FIELD STUDIES
INTERVIEWS

690A- ADVANCED METHODS IN HCI

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Slides from Prof. Joanna McGrenere and Dr. Leila Aflatoony
Includes slides from Prof. Karon MacLean and Jessica Dawson
TODAY

• Field studies
  • Interviews [20min]

• In class activity [20min]
• Discussion of readings [15min]
• Project questions [5min]
LEARNING GOALS

• explain when and why interviews may be appropriate evaluation technique choice

• describe different types of Interviews

• discuss pros/cons of interviewing

• outline criteria for a good interview, and things you want to avoid doing
DUE BY NOW...

Team Formation

• You should know by now who you will be working with for the project.

• Update the Google sheet and list the team members.
  • Reminder: teams of 3-4 students
INTERVIEWS: WHEN AND WHY

a tool that can be used at any point in design process

are well suited for (among others):

• exploring issues
• learning more about tasks, scenarios of use
• involving users (+ making them *feel* involved)
• *getting inside the user’s head*
INTERVIEWS: INFINITELY MALLEABLE

Some things that can vary:

• number of people
  • individual, pairs, groups
• scope
  • duration, depth and breadth
• type
  • structured, semi-structured, unstructured
• location
  • in the lab vs. reality (in context)
• in combination with other techniques
KINDS OF INTERVIEWS

three main types:

• open-ended / unstructured
• semi-structured
• structured

• *early stages of research use unstructured. Why?*
• *later stage more structured. Why?*

other categories (can include types above):

• group - e.g. focus groups
• retrospective – *user recalls and describes*
• contextual inquiry – *user is interviewed while working*
UNSTRUCTURED INTERVIEWS

• most like a conversation, often go into depth
• open questions
• exploratory

absolute key is to listen rather than talk: practice silence!

pros/cons:
• rich data, things interviewer may not have considered
• easy to go off the rails
• time-consuming & difficult to analyze
• impossible to replicate
SEMI-STRUCTURED INTERVIEWS

in between structured & unstructured:

• seek a mix of constrained and unconstrained responses
• make sure to cover bases
  • e.g. list of items to definitely cover, responses to definitely get
• flexibility for open-ended follow-up as situation evolves

in HCI, un- and semi-structured are the most common
STRUCTURED INTERVIEWS

• predetermined questions
  • (like questionnaire, often with a flowchart)
• closed questions
• short, clearly worded questions
• confirmatory

pros/cons:
• replicable
• potentially important detail can be lost
GROUP INTERVIEWS (FOCUS GROUP)

- 2-10 people interviewed at one time
- usually has agenda, but may be either structured or unstructured
- skilled moderator critical!
- usually recorded

pros/cons:
- can accommodate diverse and sensitive issues
- opinions developed within a social context
  - some participants may be reluctant to take opposing view
- good way to locate “proto-users”: most articulate, imaginative participants can help later w/participatory design
- some interviewees may dominate
UD CO-SPACES: A TABLE-CENTRED MULTI-DISPLAY ENVIRONMENT FOR PUBLIC ENGAGEMENT IN URBAN DESIGN CHARRETTES

Mahyar et al, UD Co-Spaces: A Table-Centred Multi-Display Environment for Public Engagement in Urban Design Charrettes, ISS 2016 [Honorable Mention Award]
COMPARATIVE STUDY
# UD-CO-SPACES EVALUATION STUDY

<table>
<thead>
<tr>
<th>Workshop agenda</th>
<th>Time allowed (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arrival, role assigned</td>
<td>10</td>
</tr>
<tr>
<td>2. Entry survey</td>
<td>10</td>
</tr>
<tr>
<td>3. Introductory lecture</td>
<td>5</td>
</tr>
<tr>
<td>4. Instruction on design task and tools</td>
<td>2</td>
</tr>
<tr>
<td>5. Work on design task</td>
<td>20</td>
</tr>
<tr>
<td>6. Targets provided by researchers</td>
<td>3</td>
</tr>
<tr>
<td>7. Continue to work on design task</td>
<td>25</td>
</tr>
<tr>
<td>8. Break</td>
<td>20</td>
</tr>
<tr>
<td>9. Post-task questionnaire</td>
<td>15</td>
</tr>
<tr>
<td>10. Focus group discussion</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>140</strong></td>
</tr>
</tbody>
</table>
RETROSPECTIVE INTERVIEW

post-test interview to clarify events that occurred during system use:
record what happened, replay it, and ask about it

pros/cons:
• excellent for following up and grounding an evaluation
• avoids erroneous reconstruction
• users often offer concrete suggestions
• takes time; might require a second session
INTERVIEWING GUIDELINE

- do not pre-suppose answer
  - How often do you use your mobile phone to call family members? VERSUS
  - What are the ways in which you communicate with your loved ones?
- be open-ended - avoid yes/no questions

avoid:

- asking long questions
- using compound sentences
- using jargon
- asking leading questions

… and generally be alert to unconscious biases.
HOW WILL DATA BE RECORDED?

