
• The questions (2 minutes)
• For Websites: The Home page tour (3 minutes)
• The tasks (35 minutes)
• Probing (5 minutes)
• Wrapping up (5 minutes)
User observation ...

✓ is simple
✓ is cheap
✓ is easy
✓ doesn’t require experts
✓ produces immediate results
Resources

- *Rocket Surgery Made Easy* by Steve Krug
- *Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests* by Jeffrey Rubin and Dana Chisnell
## Conclusion

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<tr>
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<th>Participant observation</th>
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<tr>
<td><strong>Advantages</strong></td>
<td>- Collecting quantitative data quickly</td>
<td>- Only little equipment is necessary</td>
</tr>
<tr>
<td></td>
<td>- Schedule can be used by everyone after training</td>
<td>- Gain rich insights in complex situations</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>- Study Overt behavior is restricted</td>
<td>- time consuming</td>
</tr>
<tr>
<td></td>
<td>- Difficult to provide feedback</td>
<td>- Difficult to document data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Subjective exercise</td>
</tr>
</tbody>
</table>
Discussion

• have you been observed?
• have you observed someone?
• internet–based observation, e.g. messaging boards, chat rooms
• privacy?
• ethical questions
Sources

- **Qualitative research methods: a data collector's field guide**, Family Health International, Natasha Mack, Cynthia Woodsong, 2005
- **Don't make me think**, Steve Krug, 2013