

# CS449/649: Human-Computer Interaction

Spring 2019

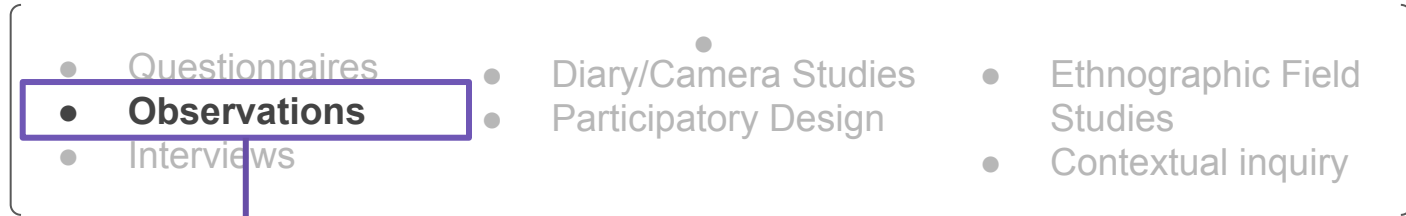
Lecture VI

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## Understand Your Users: Exploratory Studies

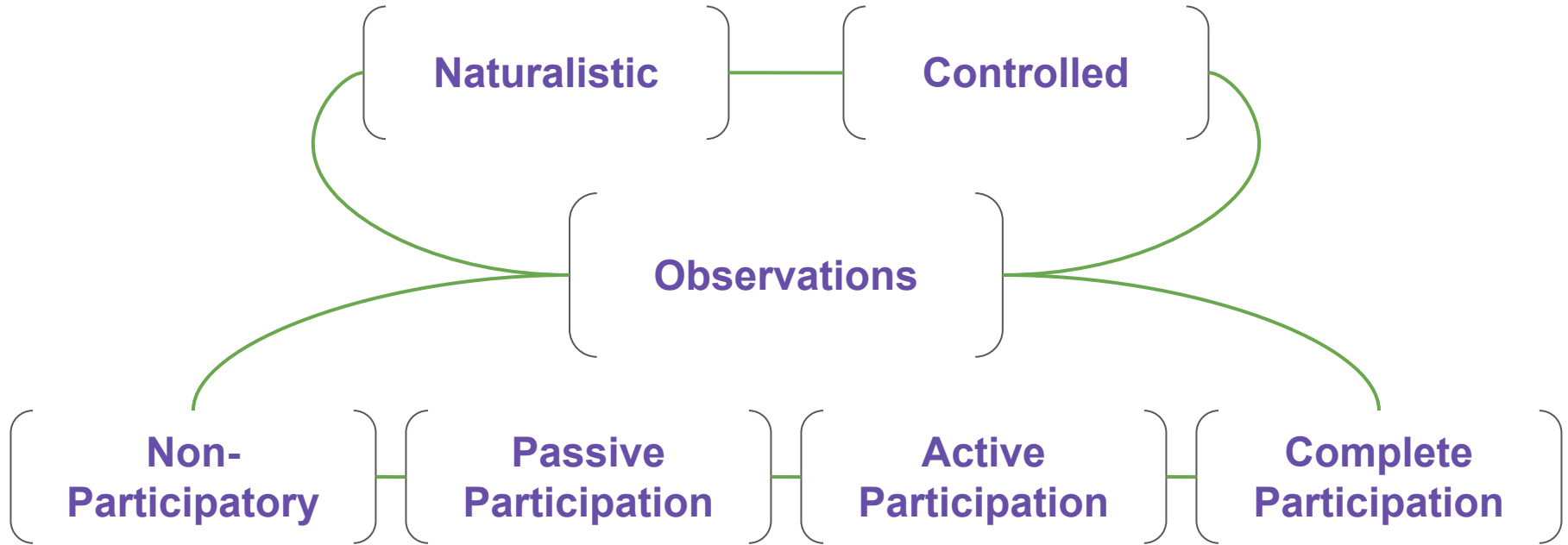


- Observing participants performing some type of activity (ongoing behaviour)
- Can be controlled (lab) or naturalistic (field)
- Different possible levels of participation
- Written or video recording (requires consent!)

