Observation (Jane Goodall, Consumer Odessey)

- Observation should be an important element in any data collection method
- Example: observe people’s behavior in bars and restaurants
Observation Methods Structured Versus Unstructured Observation

- For **structured observation**, the researcher specifies in detail what is to be observed and how the measurements are to be recorded, e.g., an auditor performing inventory analysis in a store.

- In **unstructured observation**, the observer monitors all aspects of the phenomenon that seem relevant to the problem at hand, e.g., observing children playing with new toys.

Observation Methods Disguised Versus Undisguised Observation

- In **disguised observation**, the respondents are unaware that they are being observed. Disguise may be accomplished by using one-way mirrors, hidden cameras, or inconspicuous mechanical devices. Observers may be disguised as shoppers or sales clerks. (Secret shoppers)

- In **undisguised observation**, the respondents are aware that they are under observation. (watching children play)
Observation Methods
Natural Versus Contrived Observation

- Natural observation involves observing behavior as it takes place in the environment. For example, one could observe the behavior of respondents eating fast food at Burger King.

- In contrived observation, respondents' behavior is observed in an artificial environment, such as a test kitchen.

Observation

- Participant observation: the observer needs to be unobtrusive so that people do not change their behavior because they are being watched.

- The role of participant observer
  - Become part of the organization
  - Explicit role of researcher within the organization
  - Interrupted involvement
  - Observation alone

- Serious ethical issues — ask for permission — change the behavior
- Ethnographic studies
- Grounded Theory
A Classification of Observation Methods

Fig. 6.3

Observation Methods

- Personal Observation
- Mechanical Observation
- Audit
- Content Analysis
- Trace Analysis

Observation Methods: Content (Sentiment) Analysis, Big Data!

- The objective, systematic, and quantitative description of the manifest content of a communication.
- The unit of analysis may be words, characters (individuals or objects), themes (propositions), space and time measures (length or duration of the message), or topics (subject of the message).
- Analytical categories for classifying the units are developed and the communication is broken down according to prescribed rules.
- Study of advertising themes and appeals
Observation Methods: Trace Analysis

Data collection is based on physical traces, or evidence, of past behavior (video shopping, GPS data).

- The selective erosion of tiles in a museum indexed by the replacement rate was used to determine the relative popularity of exhibits.
- The number of different fingerprints on a page was used to gauge the readership of various advertisements in a magazine.
- The position of the radio dials in cars brought in for service was used to estimate share of listening audience of various radio stations.
- The age and condition of cars in a parking lot were used to assess the affluence of customers.
- The magazines people donated to charity were used to determine people's favorite magazines.
- Internet visitors leave traces which can be analyzed to examine browsing and usage behavior by using cookies. (clickstream data)

A Comparative Evaluation of Observation Methods

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Personal Observation</th>
<th>Mechanical Observation</th>
<th>Audit Analysis</th>
<th>Content Analysis</th>
<th>Trace Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of structure</td>
<td>Low</td>
<td>Low to high</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Degree of disguise</td>
<td>Medium</td>
<td>Low to high</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Ability to observe in natural setting</td>
<td>High</td>
<td>Low to high</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Observation bias</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Analysis bias</td>
<td>High</td>
<td>Low to Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>General remarks</td>
<td>Most flexible</td>
<td>Can be intrusive</td>
<td>Expensive</td>
<td>Limited to communications</td>
<td>Method of last resort</td>
</tr>
</tbody>
</table>

Table 6.3
Interviews

Why do interviews?

- **Exploratory interviews**: to obtain a general understanding of the system in which you conduct your research; to figure out how you will answer research questions but not answer these questions.
- **Design interviews**: before finalize your survey, to ensure that important areas are covered by the survey by holding fairly short interviews with the relevant stakeholders and targets of your research.
- **In-depth research interviews**: when following a more qualitative method, probe behind the straightforward questions and yield a vast amount of rich information.
- **Longitudinal Interviews**: interview and re-interview the relevant stakeholders and targets over time in order to understand how their perceptions and attitudes change with time.
- **Validation Interviews**: to determine if there has been a proper and reliable interpretation of the collected data.
  - In sample interviews: those who have been interviewed or surveyed are presented the research findings to ascertain the degree of concordance.
  - Out of sample Interviews: those who are not part of the main study are presented the research findings to ascertain the degree of generalization of the results

