

# I214 Diary studies

October 2, 2008

# What is a diary study?

Participants collect data about events in-situ, *as they happen*

## **Asynchronous feedback**

Researchers collect repeated responses to a set of standard questions

## **Synchronous elicitation**

participants record/capture media that are then used to prompt interview discussion

from Carter and Mankoff 2005



MIT student completing “information-seeking” diary study in a library, 2006

<http://libstaff.mit.edu/webgroup/userneeds/index.html>

# Methods for collecting data

## Survey-style forms

online or paper

## Photographs / Video

digital or disposable film camera,  
mobile phone

## Audio recording

handheld recorder, mobile phone

## Aggregating data online

Blogs (text, audio, and video),  
Twitter, Jaiku, etc.

*Sample Unstructured Diary Email Form*

**HotBot DIARY**  
Please return this diary entry on or before *Thursday, June 22, 2003*

Today's date: \_\_\_\_\_ The current time: \_\_\_\_\_

1. Approximate number of searches since your last diary entry: \_\_\_\_\_
2. Of those, the approximate number of searches using HotBot: \_\_\_\_\_
3. Please describe your experiences while searching with HotBot. Your description may include:
  - what you were searching for.
  - your search procedure.
  - whether you found it.
  - any difficulties (if you were able to find a solution, please describe how you solved it) or unexpected incidents (describe what you had expected and what you got).
4. How well is HotBot working for you? \_\_\_\_\_  
*(Please rate your experience from 1 to 5, where 1 means that it's not working at all and 5 means that it's working very well.)*
5. What is your opinion of HotBot as a service?
6. Has your opinion changed since the last diary entry? If so, how has it changed and was there a specific experience that precipitated the change?
7. Other comments. Are there any other issues you'd like to tell us about or questions you'd like us to answer?

When you've completed this form, please email it to [diary@adaptivepath.com](mailto:diary@adaptivepath.com). Thank you very much for helping us make HotBot a better product.

If you have any questions or comments about this form, please contact Mike Kuniavsky at [mikek@adaptivepath.com](mailto:mikek@adaptivepath.com) or (415) 235-3468.

Kuniavsky

# Types of diary studies

## Unstructured

- participants report on everyday activities
- **elicits general themes**

## Structured

- participants report on everyday activities
- **answers more specific questions**

## Usability test

- participants complete specific tasks and report on results
- **structured comparison of task performance**

## Problem report

- participants report on everyday activities
- **identifies bugs/experience problems**



Figure 2. A postcard ("what is your favorite device?")