- handwritten notes (free form, coding sheet)
  - written notes can provide context, but not always details
- audio recording
  - audio recording helps capture terminology, common phrases, specific details
- video capture
  - video recording helps provide body language
- still photos
WHAT DO YOU NEED TO BRING?

be organized BEFORE you start:
- consent forms
- screening forms (if participant selection not done in advance)
- audio/video equipment
  - extra tapes, microphone?, extra batteries, tripod
- note taking equipment
- instruments: interview scripts, questionnaire?

just because it is a qualitative method does not mean that detailed preparation is not required!
SOME CRITERIA FOR A GOOD INTERVIEW

structure the time
• have a clear beginning, middle and end

give participants context
• explain why are there, what you hope to learn
  • if they don’t know, they can’t tell you

use props and visuals
• combat artificial contexts with props relevant to questions/topics (e.g., prototypes, photos)
  • sometimes it’s easier to show than to tell

listen
• make eye contact
• refer back to things that have been said
• be attentive, respectful, sympathetic, and flexible
• give the participant time to think
  • but if they go off topic, OK to steer them back
PILOT TESTING

check for:

- *duration*
- *clarity of interview questions*
  - non-repetitive, ability to deliver the script fluidly
- ability to operate *recording equipment*

bottom line: do you get meaningful data?
PRIMARY AND SECONDARY INTERVIEWING ROLES

there is often too much for one person to do!

• primary
  • usually the person who has contacted the participant guides the discussion

• secondary
  • responsible for most data capture (all recording devices, primary notes, artifact collection)
POST SESSION

• debrief immediately with partner/team
• type notes right away – expand as appropriate (make sure to note clearly what are expansions b/c they are subject to recall)
• check your recordings and label media
• make a log of all the items from the session (artifacts, audio/video tapes, still images, notes…)
• write up reflection on session (things that were not clear, surprising, …)
• plan for transcripts of dialog, as appropriate
“how to do a research interview”

- link to full video:
  - https://www.youtube.com/watch?v=9t-_hYjAKww
    - Contains more advice on good interviewing

Note

every example is from social sciences
. . . many similarities to interviews in HCI
DISCUSSION ON INTERVIEW READINGS  [15 MIN]

Get into group of 3-4 answering the following questions:

- What surprised you? or
- What you disagreed with?
- Others?
PROJECT QUESTIONS [5 MIN]

• First interim-milestone
  • Submitted through Piazza
  • Status of the teams?
ON DECK...

Next class (Tuesday) …

1. Readings (as posted) and researcher journals
2. Team contract is due
3. First interim-milestone: unstructured observation in public place is due on Tuesday
EXTRA SLIDES
**INTERVIEWING GUIDELINE**

- interview in everyday, familiar settings – take cues from context
- be flexible to adapt line of questioning
- establish and maintain good rapport
- casual conversation is not bad
- assume respondent is expert
- do not interrupt unnecessarily
- plan questions that allow *triangulation*
  - ask the same question in different ways
PROS AND CONS OF INTERVIEWS

<table>
<thead>
<tr>
<th>Pros and Cons of Interview</th>
<th>Advantages</th>
<th>Challenges and limitations</th>
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</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
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<tr>
<td>Can provide more detailed information than other data collection methods, such as surveys</td>
<td>Can be time-intensive because of the time it takes to conduct interviews, transcribe them, and analyze the results</td>
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<tr>
<td>May provide a more relaxed atmosphere in which to collect information through conversation, in comparison to filling out a survey</td>
<td>Interviewer must be appropriately trained in interviewing techniques in order to extract the most detailed and rich data from an interviewee</td>
<td></td>
</tr>
<tr>
<td>Interviewee can provide firsthand and more personal knowledge of a given topic that was not anticipated by the researcher</td>
<td>Not generalizable; generalizations about the results are usually incapable of being made because small samples are chosen and random sampling methods are not used</td>
<td></td>
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# PROS AND CONS OF FOCUS GROUP

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<th>Challenges and limitations</th>
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</thead>
<tbody>
<tr>
<td>Generate many ideas through dynamic discussions; “snowballing effect” can occur as participants develop ideas together</td>
<td>Where focus groups are conducted within an organization, participants may be concerned about confidentiality</td>
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<tr>
<td>Bottom-up generation of concerns and issues, which can help to establish survey variables</td>
<td>Researcher must be highly skilled in facilitating and managing group discussions</td>
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<tr>
<td>Can offer validity to research and avoid issues of bias in researcher’s interpretation</td>
<td>Some participants may not speak openly and may be inhibited because of the group</td>
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<tr>
<td>Relatively quick and efficient when compared with participant observation</td>
<td>Dominance by one, or some, participant(s) could limit findings relevant to the group as a whole</td>
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## PROS AND CONS OF OBSERVATION

### Pros and Cons of Participant Observation

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<tr>
<td>Permits access to the “backstage culture,” allows for richly detailed description of behaviours, intentions, situations, and events as understood by one's informants</td>
<td>Interpretation of data collected by researchers might be skewed by the researcher's individual interest rather than what actually happens in a culture</td>
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<tr>
<td>Provides opportunities to participate in unscheduled events</td>
<td>Understanding of the participant and what he/she thinks is being said is limited</td>
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<tr>
<td>Can afford the researcher the opportunity to experience the real emotions and feelings of those being observed</td>
<td>Researchers experience a feeling of having been excluded particularly at the beginning the research process</td>
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<tr>
<td>Useful for explaining “what is going on” in a specific culture and in particular social situations</td>
<td>Community’s discomfort with having an outsider may compromise the “reality” of what is being observed</td>
</tr>
<tr>
<td>Heightens the researcher’s awareness of significant social processes</td>
<td>Interpretations of observations are subjective</td>
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