

DS1001: Sociology of Design

Session 7

(Discussion on experience in session 5 & 6)



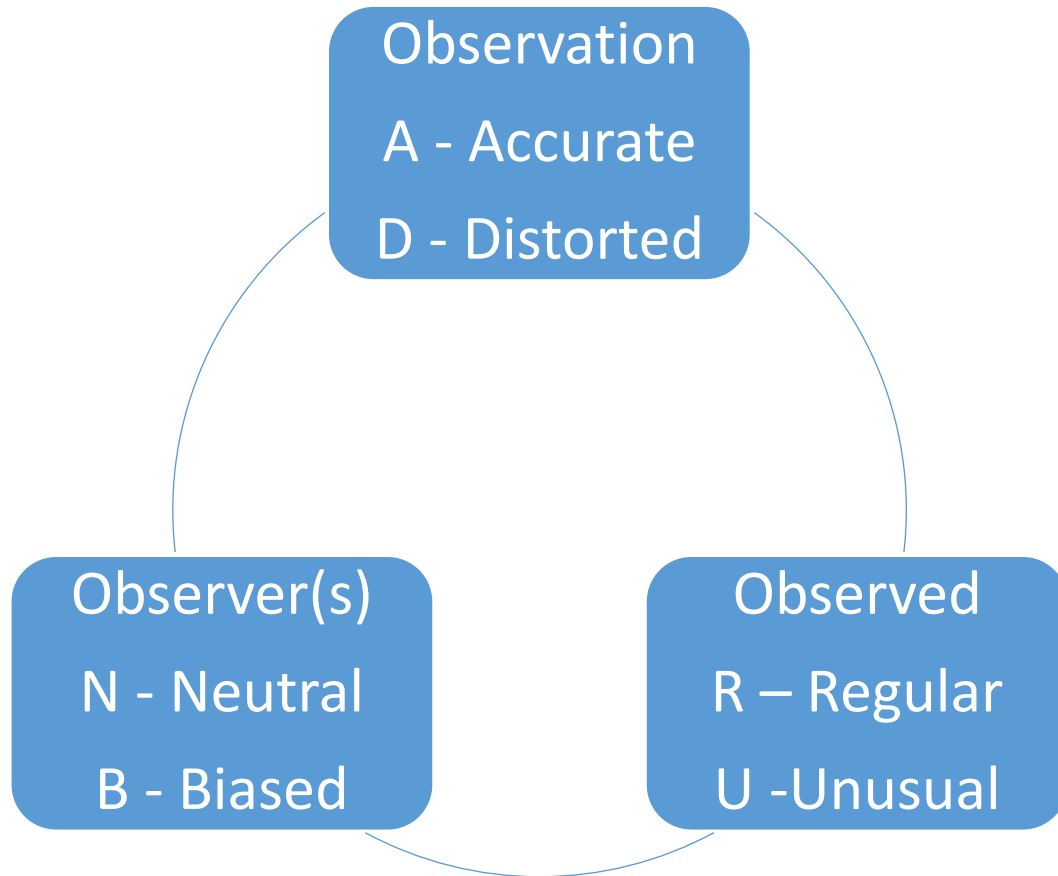
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,
DESIGN AND MANUFACTURING,
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SESSION OUTLINE

- Observing better
- Affordances
- Why and What of Ethnography
- Ethnographic Approach / Guidelines

