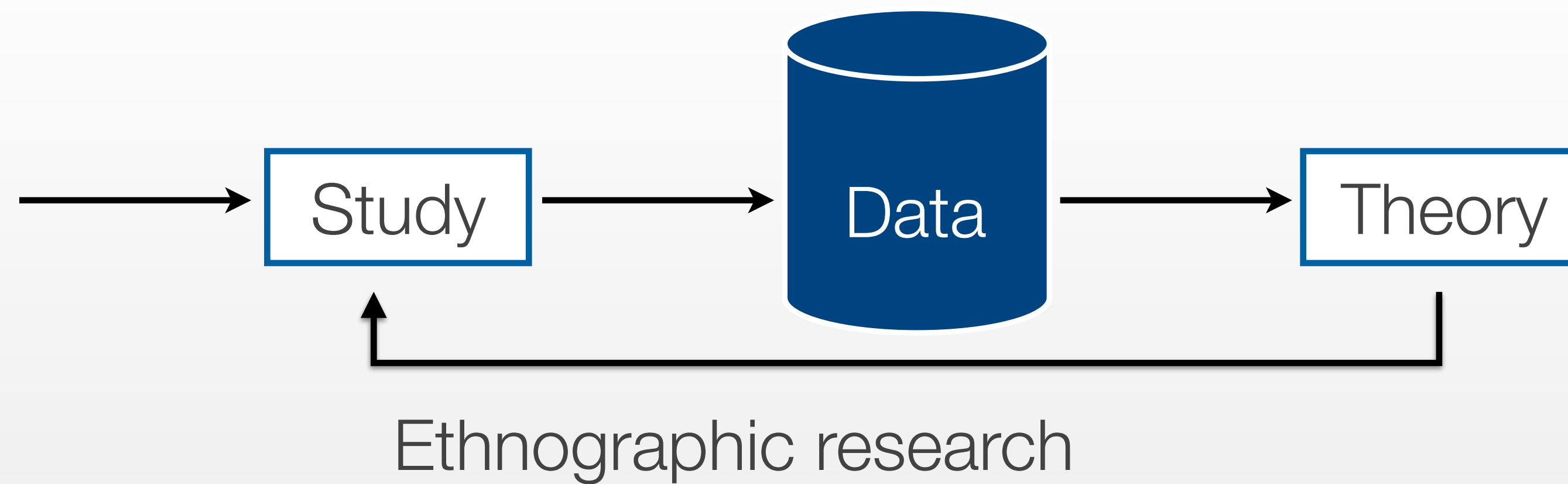
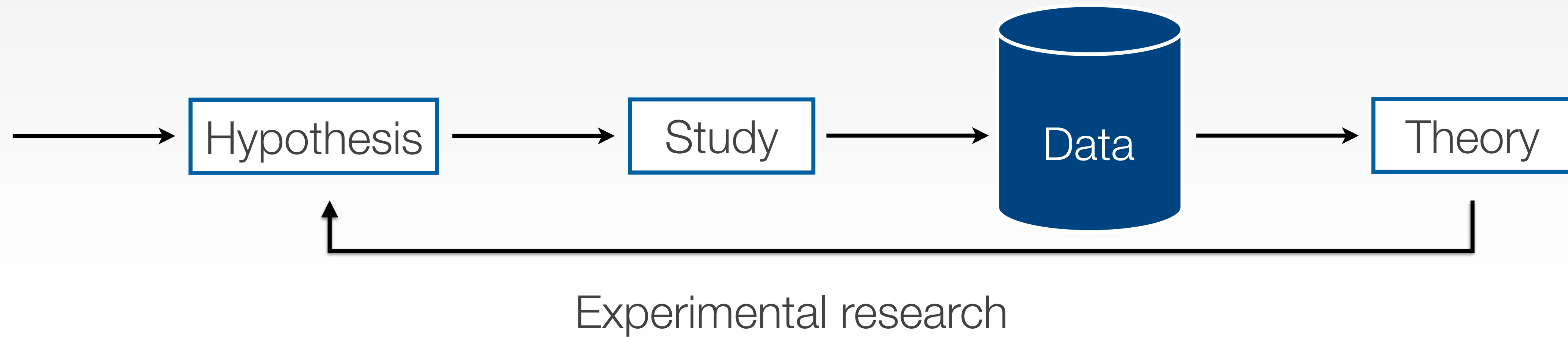
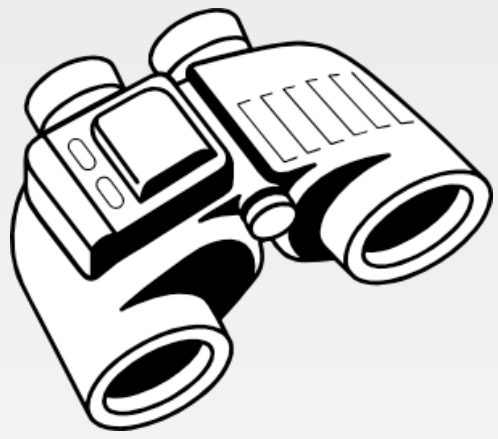
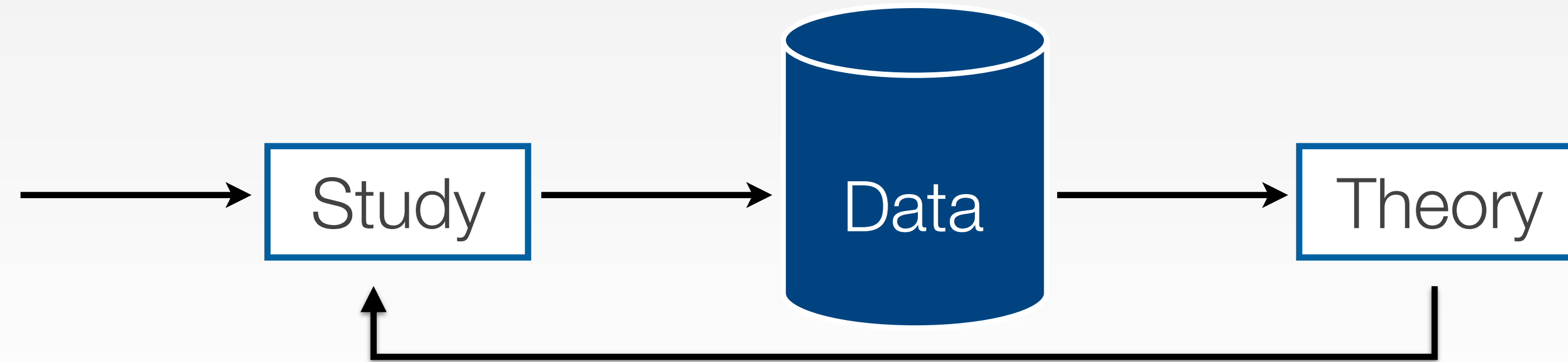
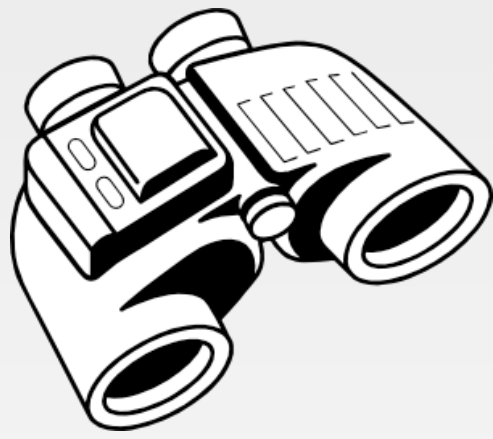


