

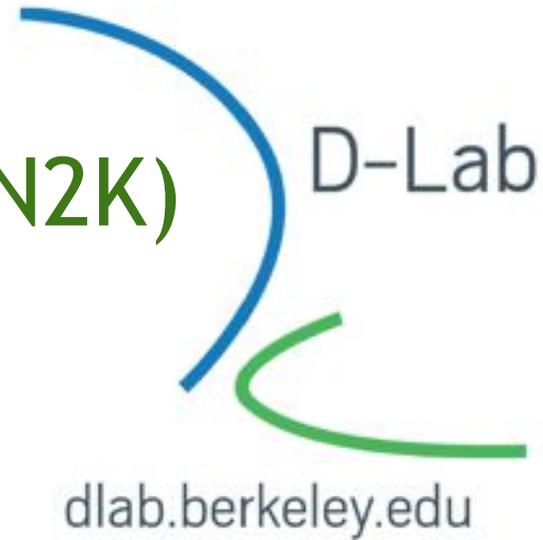
Introduction to Qualitative Research & Coding, Part 2

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some slides were adapted from Dr. Zawadi Rucks-Ahidiana and Dr. Claudia von Vacano and/or originally developed for DH Summer Institute, commissioned by D-Lab/DH at Berkeley

- It's Okay Not to Know (IOKN2K)
- 280 workshops
- 1,100 consultations
- working groups
- special research projects
- approx. 6,000 scholars served per year



Agenda

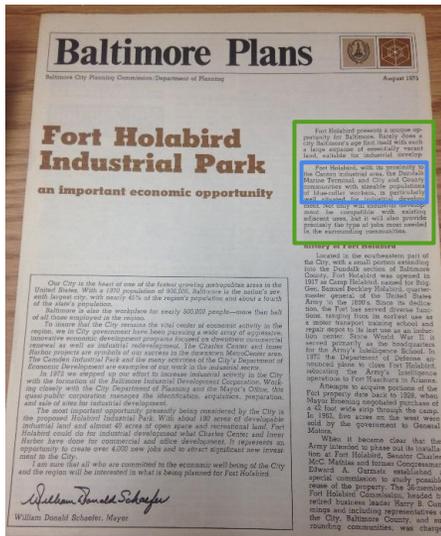
- Introduction of Facilitator & Participants
- Introduction to Qualitative Research
 - Review of Basic Concepts
 - Methodologies & Methods
 - UC Berkeley Resources
- Introduction to Coding
 - What is Coding? What are Codes?
 - Deductive and Inductive Coding
 - Defining Codes
 - Organization of Coding Scheme
 - Multi-Step Nonlinear Process
 - Best Practices
 - What is Analysis?
- Overview of QDA Software

Introduction to Coding

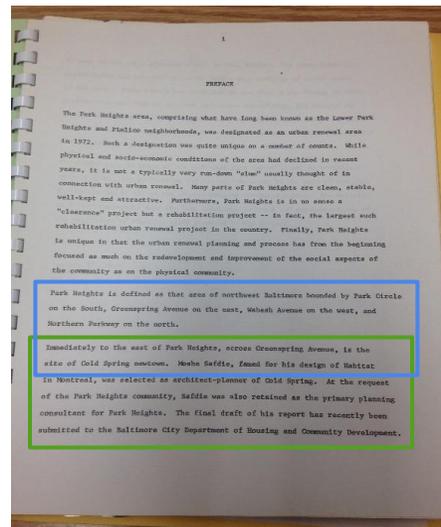
What are Codes? What is Coding

Coding is a way of organizing the data around some common idea, concept, or category ACROSS sources.

