Sampling & Sorting

Fundamentals of Human-Centered Computing

Sampling & Sorting

Memos have lots of questions

    Categories may miss properties

    Some insights may be based on a single interview

    They lack a single focus

How to move from here to a coherent and robust theory?

Solution

Use **theoretical sampling** to **saturate** your categories

Use **sorting** and/or **diagramming** to integrate your theory

Sometimes it means gathering more data to fill gaps

Sometimes it means changing your focus altogether based on an insight during analysis

Sampling

Theoretical sampling and saturation

Sampling

Conducting theoretical sampling encourages you to **follow up on analytic leads**

Goal: Write increasingly abstract and conceptual memos

This moves your project from description to analysis

Try to answer the questions you have about your own analysis, until you have none (or very few) left

Seek variation (not just between people, but also between events)

Benefits

Why would you let your data guide your sampling?

- It moves you in the most useful but often most unanticipated theoretical direction

- It prevents you from keeping categories shallow or unspecified

- It moves the data that we use as evidence beyond overt statements

- It makes your theory increasingly conceptual

Benefits

Why would you let your data guide your sampling?

– It enables you to examine your ideas and hunches

– It allows you to fine-tune your focused codes by making new distinctions and connections

– It allows you to develop the properties of categories, their range of variation, their origin, and any basis for change
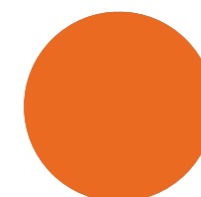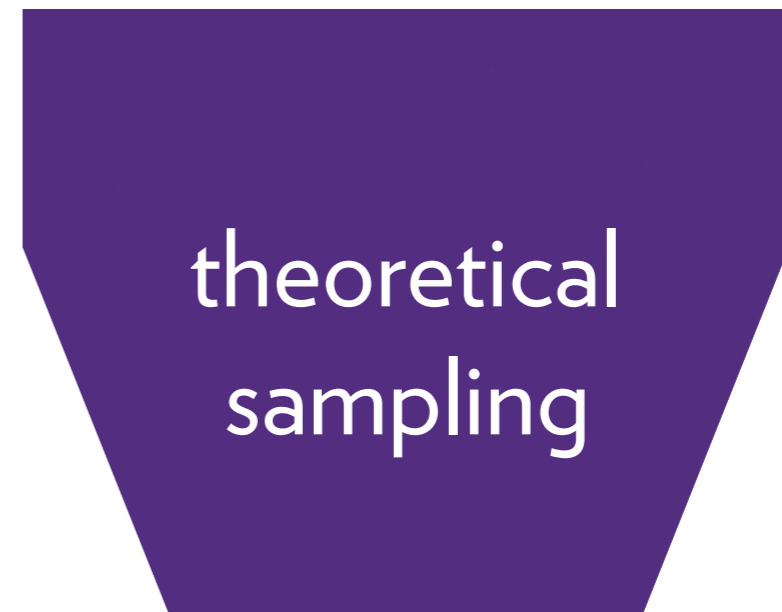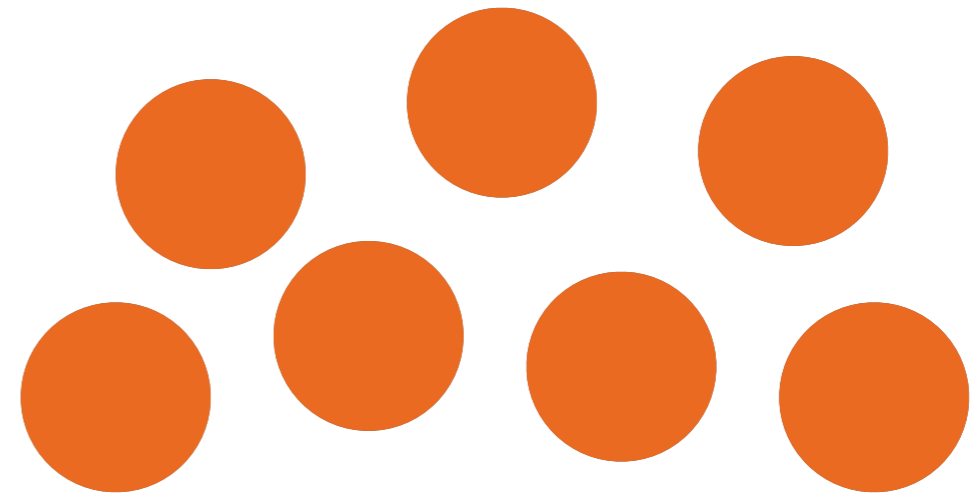
How?

Step 1: Explain your data using abduction (mental leap)

Generate a set of useful possible explanations

Step 2: "Test" these possible explanations in subsequent sampling

Find out which one is more plausible

possible explanations

theoretical sampling

Test explanations

How to test explanations?

Option 1: By reintegrating your current findings to see if it can fit the new idea

Sometimes this even re-coding your old data!

Test explanations

Option 2: By revising your interview guide with a few focused questions

> It's okay to be a bit more confrontational, if needed to explicate a hidden meaning, but only after establishing trust

Code your new data and compare it with your explanations

Saturation

Saturation happened when…

…you answered all your questions

…your categories feel robust

  Robust means: sufficiently general, backed up by multiple instances

Saturation

Test for saturation:

– Did you get to make all the comparisons in your data?

– Do they make sense?

– Do they tell the whole story?

– Did you get all the categories?

– What else could you still find?

Your sample size should be commensurate with the size of your claims!

Sorting

Sorting, diagramming, and integrating memos

Sorting

The goal is to define the **logical flow** of your theory

   Usually related to the organization of your paper

Sorting, diagramming, and integrating memos are usually done all together

Which method you end up doing the most kind of depends on your style and your research topic

Sorting

Sorting is often self-evident

If not, start by **comparing memos**

Kind of like axial coding, but at a higher level, namely to outline your theory

Order them to **create a story**

It is okay to leave some of them out

Do this on a table, and try a couple of arrangements

You've found the correct sorting when the story makes sense

Diagramming

Sometimes mapping your memos out in a **diagram** helps

One typical version of such a diagram takes the main concept, and maps the **conditions** and **consequences** surrounding it