Ethnography



Ethnography



- Collect the data
- Code the data and find patterns that occur in the data
- Create theories that explain the data
- Try to attack the theories by gathering more data
 - Leads to stronger theories

Data Collection

- Methods: Observation, interview, participation, logging
 - Format: Field notes, video, audio, log files
- **Triangulation**: use multiple data sources to support an interpretation to increase the confidence of the conclusion
 - From different participants
 - From different types of data, e.g., observation, interview, logs

Research Example: Vlogging in Dentist Training

- Becvar and Hollan (UCSD), GROUP '07
- Field site: dental hygiene training program in San Diego, CA, USA
- Goals
 - To gain understand the teaching and learning practices, media and representations
 - To implement and evaluate a design prototype based on the finding of the first goal
- Method
 - Ethnographic study of the current practice
 - Implement and deploy the prototype, then do another ethnographic study



Vlogging in Dentist Training: Understanding Current Practice

- Method (2004, [one year in the field](#))
 - Observation
 - Video recording
 - Contextual interview
- 18 students, 4 instructors participated
- Sample finding: strategies used by clinical instructors
 - Molding: laying their hands over students' hands as they work with instruments
 - Directing: verbally talking a student through a new procedure: "Do this"
 - Demonstration: using hand gestures to show correct/incorrect ways to handle instruments

Engineering & Design




- Objective: solve a problem with a solution that works
- Key attributes*:
 - Compelling target
 - **Solve a concrete, compelling problem** with demonstrated need
 - Solve a set of problems using a **unifying set of principles**
 - **Explore** how people will interact with computers in the future
 - Technical challenge
 - Requires novel, non-trivial algorithms, or configuration of components
 - Deployed when possible
 - System is deployed and intended benefits and unexpected outcomes documented

* from James Landay's slides: James & Friends' Systems How To



Research Example: Skinput

- Harrison et al., Best paper CHI '10 
- Contributions & Benefits
 - “Skinput is a **technology** that appropriates the human body for acoustic transmission, allowing the skin to be used as a finger input surface.”

Skinput: Appropriating the Body as an Input Surface

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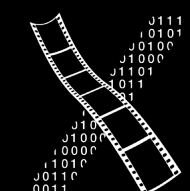


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The Messy Truth