Observing – possible errors

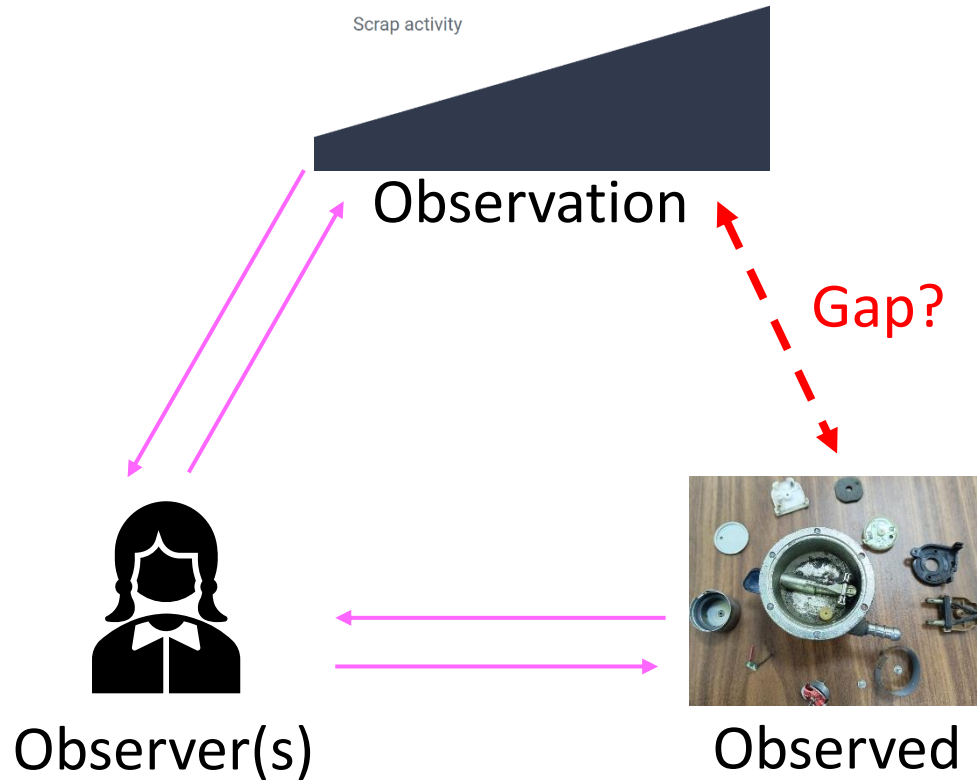


<u>Observer</u>	<u>Observed</u>	<u>Observation</u>	
<i>Biased</i>	<i>Unusual</i>	<i>Distorted</i>	Low Quality
<i>Biased</i>	<i>Regular</i>	<i>Distorted</i>	
<i>Biased</i>	<i>Unusual</i>	<i>Accurate</i>	
<i>Biased</i>	<i>Regular</i>	<i>Accurate</i>	
Neutral	Unusual	Distorted	More time & Rigor
Neutral	Unusual	Accurate	
Neutral	Regular	Distorted	
Neutral	Regular	Accurate	High Quality

Observing

DS1001

Scrap activity



How did you pick the object for study? How did your approach the object?

Which angles, aspects, levels of abstraction or representations revealed the true character of the observed?

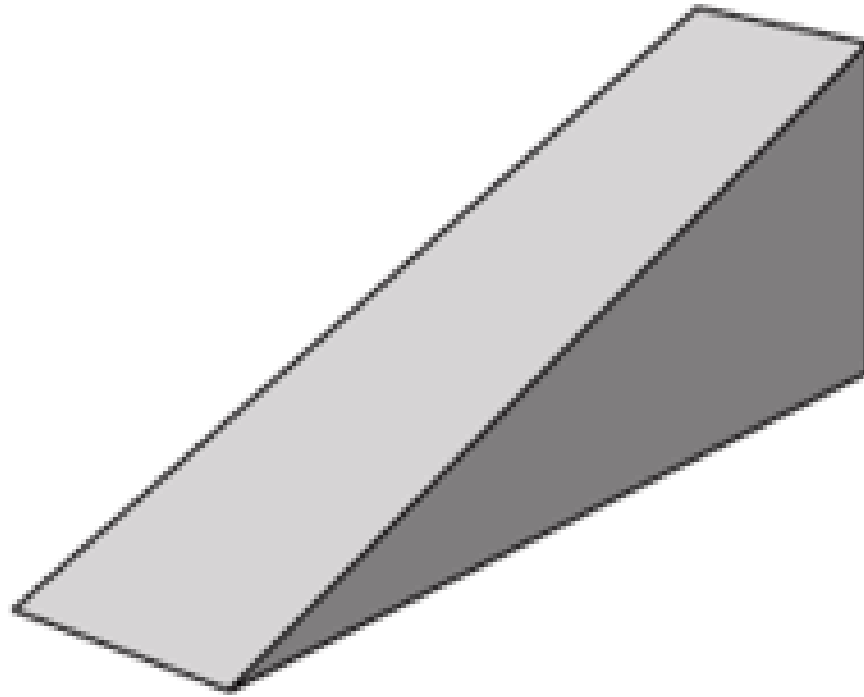
How was your object selection and observation influenced by your individual-group prejudices?

Did your observations exaggerate or distort the character of the observed? How did they change your individual-group relation with the object?