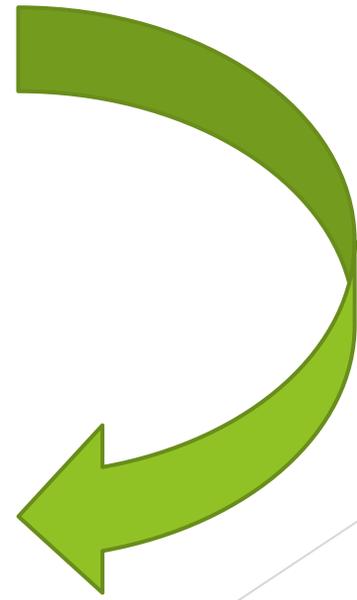
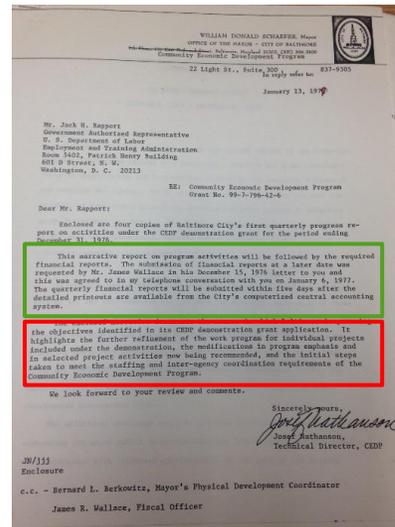
A



B



C



The code of “financial planning” is applied to the selected text from documents A, B, and C, because they all discuss this topic.

Deductive and Inductive Coding

You create codes because you deem the identified topics/concepts/ideas as important and relevant to your study.

- Deductive Coding
 - Codes emerge from your research question and/or the literature review.
- Inductive Coding
 - Codes emerge through engagement with your actual data sources and/or data set.

Introduction to Coding, cont.

Defining Codes

Your codes should be defined, just as variables in a quantitative study should be defined. The level of specificity will depend on various factors, such as the complexity of your coding scheme, whether you have a team of coders or are conducting coding on your own, requirements of your field or committee or journal of choice...

- Inclusion/Exclusion Criteria
- Weighing Scale

Organization of Coding Scheme

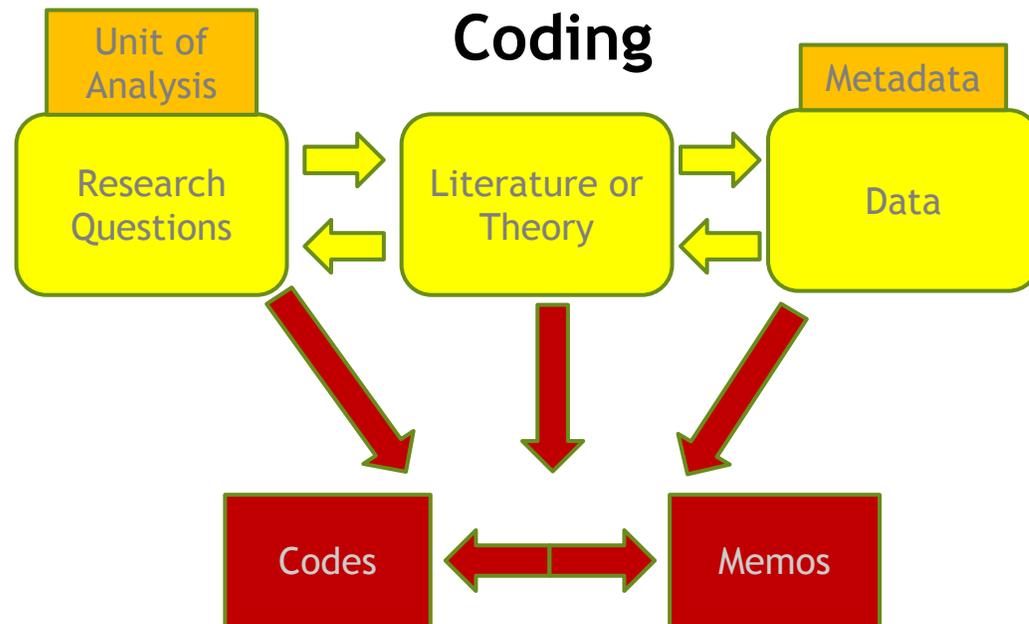
Whether deductive or inductive, codes are organized into a coding scheme that you then use to systematically identify relevant segments of data within your entire data set.

- Flat Coding
 - Codes are organized at the same conceptual level.
- Hierarchical Coding
 - Codes are organized into groups and subgroups based on whatever conceptualization the researcher deems appropriate/relevant.

