

Observations

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Definition

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



Types of observation

Covert	Overt
Observed people do not know it	Observed people know it
Researcher is like a spy	Researchers can ask questions
No explanation for presence of observer is given	More ethical because people give consent
The observed behave naturally in an undisturbed setting	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

Participant
observer



Practitioner
researcher

Complete
participant

Planning an observation

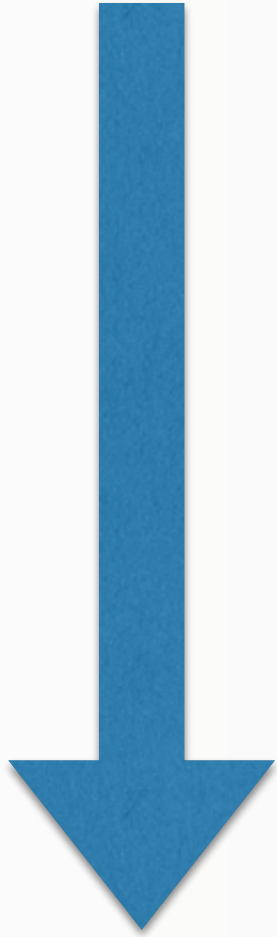
- Try to consider:
 - ✓ identity
 - ✓ privacy
 - ✓ confidentiality
 - ✓ purpose



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
- Strengthen 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)

	Person A	Person B	Person C
Leading, e.g. proposing plans	II		IIII
Constructive, e.g. helpful suggestions	I		II
Obstructive, e.g. criticizing		II	
Joking		I	IIII

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 quantitative
- 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

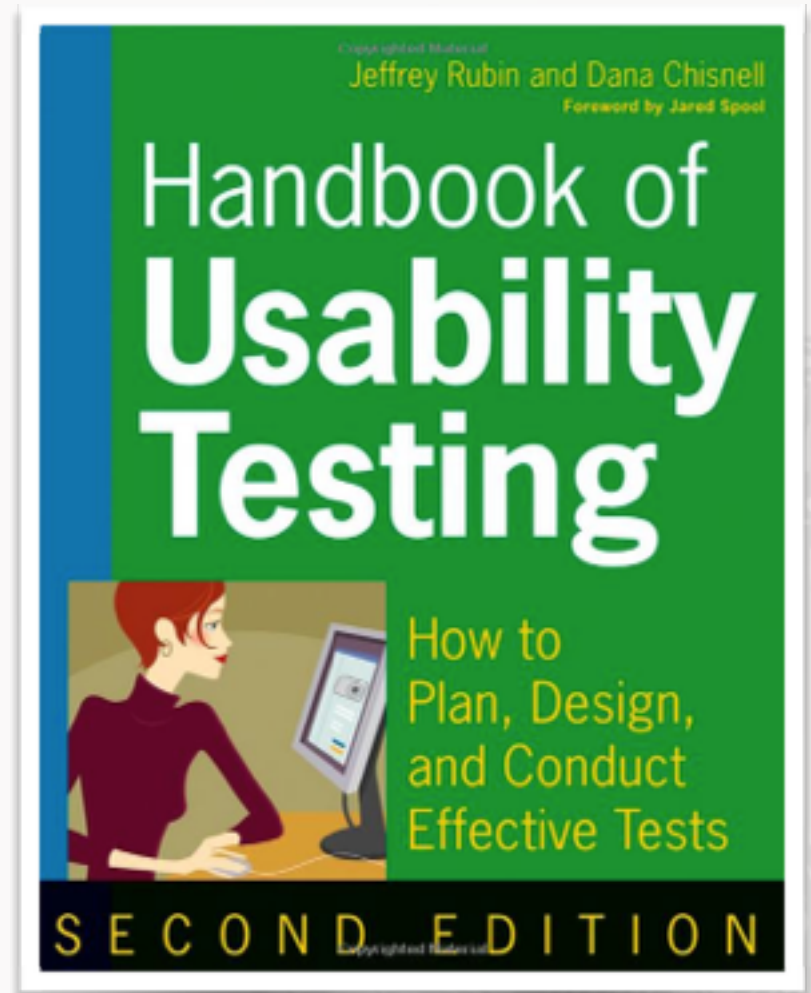
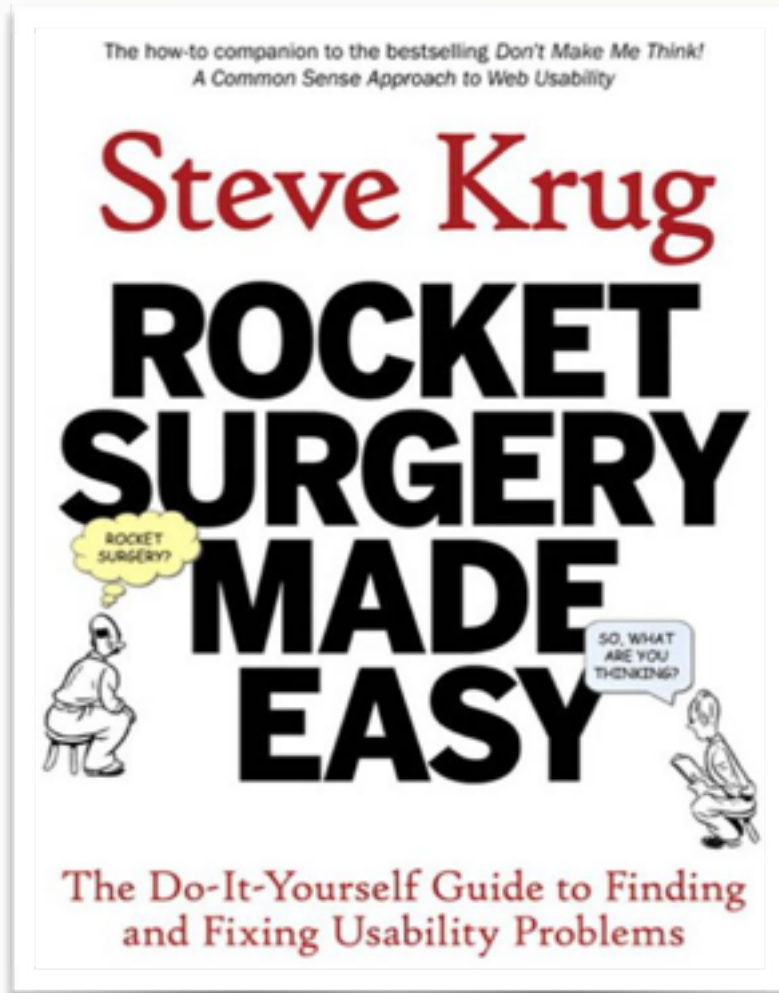
- Welcome (4 minutes)
- The questions (2 minutes)
- For Websites: The Home page tour (3 minutes)
- The tasks (35 minutes)
- Probing (5 minutes)
- Wrapping up (5 minutes)

User observation ...

- ✓ is simple
- ✓ is cheap
- ✓ is easy
- ✓ doesn't require experts
- ✓ produces immediate results



Resources



Conclusion

	Systematic observation	Participant observation
Advantages	<ul style="list-style-type: none">- Collecting quantitative data quickly- Schedule can be used by everyone after training	<ul style="list-style-type: none">- Only little equipment is necessary- Gain rich insights in complex situations
Disadvantages	<ul style="list-style-type: none">- Study Overt behavior is restricted- Difficult to provide feedback	<ul style="list-style-type: none">- time consuming- Difficult to document data- Subjective exercise

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
- **Researching Information Systems and Computing**, Briony J Oates, 2006