Lecture 4 – Field Studies III

CPSC 444
J. McGrenere

Part 1 – Case Study: Using Mobile Phones in Pub Talk

We will consider the following discussion questions about the Porcheron et al. paper as we go through today’s lecture. This page is provided for you to complete your notes:

a. What kinds of data were collected? How was it recorded?

b. What type of observational role did the researcher take on during the study? Was this an appropriate choice for the study?

c. How was data triangulated in the study?

d. What was the benefit of using video data and interaction analysis for this research? Give examples of findings from the paper that might not have been uncovered from interviews or in-person observations alone.

e. Identify two foci for analysis that likely guided the authors in their video analysis.
**Part 2 – Video Analysis Activity**

Work in groups 4-5

**Scenario:** You are designing a computer-based multiplayer puzzle game for a coffee table company. This game will be embedded inside the coffee tables and sold to families to replace existing puzzle games. Your boss has told you to watch how people work together on a jigsaw puzzle so that you can design a better game. You are to conduct an interaction analysis that captures the essence of collaborative jigsaw gaming.

**Step 1: Interaction Analysis Activity**

Find video here: [https://youtu.be/Jirm3sS-UZI](https://youtu.be/Jirm3sS-UZI)

The video does have sound, but is not necessary to listen to it in order to record your observations.

1. Split your group into two, and view the video silently the first time.
   - Record observations about the activity (between people, between people and the tabletop, between people and the game pieces, etc.) – **one observation per Post-It note**
   - Keep in mind the foci-of-analysis from the hand out.
   - Your observations can be at any level: how the fingers move, where the pieces are stored, how the pieces are rotated, how the pieces are organized...
   - Record timestamps for events that you think are highly unusual or that you think no one else would have noticed.

2. View the video again to see if you spot new things—especially review the spots where you have recorded timestamps.
   - As you review the video, talk to your teammates about what you think is going on - see if they agree with your explanations for your observations. Pause the video as necessary.
   - Repeat this process at least four more times—explore playback speed and feel free to use the pause/stop

**Step 2: Affinity Diagram Activity**

3. Your task is to organize your observations into manageable chunks for your boss. Construct an affinity diagram that links together your observations in a meaningful and interpretable way.
   - Group observations that seem similar together
   - If you have left-over observations, feel free to re-group the observations as necessary
   - Label the groups and construct the hierarchy and web of ideas on blank paper
   - Select the most interesting observation from your data, and select one team member to present your best observation

4. Return to the video as needed to review observations, follow up on interesting themes/ findings

**Step 3: Design Brainstorm Activity (IF TIME)**

5. Brainstorm 1-2 different design ideas to augment the workspace using computer-based technologies.
   - Each of these design ideas should be supported using the sticky notes from the interaction analysis (i.e. to provide justification for the idea).
**Foci for Analysis**

1. **Structure of Events**
   - How are events structured?
   - How and when do things chunk?
   - What is the real start/end? How is this constructed?
   - How do people transition and announce transitions between chunks?
     - a. Beginnings and endings
     - b. Segmentation

2. **Temporal Organization of Activity**
   - How do externally imposed timelines affect work behaviour?
   - How does timing of events, the rhythm & periodicity of events affect flow of work?
   - How is segmentation achieved?
   - How are rhythms perceived?
   - How is “sameness” perceived and when does it become different?
     - a. Macro level
     - b. Rhythm and periodicity

3. **Turn-taking**
   - How is turn taking effected (re: verbal, non verbal and TOOLS)?
   - What are the conventions?
   - When are conventions (rules) broken?
   - How are interruptions handled?
   - Consider “instrumental interaction” (responding to request with tool manipulation, etc.)

4. **Participation Structures**
   - People’s participation in work varies.
   - How do they affect these participation roles?
   - How do they communicate their desire? (i.e. their desire for/current engagement)
   - How do artifacts play a role in this? (in disrupting or facilitating)

5. **Trouble and Repair**
   - Problems provide insight into rules (expectations) about regularity (normalcy).
     - (computers force one-way problem resolutions)

6. **Spatial Organization of Activity**
   - How is information spatially oriented vis-à-vis participants?
   - How are participants spatially organized? How does is this a reflection or consequence of the work that is being done?
   - How does this spatial organization imply, dictate or free the flow of activity?

7. **Artifacts and Documents (special participants)**
   - What’s here dictates what’s possible or not.
   - What role does an artifact play? How does its trajectory influence this role?
   - Some objects’ roles may be to imply understanding
   - Ownership & territoriality