Introduction to Coding, cont.

Multi-Step Nonlinear Process

Different researchers engage the coding process in different ways... However you choose to create and organize codes, you should expect it will be a multi-step process, maybe 4, 5, or more rounds, and that there will be a great deal of “back-and-forth” throughout the process.



Best Practices

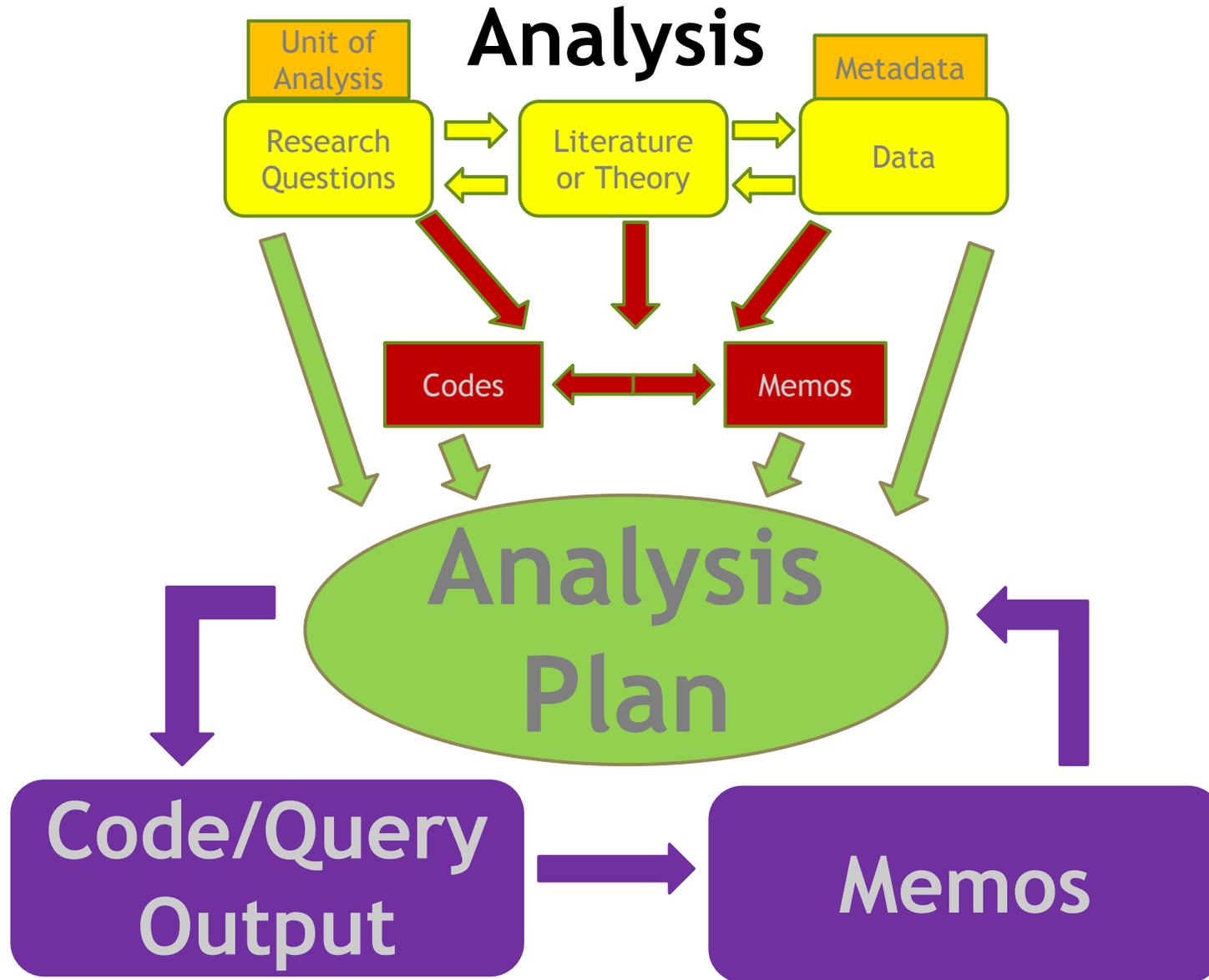
- **Treat Coding as an Iterative Process**
 - **Test Codes and Revise**
 - Look for codes that aren't being used, aren't distinct enough from other codes, are defined too broad or too specific...
 - **Review Coding Process**
 - Make sure you and other coders are being consistent in your application of the codes across the data set.
- **Actively Work with 20-30 Codes at a Time**
 - You'll likely have more than 20-30 codes, but should actively code with only 20-30 codes to ensure consistency.
- **Break Up the Coding Process**
 - You can code for a specific chapter rather than the whole dissertation/book.
 - You can split the codebook thematically, and code in rounds.
- **Keep a Codebook**
 - Include information noted on "Defining Codes" slide, and regularly refer back to it.
 - This is a living document that should be revised as needed.
- **Memo as You Code**
 - Make notes reflecting on the coding process, perhaps noting ideas for codes that aren't yet included and/or revisions to existing codes.
 - You may also write analytic memos, making a note that reflects initial thoughts about the meaning of your work (i.e., preliminary analysis)