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What do feel like doing when you see the following objects? (1 / 2)



What do you feel like doing when you see the following objects? (2/2)



Affordances

- *Affordance* refers to whatever it is about the environment that contributes to the kind of interaction that occurs ... JJ. Gibson is credited with coining the term & Dan Norman popularized it among designers
- In any interaction involving an agent with some other system, conditions that enable that interaction include some properties of the agent along with some properties of the other system
- Affordance is not users' judgment or evaluation of products' perceived qualities, but the action capabilities based on objective conditions of users and products at present
- Affordances in product design are not meant to convey information for communication purpose, but are the groundwork for the necessary behavior in achieving a product's function

Additional references

- <https://www.youtube.com/watch?v=a6F0EYCUjcE>
- <https://www.youtube.com/watch?v=-vwhXFWD6qk>
- <https://www.youtube.com/watch?v=3WvtEFJGp-8>

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Why ethnography?

- In practice, companies often rely on what people say. Verbal behavior is the foundation of the overwhelming bulk of consumer research
- Most approaches (qualitative and quantitative research) are based solely on what people say — either in groups or individually, in person or over the phone, on paper or on the Internet. What **such methods fail to focus on is what people do and how they do it. i.e., behavior (action + meaning)**
- When manufacturers and marketers rely solely on what users say, they fall victim to the fact that **people often have difficulty describing what type of product they need or want**. End-users typically cannot express their precise problem with a given device only by talking about it

What is ethnography?

- As a methodology, it stems not from psychology (the source of virtually all of the traditional market research methods, such as surveys and focus groups), but from cultural anthropology, and so **involves the study of people's behavior in the actual “environments of use”** to generate insights about their needs
- **Observing users in their natural habitat helps new-product developers understand the product's strengths and limitations from the user's point of view.** But there are many additional benefits. By watching end-users interact with the device, researchers can see behaviors that reveal product performance attributes even when the users don't say a word

What is ethnography?

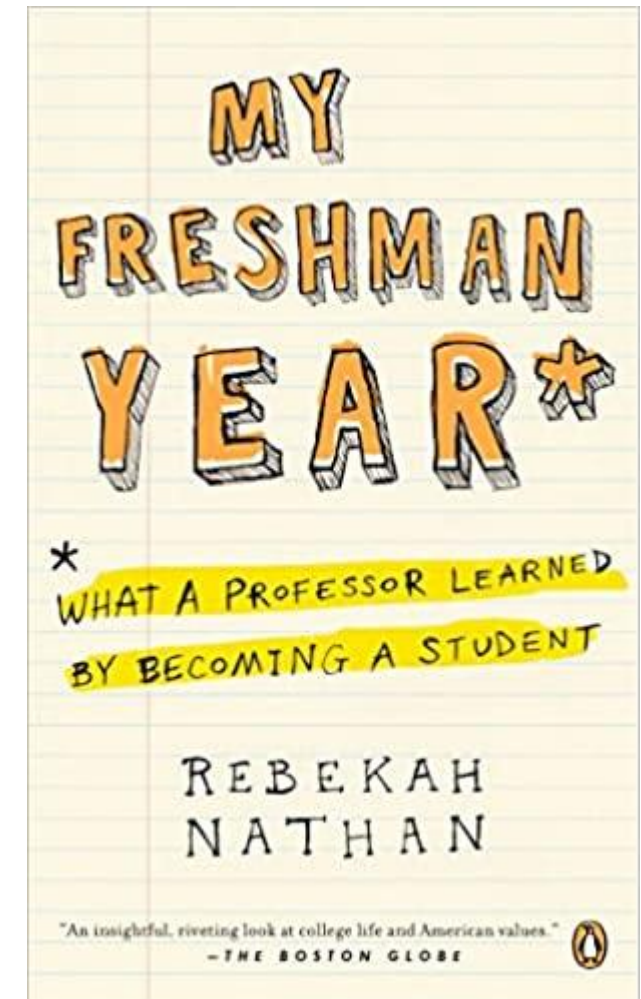
- When compared with focus groups, surveys, and even one-to-one interviews, the discovery process of **ethnographic research yields information that is typically more rich, vivid, and concrete**. This is because working in a naturalistic context enables researchers to ask people questions while they use the product (or, at the very least, immediately before and after).