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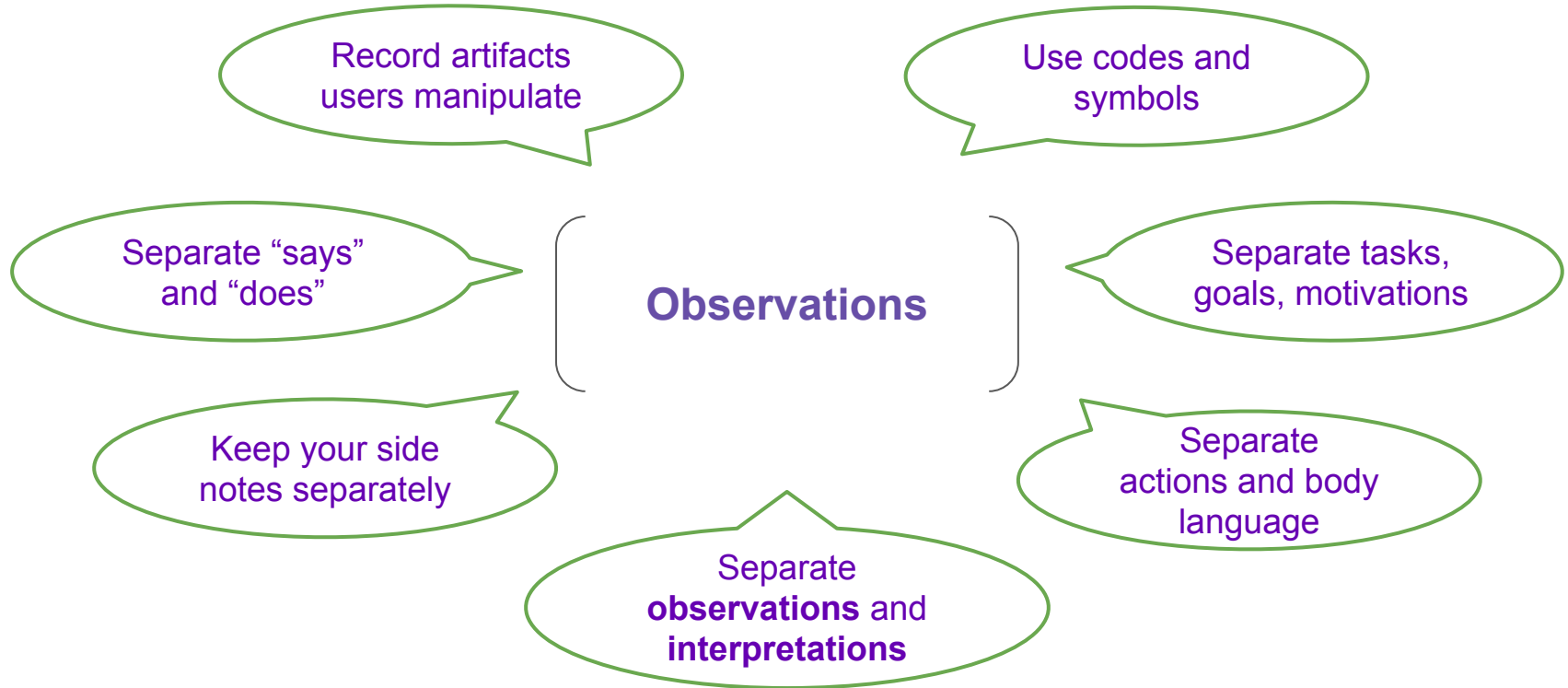


## Understand Your Users: Exploratory Studies





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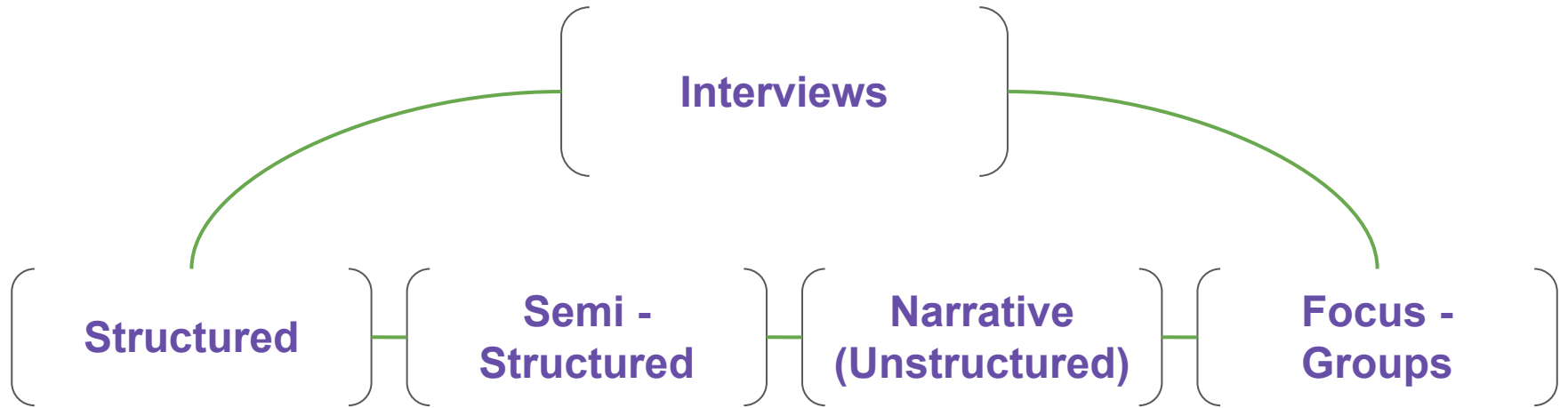
- Questionnaires
- Observations
- **Interviews**
- Diary/Camera Studies
- Participatory Design
- Ethnographic Field Studies
- Contextual inquiry

- In depth discussion of the topic with a participant
- Usually one-on-one
- Written, audio, video recording options (requires consent!)

