



Human-Computer Interaction IS4300



Homework Review

UI Critique

2 Good & 2 Bad Examples...



Design Principles / Heuristics

1. Simple and Natural Dialogue
2. Speak the User's Language
3. Minimize User Memory Load
4. Consistency
5. Feedback
6. Clearly Marked Exits
7. Shortcuts
8. Good Error Messages
9. Prevent Errors
10. Help and Documentation
11. Visibility / Obviousness
12. Affordances



Understanding Requirements



First Step to Design: Requirements Analysis

- Know your user
- Knowledge about people in general
- Very, very specific knowledge about users and work environment



Techniques & Terminology

- Ethnography
 - Observation & Interview, as insider
- Questionnaire
 - More useful for statistical / quantitative data
- Scenarios
- Low-fidelity Prototyping
- Probes
- Card sorting
- Focus groups

Ethnography

The art and science of describing
a group or culture.

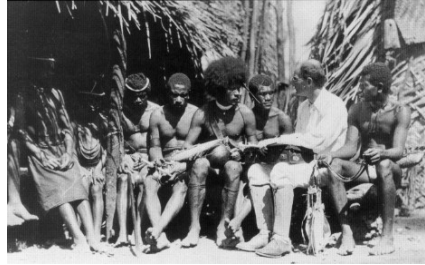
Bronislaw Malinowski

- 1914, Anthropology grad student, traveled to Papua, New Guinea
- He became stranded.
 - WWI, as a Pole from Austria-Hungary in a British controlled area, he was unable to leave.
- After a period in which he actively avoided contact with the native Trobrianders, who he considered to be "savages", Malinowski finally decided, out of loneliness, to participate in their society.
- After he did so, Malinowski learned the local language, formed close friendships with the people and is even rumoured to have fallen in love with one of the islanders.
- It was during this period that he conducted his fieldwork on Kula and produced his theories of Participant observation, which are now key to anthropological methodology



Ethnography

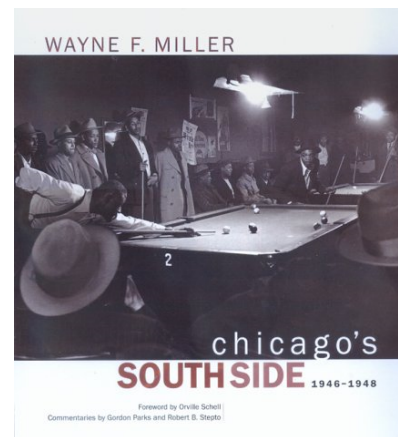
- Invented in 1915 by Bronislaw Malinowski
 - Start of cultural anthropology
 - Purpose: to become intimately familiar with a way of life by living it ("emic" perspective)
 - Method: use multiple sources of info
 - "Things are not what they seem."
 - People can't always tell you what they do.
 - To make authoritative claims about a culture you must have been there, done that.



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Ethnography

- 30's-60's focus on ordinary life
- "Chicago sociology"
- Studies of cat houses, insane asylums, jazz clubs, wine alleys, public toilets, race tracks, etc.

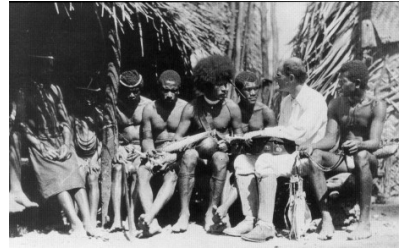


Lecture 1 - Introduction

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Ethnography

- Formally – the analysis, interpretation and writeup of all information to form a holistic description.
- “Triangulation” – checking one source against another
- Be aware of your own biases & preconceptions



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Ethnography

- Some fieldwork methods
 - Observation
 - 6 months – 1 year (not!)
 - Interviews
 - Formally structured
 - Semistructured
 - Informal
 - Grand tour questions
- Must be **Observant, Methodical, Thorough**

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Ethnography (Observational Study) Exercise



You have been asked to develop a website to sell eyeglass frames.

As part of your background research, you decide to do an ethnographic study of work practices in an optometrist's office, focusing on interactions between the optometrist and a salesperson.

What questions would you ask?

(Start at 7 min)



Example Studies

Notes on Fridge Surfaces

- Methods?
- Data?
- Findings?



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Example Studies

- Methods?
- Data?
- Findings?



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Example Studies

Ordinary Gestures to TV Screens

- Methods?
- Data?
- Findings?



Analysis

- Purpose: decide whether spontaneous gesture could be used to remote control TVs
- Issues
 - Spontaneous gesture
 - No standards of form
 - May not have communicative intent
 - How to differentiate?
 - Most work in gestural control thus uses "standardized" gestures
 - What would you do if you could recognize communicative intent from these gestures?
 - Authors don't offer any ideas
 - Also: issues with methods, multi-party/occlusion



Ethnography Homework I3

- Goal: idea to make student center more efficient and friendly
 - Pick a location and spend an hour people watching with a notebook and pencil.
 - Identify an activity you find interesting.
 - Ideally related to your project idea.
 - Watch several people do it.
 - Interview two or more about it.
 - Don't forget to obtain verbal consent!
- Write it up.
 - Be as detailed as possible

Introduction

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I3 Grading

"A" =

- A one-paragraph summary of why you picked your particular activity to focus on,
- Followed by an overview of the activity, the kinds of people you observed engaging in it, and a description of any artifacts they used.
 - sketch or photos of the space
 - times & dates of observation
 - some quantitative measures (number of people observed, number of people in a group, age range, etc); some hard numbers, not just narrative generalizations.
- Describe the individuals you interviewed (not by name) and what you learned from the interviews.
 - must have interviewed at least 2 people
 - must be at least one quote from each
- Total report length should be 2-3 pages.



To do...

- Read
 - Benyon Ch 24, "Interaction"
- Project proposal
 - Draft idea to is4300f15@ by next class
- Start I3 ethnography hw (1.5 weeks)