General Guidelines for Interviewing

- **Pre-test the interview**
  - How comprehensive is the list of questions?
  - Is the language appropriate?
  - Are there other problems such as double meaning or multiple issues in one question?
  - Does the interview schedule as developed help motivate respondents?
- At the beginning of the interview explain what the interview is about and its purpose
- Ask general simple questions first to put your subjects at ease
- Keep the interview confidential and take steps to prevent the subject from being identified.
- The subject should do most of the talking; Do not lead the subject but be firm in not letting the subject deviate from the area you are asking about.
- Remember to listen actively, probe and reflect.
- Go into the in-depth questions after the simple and straightforward ones, keeping any sensitive ones towards the end.
- Try to be as consistent as possible when conducting the interviews on different subjects.
- Not just to prepare questions and note the answers but also to observe body language.
**Bias and Errors**

- Misunderstand the question or the answer---include some related questions for cross-checking purposes

- Bias from interviewer, respondents, or sample selection

- Tactics to minimize the bias and errors:
  - Establish rapport and trust with the respondent
  - Get to know the interviewees and their ‘social context’
  - Motivate individuals to respond
  - Use appropriate questioning techniques
  - Verify responses from interviews with data from other sources

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**Telephone Interview**

- Advantages of telephone interview: ease of geographic coverage, the possibility of doing more interviews in the time available, and lower costs.

- Significant drawbacks of telephone interview: the sense of impersonality, the lack of visual contact, and a feeling of time pressure

- Tips for overcoming these drawbacks
  - Use voice cues to compensate for the lack of visual contact
  - Listen sensitively and do not talk too much
  - Remember the importance of your tone and the need to project warmth and friendliness.
  - Remember to write and take notes as well as listen
  - Sum up important points from time to time
  - Arrange in advance, a mutually convenient time for the interview
  - Do not be afraid of silence
Group/Focus Group Interview

- Group interviews are efficient in that responses from several subjects can be elicited simultaneously, thus saving a considerable amount of time.
  - The groups should be composed of homogeneous people as far as possible
- Focus groups: focuses on specific issues
  - Between eight and 12 subjects: all participate and no individual dominates the discussions
  - At least two researchers as the facilitators: one facilitates and asks the questions, and the other notes down the responses and observations
  - Focus groups take considerable planning
  - Problems may arise:
    - Subjects may be too shy to participate—giving material in advance
    - One or two people dominate the discussion—the role of facilitator
    - Subjects fall into line with the group view
    - Enroll different subjects

Qualitative Data Analysis

- Qualitative research poses a challenge: an overwhelming amount of data gathered from in-depth interviews, observations and written documentation.

- Aims of qualitative analysis
  - To detect patterns in the data—Exploration phase
  - Identify deviants and oddities—Classification phase
  - To compare to theory
  - Identify groups—classification
  - Compare and contrast groups—Drawing conclusion phase
  - Construct a model
  - Test the model—validation—Testing phase
Framework Approach

- **Familiarization with Data:** gain an overview of the depth and diversity of the material and identification of recurring themes and issues.
- **Creating a Thematic Framework:** a thorough careful reading of transcripts in full to ensure that any index is grounded in the original accounts and observations.
- **Coding and Indexing of Data:** All the material is read through and coded alongside the margin of the text.
- **Charting:** allows the analyst to build up a picture of the data as a whole.
- **Mapping and Interpretation:** reviews the charts and research notes, compares and contrasts perceptions, accounts or experiences, and searches for patterns and connections that explain the phenomenon under study.

Content Analysis

- **Content analysis:** to describe the content of your respondents’ comments systematically and classify the various meanings expressed in the material.
  - Identify the Unit of Analysis: an individual, a company, geographic region or country
  - Choose a Set of Categories: relevant, mutually exclusive, exhaustive, and reliable
  - Coding: within each context unit, assign each assertion to one of the categories
  - Tabulate the Material: count the number of assertions under each category and present the material as a table
  - Illustrate the Material: construct schematic diagrams to indicate the relationships between elements and the direction of influence
  - Draw Conclusions from the Tabulations and Diagram: produce inferences as to the nature of effects between elements in the data.
## Summarizing and Grounded Theory

- **Summarizing**
  - Tabulation is the usual way of presenting the information available in content-analyzed data.
  - Categories were developed by looking at the different answers given in the transcripts of that part of the interview.

- **Apply grounded theory to data transcripts**
  - Start with a thorough familiarization with the data and the framing of questions
  - Conceptualization comes next: a set of concepts or variables are important in understanding what is going on.
  - Cataloguing concepts: the perspective of the researcher or respondent?
  - Linking: all of the variables considered important can be linked together towards a more holistic theory
  - Re-evaluation should take place in the light of peer scrutiny