Figure 4. Camera

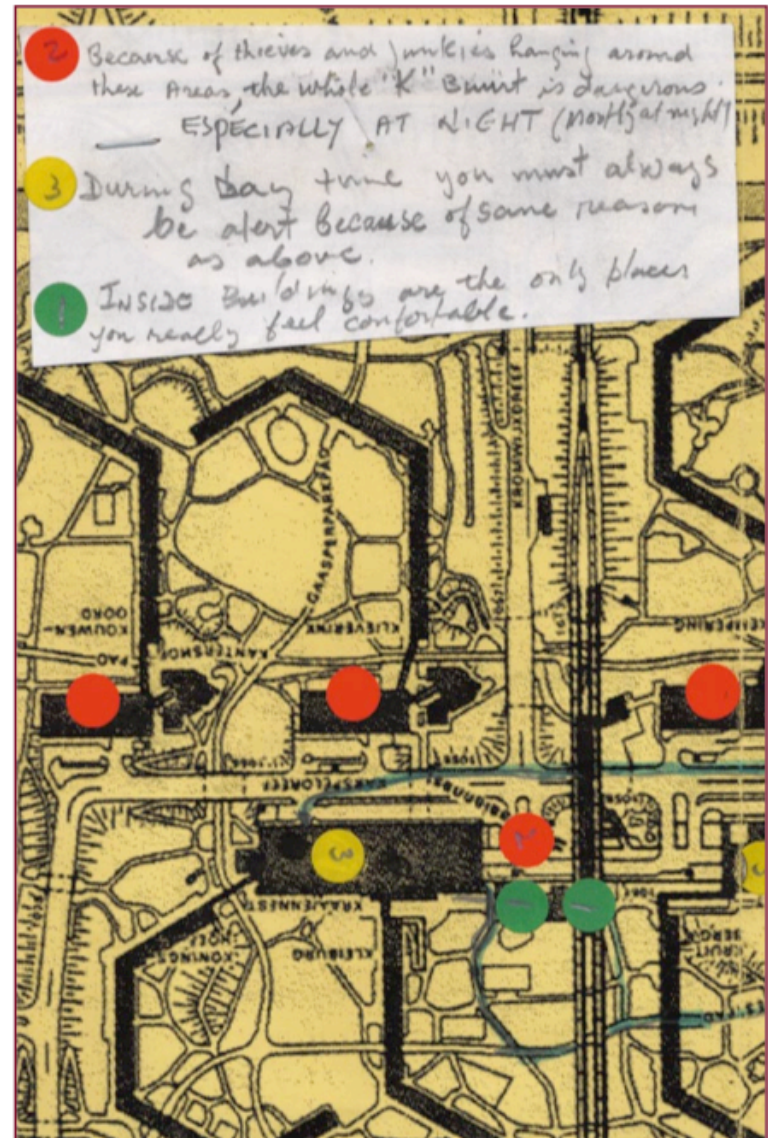


Figure 7. A returned map showing zones of safety and fear in the Bijlmer.

# Probes

## Cultural probes

associative, interpretively ambiguous, inspirational, subversive

And other types:

technology probes, urban probes, mobile probes, domestic probes, value probes....

... as **packet** of material artifacts

...as empirical **data collection**

...as **participatory** input into design

...as motivating **sensibility**

Gaver, Dunne, Pacenti, 1999

# Coordinating the study

## Keeping people on track

- give periodic reminders
- provide feedback about level of detail in response
- progressive incentives
- surprise incentives / little gifts

## Adapting to changes

- start analyzing as soon as early results arrive
- periodic re-evaluation of diary format

# Advantages of diary studies

- 1) Efficient use of *your* time
- 2) Facilitate broad geographic distribution
- 3) Support in-situ reporting *over time*
- 4) Can be a rich window into context of use

# Disadvantages of diary studies

- 1) Can be tiresome for participants
- 2) Participants will require reminders
- 3) Can get very expensive for long durations
- 4) Amount of data can be overwhelming



# Diary study packet components

## (1) Introductory letter

About the study: goals, motivation, and sponsorship

General requirements for participants

Compensation and warning of any potential harms

Permission/consent letter

Thanks and appreciation for their effort!

## (2) *Specific* instructions

## (3) Diary form / key incident form

## (4) Recording device camera, camera phone, stickers

# Analysis

## Asynchronous feedback

Track temporal patterns in content

## Synchronous elicitation

Combined with interview analysis

## Image analysis

Looking for semantic patterns in visual data



Figure 6. Some of the returned items.

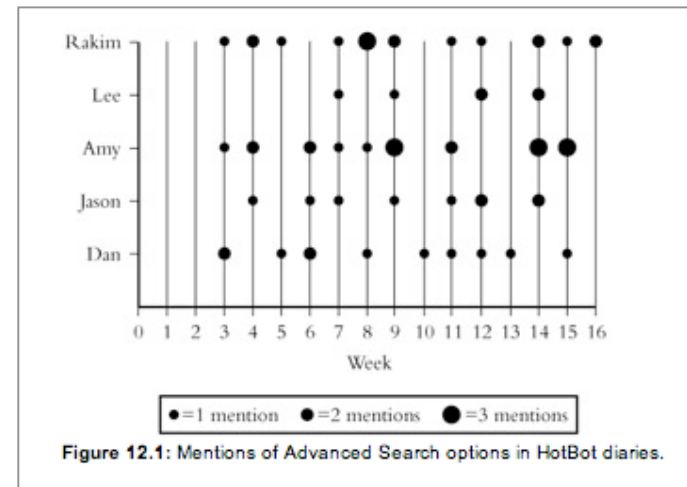


Figure 12.1: Mentions of Advanced Search options in HotBot diaries.