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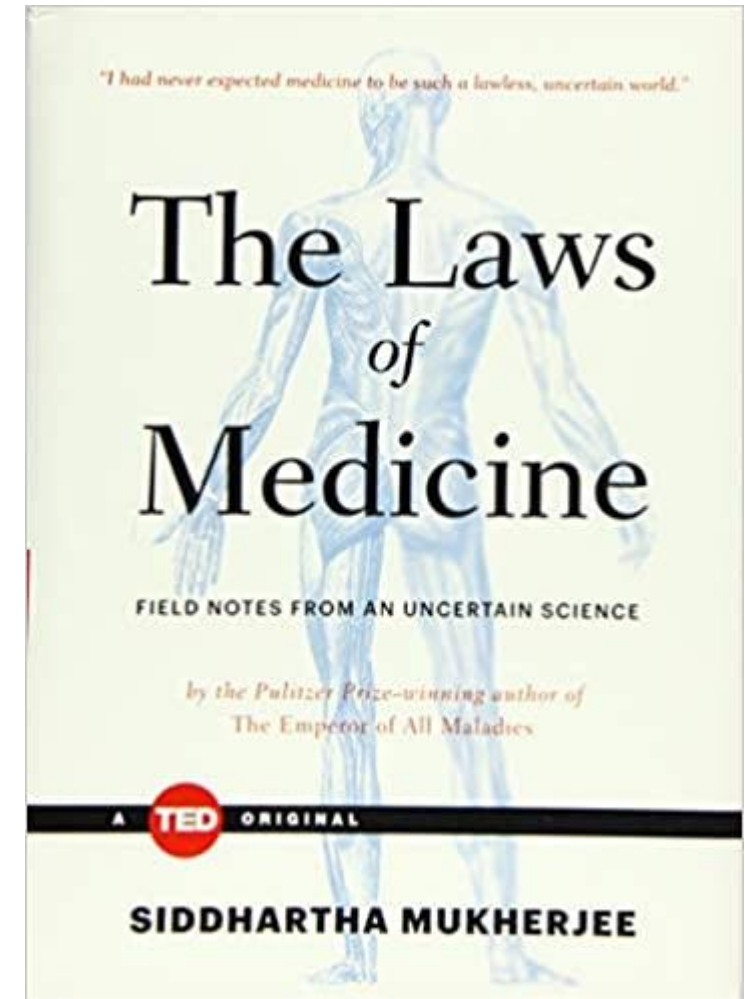
How is ethnography done (1/6)?

- Literally meaning “**writing about culture**”, the term and concept of ethnography describes the attempt to **understand the beliefs, customs, and rituals of people** in different types of societies.
- The **main principle** of successful ethnography is **understanding the other person’s worldview**.
Doing so is not the same thing as merely listening to his or her opinions.
- Understanding their worldview **means discovering their values and norms, identifying their goals and expectations, and determining some of the basic ways they divide space and fill up their days ...**
shared symbols & behaviors



How is ethnography done (2/6)?

- Electrical engineers have had a difficult time for years trying to develop a user interface for pacemaker programming that cardiologists will find easy to use. Why?
- Because to do it, the **device manufacturers essentially need to learn how physicians think.**
- **They need to know, for instance, what day-to-day professional language cardiologists and electrophysiologists use, which diagnostic categories are most critical to them, and how they arrive at specific treatment plans**



How is ethnography done (3/6)?

- Ethnographic research is holistic.
- It requires researchers to look beyond the immediate answers to their initial questions and to see the new product as part of the larger context of personnel, tasks, and incentives that its users confront on a daily basis.



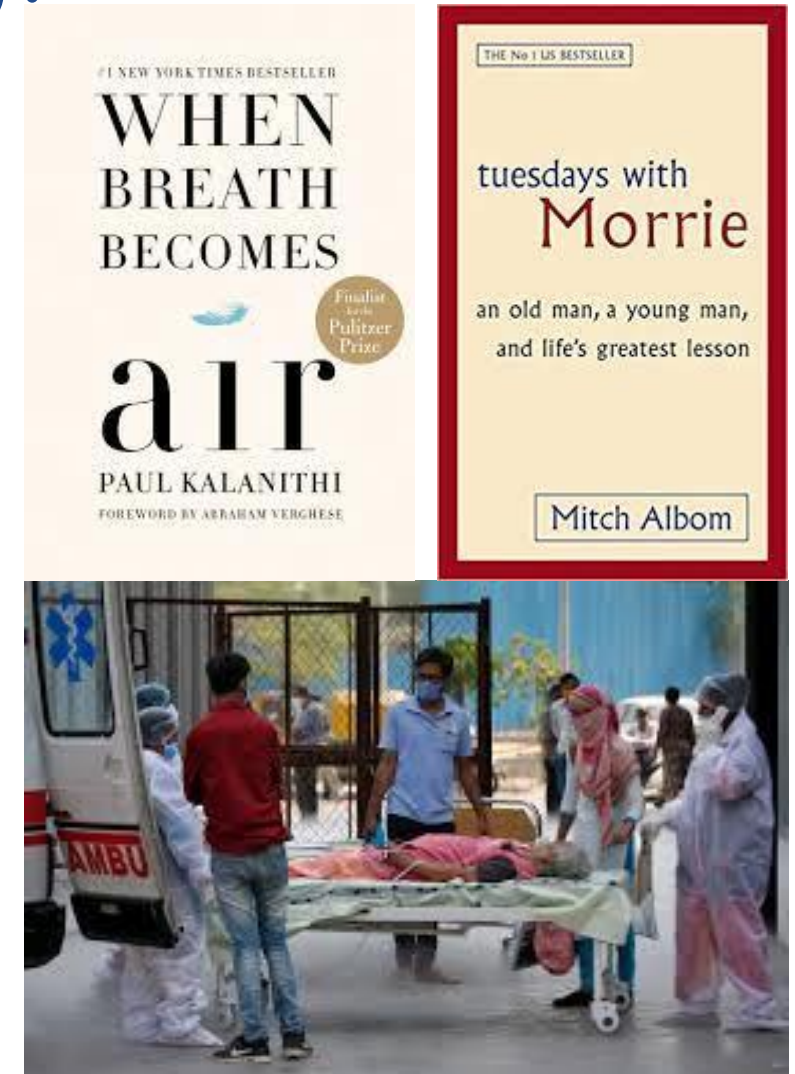
How is ethnography done (4/6)?

