9. Information System & Service Design:

Ethnographic Techniques for Experience Design

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Ethnography & Design

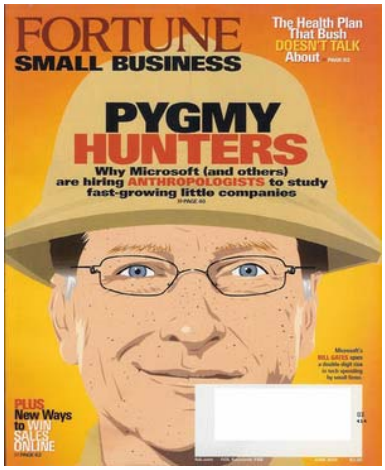
- Ethnography and ISSD
- A brief history of ethnography
- Ethnographic techniques
- Ethnography in industry

Ethnography & ISSD

People	Systems
'experience-intensive'	*'information-intensive'*

documents & artifacts
environmental constraints
process
taskonomy not taxonomy

Ethnography & ISSD



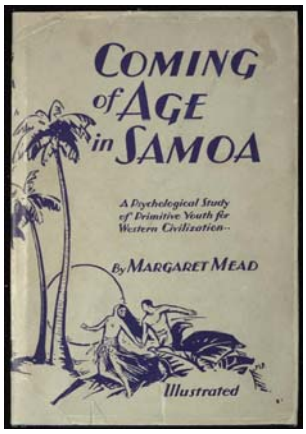
June 2005 issue

From "Management Tools Survey" 2007, by Bain & Co.

A brief history of ethnography

- Ethnography = *lit.* “writing about people”
- Social discipline that seeks to understand a community, or a specific issue within it by gathering first-hand information from informants, mostly through interviews, observation and the collection of artifacts
- Goal is to understand the socio-cultural ecosystem as a whole, by living in the community for months, or even years

A brief history of ethnography



Early ethnography, from 1920s to 1950s, inspired by the idea of the *external, objective observer.* Focus on ‘primitive, pure cultures’

A brief history of ethnography

Image credit: Yale Urban Ethnography Conference 2008

Challenges in the 1950s:

from study of exotic cultures to study of local environments.

from *objective to subjective*

Ethnographic techniques

- Defining characteristics of ethnography:
  - element of surprise: *not knowing what needs to be known*
  - observing and understanding action *in context*
  - understanding the symbolic meaning of actions
  - situated participation (first hand experience)
  - theoretical framework for interpretation

Ethnographic techniques

- Participant observation
  - Interaction with community studied
  - Informal conversations
  - Participation to community life
  - Analysis of artifacts
- In-depth interviews
  - Open or semi-open ended, to understand once again the context, not to test theories

Ethnography in the industry

- Ethnographic research – or rather, its results – is very attractive to the industry: an in-depth understanding of a community means an in-depth understanding of its needs, preferences and expectations; in other words, ***a well-targeted and well-defined consumer pool.***

Ethnography in the industry

- 1999, “Design Ethnography” by Tony Salvador, Genevieve Bell, Ken Anderson, in *Design Management Journal*:

  “[ethnography is] a way of understanding the particulars of daily life in such a way as to increase the success probability of a new product or service or, more appropriately, to reduce the probability of failure specifically due to a lack of understanding of the basic behaviors and frameworks of consumers."

Ethnography in the industry

- But what does it mean in practice?
  - ethnography in the wild
    - People-, site- and behavior-focused
  - ethnography in the corporation/market
    - System- and product-focused

Ethnography in the industry

- Ethnography in the wild:
  - Multi-sited research
    - focuses on a topic and does field work in different countries; Intel & Nokia
    - http://download.intel.com/research/exploratory/PeopleAndPractices.wmv
  - Comparative research
    - Variation on multi-sited research, focusing on 2 places with similar characteristics, and different outcomes; Intel Tales of Two Cities

Ethnography in the industry

- Actual teams of ethnographers are still a rarity in industry, but ethnographic methods have been adapted to the requirements of rapid and constrained industry-based research.
  - Rapid Ethnography
  - Rapid Contextual Design

Ethnography in the industry

- Ethnography in the corporation:
  - Shift from marketing-led research to drive specific product development to ethnographic-style research about broader issues
  - Sometimes early test of proof of concept prototyping: Nokia
  - Pattern- and time-based behavior
  - Use of activities to elicit specific reactions/information

Ethnography in the industry

- Specific techniques in a constrained environment:
  - Situated interview
  - Simulated use
  - Acting out
  - Shadowing
  - Apprenticeship

Ethnography in the industry

- Rapid Contextual Design derives its main method of data gathering from ethnographic techniques: contextual inquiry
  - Users are observed in their own environment, in order to understand the context of their work practices
  - These work practices are modeled in 5 ways (flow, sequence, artifact, cultural and physical model) and consolidated
  - The work flow is redesigned and tested with users

Ethnography in the industry

- Objections to ethnographic methods:
  - Time
  - Money
  - It's common sense!
  - It's not a quantitative discipline
    - Not scientific, not representative, not quantifiable, not directly actionable
  - Hawthorne effect

Ethnography in the industry

- Objections to ethnography as a discipline in the corporation:
  - Ethnography and marketing

"Ethnography is a discovery science, not a validating one."

From Jordan and Dalal "Field Encounters"

"Market research and focus groups aren't telling us anything we don't know. We must drop the notion that consumers can tell you what they want."

From FutureLab blog, which "assembles the world's sharpest minds in marketing and strategy innovation"

Ethnography in the industry

- Objections to ethnography as a discipline in the corporation:
  - Ethnography and usability

Ethnography in the industry

	Ethnography	Usability
General Focus	Focus on people and how they behave in context	Focus on technology
Key Questions	• What will be useful for people? • What should it do for people? • What will people adopt?	• What will people be able to use? • How should the interaction work? • Can people figure out how to use it to accomplish goals?
Findings Describe Things Like	• Social organization and dynamics in a given domain • Motivations • Tasks • Goals	• Whether people can accomplish defined tasks using the given designs • Identification of design aspects that account for this
Data Comes From	Observations of how people function in existing environments	Observations of how people interact with design in efforts to accomplish goals
Data Type	Unstructured qualitative	Structured qualitative, some quantitative (metrics)
What They Contribute to Design Process	• Typology of people and contexts • Personas • High level requirements	• Evaluation of design; detailed design guidance to correct problems

	Ethnography	Usability
Design Phase	Pre-design, early design	Early to late design
Core Challenges In Influencing Design	• Can be hard to translate high level qualitative data about people into specific product design recommendations that designers see as actionable	• Can miss the most important issues: e.g., something may appear usable but be unimportant, or something may look unusable because scenario does not match real life. • Can be too late to influence underlying design assumptions.
Formal Training	Anthropology	Cognitive Psychology, Computer Science
Skills Needed	Synthetic, inductive e.g.: Ability to pull themes and patterns out of very messy data	Analytic, deductive e.g.: Ability to design valid tests of design hypotheses, ability to interpret user behavior as clues to cognitive processing
Product Knowledge Needed	• Understanding of product strategy • Knowledge of the product space overall • Knowledge of technology features and their intended and potential uses	• Knowledge of detailed design and interaction models • Grasp of basic technology constraints on functional capabilities, • Understanding the history of rationales behind specific design approaches

To summarize

- Ethnography in the corporation IS a way to enlarge the world view of designers/developers/marketers/strategists
- Ethnography IS NOT “consequences for design”; IS NOT a way to find a solution, or even a problem; IS NOT a substitute of/complement to usability