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## Understand Your Users: Interview





## Understand Your Users: Interview

### Structured

- Same set of questions
- Standardized process
- Little freedom of expression
- Often self-reported

### Semi - Structured

- List of guiding questions / topics
- Trajectories in a conversation
- Often preceded by observation
- One of the most popular

### Narrative (Unstructured)

- Focus and goal guide the discussion
- Open-ended questions
- Freedom of expression & little control
- Popular in ethnography

### Focus - Groups

- Semi-structured in a group
- Moderated
- 6-10 homogeneous strangers
- May permit discussion
- Emerged in the 1940s



## Understand Your Users: Exploratory Studies

- Questionnaires
- Observations
- Interviews

- **Diary/Camera Studies**

- Participatory Design

- Ethnographic Field Studies
- Contextual inquiry

- Includes a mechanism (diary or camera) to record / describe relevant activities in “everyday” settings
- Longitudinal
- Data recorded by participants based on provided guidelines

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## Understand Your Users: Exploratory Studies

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- **Participatory Design**
- Ethnographic Field Studies
- Contextual inquiry



- Participants are given design elements
- Inclusive design process - constructing ideal experience real time with a researcher
- Helps to understand values and uncover mental models

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## Understand Your Users: Exploratory Studies

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- Participatory Design
- **Ethnographic Field Studies**
- Contextual inquiry

- Natural environment, everyday life
- First-hand participation in users' activities
- Description of the scene, key events, key actors, key artifacts and actions
- Combination of observations and interviews
- Focus on objective behaviours

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## Understand Your Users: Exploratory Studies





## Understand Your Users: Exploratory Studies

- Questionnaires
- Observations
- Interviews
- Diary/Camera Studies
- Participatory Design
- Ethnographic Field Studies
- **Contextual inquiry**

- Natural environment, everyday life
- First-hand participation in participants' activities
- Relatively short (several hours)
- Researcher heavily involved in the process and constantly asks questions
- Mostly rely on self-report data

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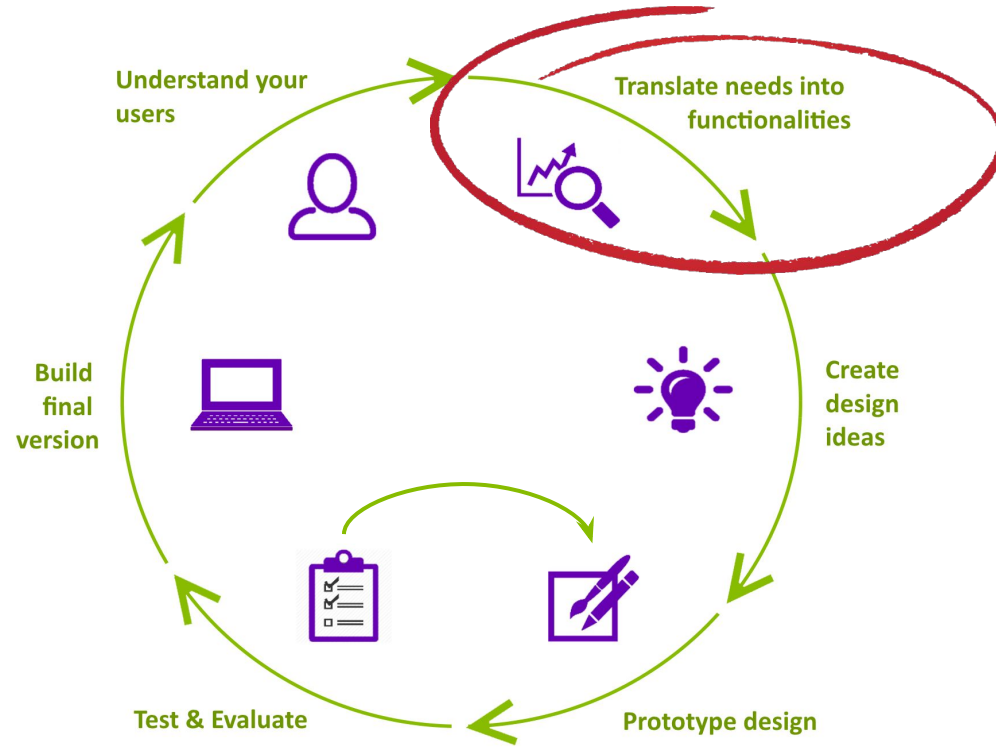
## Understand Your Users: Exploratory Studies

### There is a product

- True-Intent Studies
- Remote Unmoderated Usability Studies
- Intercept Surveys
- Clickstream Analysis

### There is NO product

- |                        |                  |                              |
|------------------------|------------------|------------------------------|
| • Diary/Camera Studies | • Questionnaires | • Ethnographic Field Studies |
| • Participatory Design | • Observations   | • Contextual inquiry         |
|                        | • Interviews     |                              |





## Translating Needs Into Functionalities





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