- In a study of behavior around office photocopiers, for example, anthropologist J. Blomberg discovered that office workers tended to define the term *mechanical breakdown* simply as any time the machine was unusable, not as when the mechanical components were physically damaged
- As one might imagine, machines that happened to be in offices with a helper, someone available to clear paper jams and handle other minor problems efficiently, were perceived as more reliable than machines of the same type in offices lacking such an employee.



How is ethnography done (5/6)?

- *Emic* and *Etic* are terms used in ethnography to describe methods of observation
 - **Emic observation is an insider approach**, observing the setting and its members by directly participating in the setting. Emic is not only observing but also experiencing.
 - **Etic is a more distant approach**, observing the setting and its members as unobtrusively as possible from the outside... as a patient attender in a hospital



How is ethnography done (6/6)?

- The best tool for ethnographic research is the designer's knowledge, vision, and memory
 - Cameras, voice recorders, and notebooks are also reminders of what is observed.
 - A video camera is a valuable tool that allows an independent researcher to focus on the larger context, sketch, make notes, and take pictures while in the environment.
 - Sketches are less obtrusive than pictures, and pictures are less obtrusive than video footage

Example of Emic: Getting involved to observe better



https://www.youtube.com/watch?v=xMj_P_6H69g

Activity 7: Observing situations (interaction between people and things)

- Observe and document how people interact with things and identify hidden patterns in interactions and meanings that may be guiding actions
 - Garden staff removing weeds in the garden
 - Security personnel – at the gate or in the lab/academic complex
 - Housekeeping staff
 - Waiting for a lift; While inside a lift; while getting out of a lift
 - People queuing and using an ATM; Standing in queue for making payment in a grocery shop
 - People's response to automatic doors / people taking the stairs
 - Or any other situation in the campus
- Capture sketches and notes of your observation and summarize the findings
- This exercise is for your to practice and validate your approach

Weekend activity for sessions 8-10: Observing situations (interaction between people and things)

- Each team may pick one distinctive domain of human activity in Kandigai (no two teams should have the same domain). Examples,
 - Roads in Kandigai and how pedestrians, cyclists, bikes, cars, trucks use them - Road safety(1);
 - Vegetable supply / shops / push carts / online delivery (2); flower shops (3); fish or proteins (4)
 - Restaurants (5); Street food carts (6); Pharmacy shops (7); Govt or private hospitals (8);
 - Bus stops (9); Children transported/walking to schools (10); Sign boards / notice boards / posters / etc. on the roads (11); Public transport (bus) (12); Auto rickshaws (13); Auto mechanics (14); Traffic movement in signals (15)
 - Hair dresser / beauty salon (16);
 - Garbage collection or disposal (17); Public water supply (18); Public toilets (19); Public parks (20); Lakes (21)
- Two members in each team to form a pair and gather data using ethnographic principles – observing with eyes and ears and making notes/sketches
 - No survey, No interview, No intrusion, No unauthorized photographs or videos
 - Gather all aspects involved and analyze the issues, meanings
 - Do this over next three weekends (2.5 hrs each weekend at different times of the day)
 - **Design a powerful Visual Communication Poster to generate positive collective action among people**
 - Final poster display (weekend of session 12)

Relevant videos



<https://youtu.be/9tHgNXzS2EY>



<https://youtu.be/ZGnCOKPlig>

<http://blog.usabilla.com/top-ethnographic-research-videos/>