Design Research & Ethnography
Overview, Troubleshooting, & Practice Activity
Introductions

Background:
• Native Midwesterner
• Passionate about Design + HealthCare
• Industrial Design, Interaction Design (SCAD)
• Worked previously as a Design Researcher, Interaction Designer, & Service Designer for Medical Device & Hospital Service Design Consultancies
  • i.e. Band-Aids to Ablation Devices, Emergency Department Workflow Redesign
• MD Candidate (2018) Tufts University School of Medicine
Overview

- Ethnography for Design
- Nuts & Bolts of Conducting Design
  Ethnographies/Contextual Interviews:
  - Planning
  - Executing
  - Synthesizing
  - Presenting
- Exercise: Generating Design Insights from Ethnographic Artifacts
Design Ethnography + Contextual Interviews

- Ethnography for Design
  - Focus on understanding how people go about completing a task in the environment in which they would normally complete said task.
  - Looking for insight that will help you take action
  - Follow the Master/Apprentice Model
- May be considered task-based interview
- Value: People don’t always do what they say.
  - May be generative or evaluative
1. Conduct preliminary research to familiarize yourself with your domain.
2. Use this understanding to draft a discussion / visit guide with specific questions you wish to answer & tasks you would like to observe.
3. Make a supply list
   1. Camera(s)
   2. Extra Chargers / Batteries
   3. Audio Recorder
   4. Etc.
4. Complete a Pilot Interview
5. Assign Roles
   1. Primary Interviewer, Scribe, Photographer / Videographer (Rule of thumb is generally no more than 3 people attending interview)
Discussion Guide Components

- **Planning**
  - Intro Statement: “The Elevator Pitch” ~ 5-10 Minutes
    - Who you are and what you are doing
    - What you will do with this information
  - Task Observations ~ 30 – 1 Hour
    - Include task list you would like to see based on prior research
    - May ask questions after each task
  - Follow Up Q&A Session ~15 – 30 Minutes
    - Discuss in more detail how the participant completed the tasks and why (master/apprentice model)
  - Conclusion & Wrap Up ~ 5-10 Minutes
    - Review guide to ensure you have covered everything, ask any remaining questions
    - Thank the participant for his/her time

- **Executing**

- **Synthesizing**

- **Presenting**
Team Dynamics

Appearance:
- Dress professional, but approachable

Follow Through with the Roles:
- Moderator should focus on ensuring all tasks and questions are covered and the session ends on time.
- Note Taker: Focus on documentation and visual observation. Back up moderator with any additional tasks or questions that need completed
- Photographer/ Videographer: Check photo quality and capture throughout the session. Don’t wait until you leave the session.
## Task Observation

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- Observe the participant doing their work and/or task in their normal environment.
- You may want to ask the participant to Think Aloud as they complete their task. Watch for hesitations or pauses to identify areas of strain and difficulty.
- Look for ‘workarounds’ and document thoroughly (i.e. Post-production modification idiosyncrasy. Writing sharpie on a Ziploc bag).
- Save the ‘Why’s’ until after the task has been completed.

Discussing Sensitive Questions

1. Planning
   - Establish rapport with the participant
   - Let them know and reiterate that they are not required to answer any question that makes them feel uncomfortable and they may end the session at any time if they become uncomfortable.
     - Ask permission to take photos / video of sensitive items and allow them to delete any images.
   - Slow down the pace of a more sensitive line of questioning and maintain eye contact.
   - Explain to the participant why it is important or valuable for you to ask a particular question, so they can understand how you will use the information they divulge.

2. Executing
   - Use tools to supplement verbal communication: i.e. Imagery, Cultural Probes
Troubleshooting

Some common issues:

1. You get back to your desk with only 1 decent picture.
2. The sweet video you took actually missed the crucial step in the task!
3. Your participant is so enthusiastic they want to talk to you about everything, and you are running out of time
4. Your participant is very shy, and responds to your questions with one word answers
5. Your participant has a very enthusiastic caretaker or friend who keeps interrupting them
6. You ask a question and unintentionally offend your research participant.
7. Leading the Witness: Ask Open-Ended Questions
8. You arrive to conduct your session with your research participant and you feel unsafe.
9. Your 3-person team arrives for the session. Everyone is taking turns asking one question after another.
Findings & Synthesis

Leveraging Research Artifacts
- Create a dedicated team space
- Should be done immediately after the interview!
- Post printed photos, participant quotes, and other items on the wall
- Review as a team & discuss insights

Visualizing Observations

1. Planning
   - Review Photos & Video for Patterns

2. Executing
   - Map Tasks & Communication Visually

3. Synthesizing
   - User Personas & Scenarios to Develop Concepts

4. Presenting
Visual Analysis of Artifacts

Vermeer, Johannes. Woman Holding a Balance. 1663.

Presenting Your Research

1. Telling the Story
   - Choose your most powerful photos and highlight insight with brief annotations.
   - Quotes can be used to support your insight

2. Less is More
   - The # of insights is not as important as the quality and level of 'actionability'
   - You will be using these to drive your design

3. Participant Privacy
   - Blurred faces may be appropriate in certain scenarios

From Insight to Action: Tying Research to Ideation

“Lorem Ipsum”
Rapid Translation Activity:
Generating Design Insight from Ethnographic Artifacts

1. Split into teams
2. Each team will be assigned one of the photos on the right
3. Examine your photo: Discuss insights with your team, Tag the photo with insights using stickies. What problems could be solved based on this photo?
4. Present your insights back to the group