## Reflexive Thematic Analysis

CS294-184: Building User-Centered Programming Tools UC Berkeley Sarah E. Chasins

**Need Finding** Week, Day 1



#### Discuss in groups

- Which part of thematic analysis currently looks hardest to you, before trying it (assuming you haven't done it before :) )? Revisiting a Tuesday question after the RTA video—would the creators
- of RTA say it is replicable?
- How would you draw the distinction between a code and a theme? • How do you know when you're done with RTA?
- What do you think about the RTA claim that the most frequent themes are not necessarily the most important?
- What do you think about the RTA claim that just because a participant doesn't talk about a theme doesn't mean it's not important?

### **Reading Reflection**



### Thematic Analysis

No looking at sessions, noticing a few things, and calling it an analysis! TA (and other QDA approaches) are well-developed techniques with long histories and lots and lots of ways to do them wrong!

Other resources, other than the posted readings:

- analysis-in-hci-57edae583ca9
- psych/about/our-research/documents/ <u>ril%202019.pdf</u>

• A nice starter/summary resource: <u>https://medium.com/usabilitygeek/thematic-</u>

• Thematic analysis inventors' own guide: <u>https://cdn.auckland.ac.nz/assets/</u>

<u>Reading%20List%20and%20Resources%20for%20Thematic%20Analysis%20Ap</u>



### Thematic Analysis for PL

Other advice:

- Record sessions
- Use software to support your qualitative coding (e.g., MAXQDA)
- Learn by doing!
  - In-class activity, HW part 2
- by doing, but...
  - similar study and a similar analysis recently

• I have yet to meet anyone who's managed to really learn this except via learning

...you can avoid some of the pitfalls by talking to someone who's done a

 Everything from tips for using qualitative coding software to what kinds of open codes you'll find most useful later in the grouping process

# Tips for Coding for PL Start your coding process with detail-heavy, purely descriptive process

- codes
  - said!
  - could with participant quotes
  - then you'll keep having to dive into the video.
    - making any assumptions, generalizations, or speculations at this stage.

• Even after observation, it can be tempting to rely on what participants

• Easier to fight that urge if you've turned the things participants did into text that you can then rearrange and test in themes as easily as you

• For first layer of codes, use complete sentences. Short summaries or key phrases make it too easy to leave out detail you'll need later, and

• For first layer of codes, don't do any analysis. Be purely descriptive. You don't need to include every single detail down to the exact string the user typed, but you shouldn't be







## Tips for Coding for PL

- Distinguish between codes related to things you observed vs. things participants said
  - E.g., using different colors in your analysis software
  - you're later in the process. E.g., writing the paper
  - Both are useful, but they're different kinds of evidence

• Distinguishing, wiht whatever mechanism, can be really helpful once

### In-Class RTA Activity

- We're going to try out RTA!
- MaxQDA (see slack)
- Video: <u>https://drive.google.com/file/d/</u> <u>1sLPOb4qg0xBsxMjBk0AjhG3c9\_0JECu9/view?usp=sharing</u>
- P5, a JavaScript library for creative coding?

• RQ: What kinds of needs does this programmer exhibit while learning



The rest of the slides in this deck are taken from PowerPoint slides from the Braun, Clarke & Hayfield Qualitative Methods Online Teaching & Learning Resources Collaboration (QMOTLRC)







#### Six Phases of Thematic Analysis

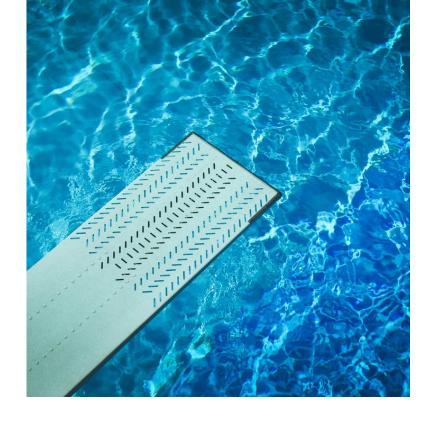
- 1. 3. 4. 5.
  - Familiarisation with the data.
- 2. Coding the data.
  - Generating initial themes.
  - Reviewing and developing themes.
  - Refining, defining and naming themes.
- 6. Producing the report.

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#### 1) Familiarisation with the data

- o Read through each data item and make a note of: • Things of potential interest. Ideas to explore further in coding.
  - Your responses to the data.
- Read actively, analytically and critically (read data as *data*).
- Try to unpick the assumptions that underpin your initial reactions and analytic observations -
  - What was familiar?
  - What was unfamiliar/surprising?
  - Why are you reacting to the data in *that* way?
- O End this phase by writing familiarisation notes for the whole dataset.





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### (2) Coding the data

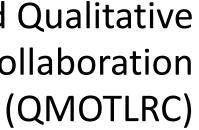
- A code captures what is analytically interesting about the data – consists of a coding label that evokes what is analytically relevant and the underlying idea/concept/take. ○ 'Take away the data' test...
- Code inclusively, comprehensively and systematically.
- Codes can be semantic or latent; coding can be fine or coarse – but should be fine enough to parse out relevant meaning.
- Give each data item broadly equal attention.
- More than one sweep of coding may be necessary.
- O End this phase, with a list of codes and all the data relevant to each code collated (important for next phase).



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- We've renamed this phase from our original 2006 paper to capture the way in which generating themes is an active and interpretative process; themes don't 'emerge' from data fully formed!
- Organising the codes into initial themes:
  - 'Promote' an important (multifaceted) code to a theme
  - Cluster together similar codes
  - Review the coded data to help you identify potential themes
  - Use thematic maps/tables
  - Start to think about the relationship between themes what's the overall story?
  - Good themes are distinctive and part of a larger whole
- Gather all the coded data relevant to each theme (important for next PowerPoint slides from the Braun, Clarke & Hayfield Qualitative phase). Methods Online Teaching & Learning Resources Collaboration



### Quick Check!

Do you need to hop back to a prior phase? Remember that these are not steps that need to run in order! Feel free to fall back to other phases at any point!

#### 4) Reviewing and developing themes

- Start to identify the nature or character of the potential themes.
- $\circ$  Questions to ask:
  - $\circ$  Is this a theme?
  - What is the quality of this theme?
  - What are the boundaries of this theme?
  - Are there enough (meaningful) data to support this theme?
  - Are the data too diverse and wide-ranging?
- Check if the themes work in relation to (a) the coded extracts and (b) the entire data set.
- Be prepared to let things go.
- Finalise your thematic map.

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#### 5) Refining, defining and naming themes

- A name or label beware one-word theme names!
- Avoid domain summary-type names too (e.g. Benefits of... Barriers to... Experiences of...).
- Write a definition a short description or 'abstract' for each theme (a few hundred words).
- Refine the specifics of each theme and the overall story of your analysis.
- How many themes are enough (or too many)?
  - There is no magic formula that states that if you have X amount of data, and you're writing a report of Y length, you should have Z number of themes!
  - However, lots of themes and sub-themes are suggestive of a fragmented and under-developed analysis.

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#### 6) Producing the report

- Final chance for analysis!
- Analysis consists of analytic commentary, data extracts and themes.
- Decide on the order in which to present your themes.
- Select vivid and compelling examples of data to illustrate each theme.
- Final analysis of selected examples (if using data analytically to further your analysis).
- Relate analysis to research question and the literature (and the wider context).
- $\circ$  (Still) be prepared to let things go.
- Draw out analytic conclusions across themes.



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