## Designing with video 2,

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## Editing

- Page 91 read
- Important to relate what happens now to what happened before and how this affects the future
- Interpretation as a complex and multilayered process, e.g. winking features (page 93)
- To interpret videos needs the capacity to identify patterns - and relate the whole to these patterns

- Guidelines for interpretation:
  - Humans interact with things on the basis of meaning that the things have for them
  - Meaning of things arises out of social interaction
  - Meanings are handed onwards, modified through an interpretative process
  - Meanings arise both of the materiality of situation and out of the biologically and culturally developed mental structures

- People are sensual, emotional and experimental beings in addition to rational actors
- Video has a capacity to capture details for analytical scrutiny, and to foster emphatic engagement with people and situations
- Design teams have different perspectives (show kitchen video)
- Team should include: Usability specialist, user, domain specialist, designer and developer

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- For team to interpret together a clear focus is needed
- Otherwise interpretations will not be relevant for the project
- In a collaborative (workshop)
  interpretation warm up is needed to get a
  good start

# Interaction analysis workshop

- It helps to find the patterns of actions from the video and generate ideas how to improve
- The "tape owner" who knows the video introduces a focus for the interpretation/analysis
- S/he decides where to start the video and where to end
- Participants can stop the video to give hypothesis of what is going on and why
- The hypothesis are discussed and when agreement is found the team moves to next one

# Interaction analysis workshop

- Interpretations have to be grounded on what is seen in the video
- 30 min is usually max., that a team can go efficiently through
- Turning off the sounds helps to focus on what is visible (handling artefacts, body movements, facial expressions, etc.) rather than what is expected
- Fast motion helps to see rhythm of action and periodicity on the overall activity

#### Interaction analysis workshop

- How to find foci for analysis
  - The structure of events (beginnings and endings)
  - Temporal organisation of activities (rhythm, periodicity, break downs)
  - Turn-taking (sift of body postures, handing over artefacts, etc.)
  - Participation structures (how people group, who links to whom, who collaborates, formal/informal hierarchies)
  - Trouble and repair (how people occupy space, take possession of space, role in the group)
  - The use of artefacts and documents most central in the analysis (e.g., how people handle electronic artefacts contra non-electronic)

## Two ways to approach the analysis

- Grounded or framed:
  - Grounded is rooted in the contextual data
  - Framed is based on a model or a template for analysis
- Scan Image page 102

## Two ways to approach the analysis

- Interpretations have relation to the project, use context and design team characteristics
- One way to make the comparison of current activity is to draw workflow diagrams and task hierarchies - especially if information handling is the focus
- Another focus is to identifying problems, prioritising them and finding solutions
- We skip the video card game for analysis since it is too heavy method for practically oriented "real projects" (pages: 105-116)

#### End product of the raw material

- Different outcomes for different purposes:
- 4 different outcomes: A video story, A video portrait, a video collage, Usability problem highlights
- A video story: it shows how some event occurred, how it folds in time; Purpose: To help the design team to understand what happens in the field
- A video portrait: Helps to build empathy; Purpose, to show values and attitudes
- A video collage: Make a comparison of what happens and what might be e.g., what is activity now, and how it could be; Purpose: to raise ideas, to show improvement solutions
- Usability problem highlights: Show the main problems areas; Purpose: to give clearer and emotionally stronger presentation of the usability problems

#### Video Stories

- Activities can for example occur in parallel
- Or only the most interesting events, with descriptions in between
- Tips for editing video stories:
  - Maintain continuity so that flow of actions is easy to see
  - Use texts, fade outs, or live explanation to create the continuity
  - Keep field notes with exact time codes to later help fast location of the best clips
  - Use the "rec-pause method" with two interconnected video devices when in hurry

#### Video Portrait

- Needs background of the persons, context and tasks quite a lot
- Capture relevant material (needs that it is know before hand that portrait is made) combination of observation and interviews is usually good solution for the video
- Introduce the context, i.e., make sure the audience is aware of where the user is situated, and who is in the picture
- Show the persons especially the face
- Let the person tell (and act) the story
- Go slow, when superimposing text on the picture make sure here is enough time to read it; read it aloud yourself to find out how much time is needed
- Cut meaningfully; remember that clips are seen in the light of the together, so cuts have to be meaningful also
- Let the person explain; his/her explanation in the background when showing something else is better than another narrator

Avoid music and use special effects sparingly

- In usability highlights the problems are the centre focus
- Shows examples of how users encounter difficulties when interacting with the system
- How users go about in solving these difficulties (especially unexpected ways are important - they might bring a long novel improvement ideas)
- The highlights do not work alone but are companied by the usability report
- Usually in the economy, the usability test are done by some company specialised in these or the organisations own usability group
- When shooting a group working on a system one needs two cameras and a note taker: one camera shoots the group so that facial expressions and hand movements are seen and the other shoot the screen if there is no screen capturing program to use, note taker takes notes; all should have time codes available so that editing becomes easier

- Sometimes a split image is used; to two pictures or even four: the screen, the active users and the group and another picture of the group from different angle
- Try to edit a coherent story if possible although this might be difficult
- Some tips to make the usability highlight video (pages 196-201):
  - Start on a positive note: Show things that come out successfully with the design of the tool in use
  - Show the face of the people
  - Pick no more than four to five usability problems of high priority, show details and add explanatory text to make certain that the audience will notice the problems, repeat action and use slow motion if things are difficult to make out.
  - Discard poor quality scenes: do not allow audience to sift attention away from the core message

- Some tips to make the usability highlight video (pages 196-201):
  - Make the video short and to the point, the practical limit is around 15 min
  - Craft careful story through the order of sequences; brake the monotony of fixed angle cameras through cuts and text, before editing choose carefully the camera positions and ensure best picture quality and sound quality (means test the place before the actual shooting!)

- Case study on Bathroom lighting:
  - New lightning system for bathrooms to crate for example different kind of atmospheres for relaxing
  - Idea was to create an easy use system but it needed to introduce new concepts of how to interact with lights in the bathroom
  - First they conducted a contextual study with diaries and disposal cameras to get to know how people acted in the bathrooms they found some unexceptional behaviour, which unfortunately they do not tell so use your imagination

- They made many iterative design cycles to find out the design out of which they made the prototype to test
- The design ideas were based on the contextual study
- They built a "home-lab" where they asked the people in the contextual study to come and test the ideas
- They had two sets of tasks for the people to do
  - One easy one: daily activities meaning switching on and off the light
  - Second task was to use the new ideas for creating the atmosphere for relaxing
  - After the test use the users were asked to fill a Technology Acceptance Model questionnaire

- That TAM questionnaire measures the attitude scales
- Furthermore the users were interviewed to get to know how they described the interactions as they understood it and the meaning of the different user interface elements to see how they had conceptualised the system
- They set the cameras to locked angles, position and zoom to enable similar view to all users who tested the Home-Lab.
- However they had to adjust one of the camera to capture facial expressions

- The results they got out of the tests:
  - Number of times the switch was pressed
  - Lasting evidence of some of the comments the users said
  - They could compare the video data to the answer of the TAM questionnaire and interviews enabled better reliability to the test
  - However, they got more, they got very good facial expressions and other reactions of the users when they were interacting with the system
  - They edited these to a highlight usability video and were able to show a lot better the actual use experience than they could have with the still images and text!

- TAM in WIkipedia:
- http://en.wikipedia.org/
  wiki/
  Technology acceptance model