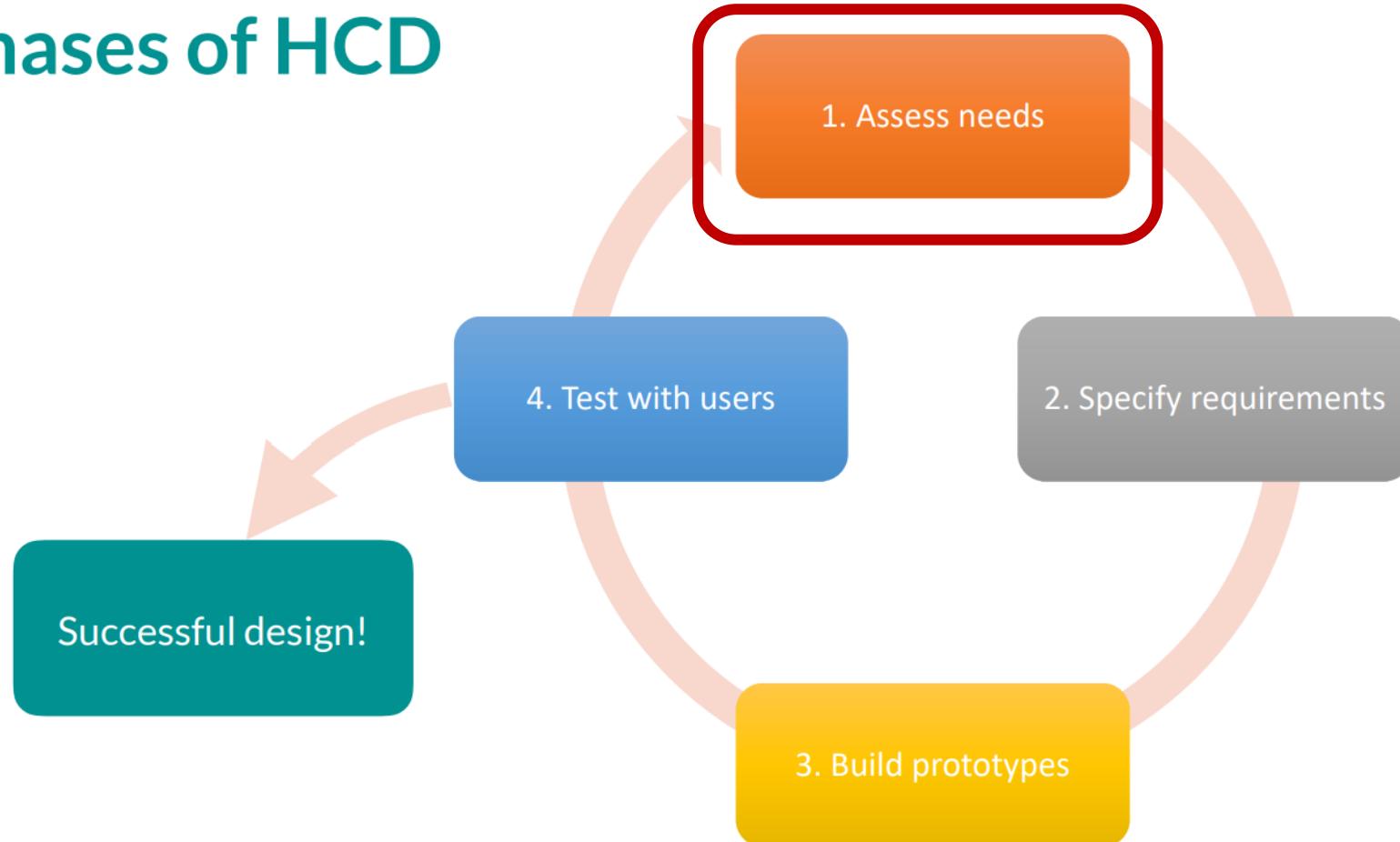


CSE 4451: HUMAN-COMPUTER INTERACTION

**Class 2: Ethnographic Observation
and Contextual Inquiry**

Phases of HCD

Phases of HCD



Needfinding

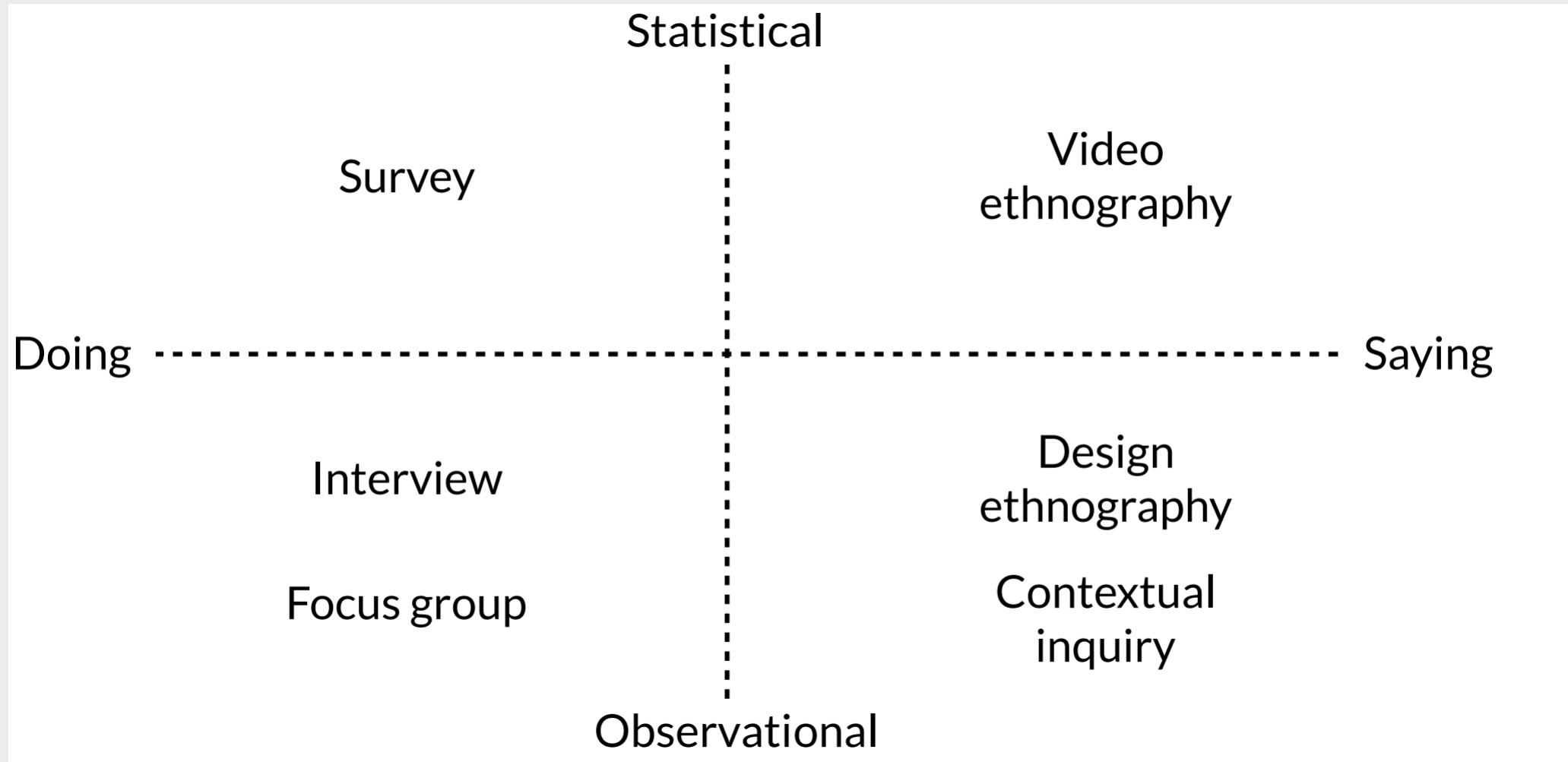
- People are bad at predicting what they would use, or would prefer when it is only hypothetical
- They can respond much better to actual, concrete things, or make comparisons
- This highlights the importance of observation and prototypes

What is our goal?

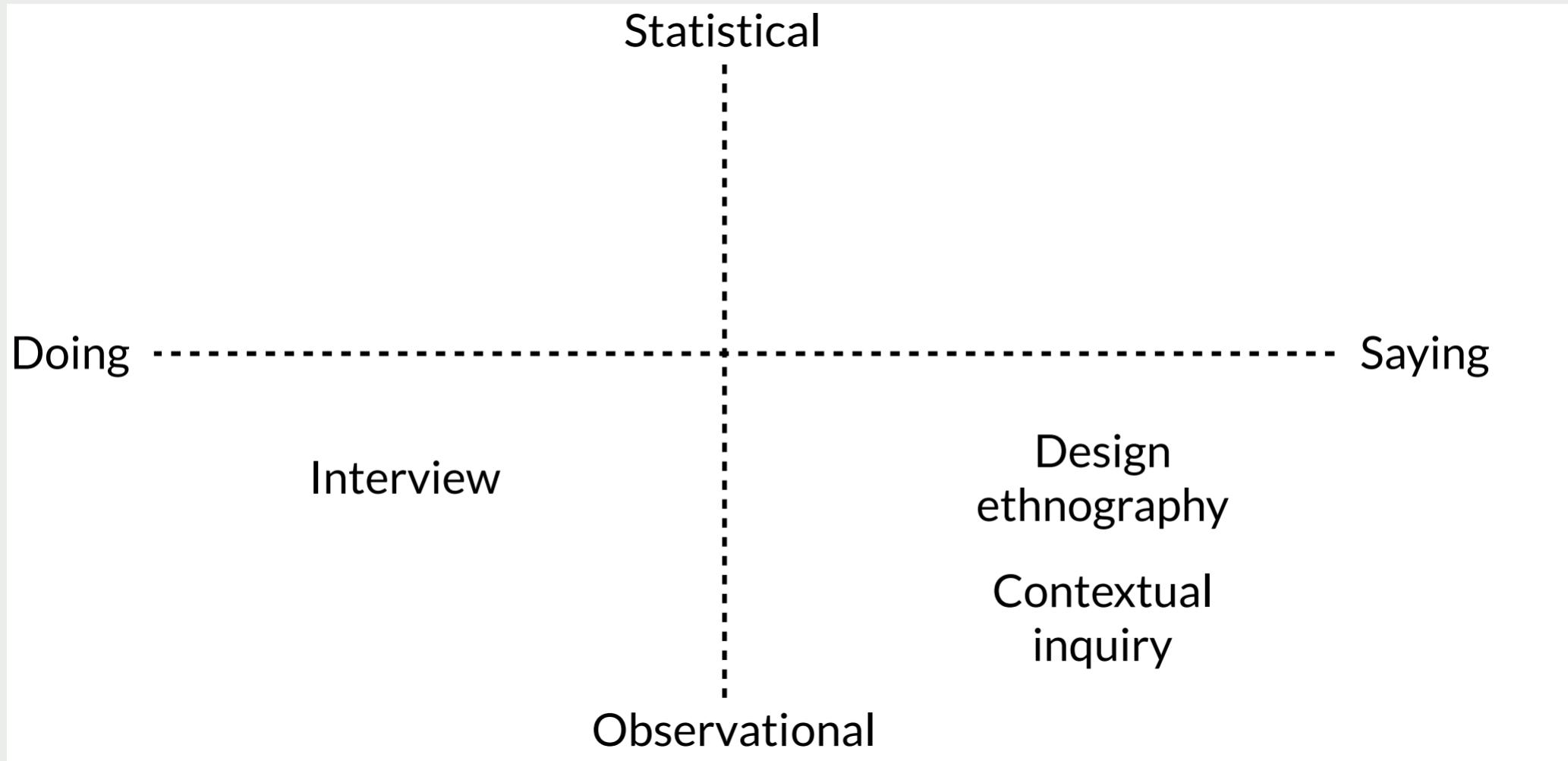
**What are we
looking for?**

- Opportunities for new design and experiences
- Breakdowns in current processes
- Workarounds that people are implementing
- Mismatches between what people say and what they do

Needfinding



Needfinding



Qualitative Approaches for Needfinding

- Helps form an understanding of how and why
- Tends to focus on a combination of behaviors and attitudes
 - Can be observational or self-report
- Often the only way to get at the context surrounding design challenge
- The results of qualitative methods DO NOT equal systems requirements
 - Translation is a key gap

Qualitative Approaches for Needfinding

- Qualitative approaches are flexible
 - But this does not mean the study has no focus
- The researcher must document how the study evolved
- Methods allow for openness to adapt inquiry when understanding deepens or situations change

Ethnographic Research

- Observation and interview in a naturalistic environment, focused on building theory and filtered through a researcher
- Design ethnography tends to focus the observation in the context of an existing or future design

Ethnographic Observation

Plan

- Define objectives, questions, and data needed
- Determine when, where, and who you will observe
- Decide how you will record; do not assume you can “get it off the audio”

Execute

- Inform people what you are doing (possibly with a formal consent document)
- Try to be unobtrusive; the longer you are there, the easier this will become
- Document before, during, and after

Ethnographic Observation

Building theory

- Make an observation and document it
 - e.g., “people don’t notice the button on the screen”
- Investigate whether it pops up again
 - Maybe with different people, under different circumstances, etc.
- Repeated exposure leads to insights
 - Designer’s intuition, combined with people’s practices, lead to design ideas

Ethnographic Observation

Saturation

- When you stop making new observations
 - You've gleaned all of the insights you're going to glean
- The “ideal” stopping point for an ethnography or contextual inquiry
 - In practice, timelines and resource constraints

IN-CLASS ACTIVITY



Activity (20 mins)

- Pair up (or threes as needed)
- Select one of you to be the researcher(s), the other the participant
- For now, the researchers will only observe the participants

Participants

- Order breakfast from a food ordering site

Researchers

- You're looking at the participant ordering food, observe for 10 mins
- You may not ask the participant questions, but take note of
What are people *doing*? What objects/tools are involved? What behaviors
seem efficient or clumsy? What social interactions are present? What
assumptions might underlie their behavior?
- Write down 1–2 key insights or behavioral patterns

REFLECTIONS



Things to be discussed