What is Analysis?

The process of identifying themes related to your research findings. This is different than identifying ideas/concepts/topics that come up throughout your data set. It's "bigger picture" stuff...

- Overarching Themes
 - What is happening in your data overall?
- Subgroup Themes
 - What is happening in your data for specific subgroups?
- Typology Themes
 - What is happening in your data by specific dimensions of coded data?

What is Analysis?, cont.



What is Analysis?, cont.

Creating an Analysis Plan

An analysis plan is a living document that you revise as you discover new questions, add codes to your codebook, and revise your plan based on null findings.

The plan should document:

- Research questions you want to answer
- Codes, attributes, and queries you'll use to answer each question
- Relevant subgroups and typologies

What is Analysis?, cont.

Multi-Step Nonlinear Process

1. Identify Specific Questions to Answer

- These questions will be more specific than the research questions that motivate your study, and will focus on your actual data.

2. Identify Codes and Attributes Associated with the Specific Questions

- Which codes help answer the specific question?
- What aspects of codes are you interested in? (i.e., co-occurrence)?
- If you have a hypothesis, plan to test both to prove and disprove.

3. Identify Relevant Subgroups

- Make note of subgroups within the data or aspects of the data that are important to your research.
- What unit of analysis is important to answer your question (e.g., individual or group, stakeholder type, document age)?
- How might codes vary across subgroups?

4. Identify Relevant Typologies of Coded Data

- How might the concepts/ideas/categories for which you coded contribute to your research question?

What is Analysis?, cont.

Types of Analysis

You may hear different verbiage related to qualitative and other types of analysis. As with many other concepts, different researchers, including established and respected methodological leaders, may use different terms to refer to the same thing or the same terms to refer to different things... You should familiarize yourself with whatever terminology is used in your field, by your colleagues, etc. to determine what language you should use to describe your chosen methodology.

- Qualitative Text Analysis
- Qualitative Content Analysis
- Content Analysis
- Thematic Analysis
- Discourse Analysis
- Audio Analysis
- Visual Analysis
- Video Analysis
- Picture or Image Analysis
- Computational Text Analysis



Agenda for Introduction to QDA Software +

- QDA Software as a Tool for Coding & Analysis
- Overview of Relevant Software Programs
- Overview of QDA Software Programs
 - ATLAS.ti
 - Dedoose
 - NVivo
 - MAXQDA



QDA Software as a Tool for Coding & Analysis

What It Does

- Structure & Organize
- Explore
- Annotate
- Memo
- Code & Retrieve
- Visualize

Potential Benefits

- Can Deal with Large Data Sets
- Frees Time to Focus on Analysis
- Improves Validity/Auditability
- Improves Credibility
(among some audiences)

What It Does Not

- Analytic Thinking
- Error-Free Auto Coding
- Eliminate Bias
- Advanced Quantitative Analysis

Potential Drawbacks

- Can Produce Nonsensical Findings
- May Create Pressure to Engage Excessive Features & Large Data Sets
- Requires Learning the Software

Overview of Relevant Software Programs



QDA Miner

HyperResearch



ANSWR

Transana



Aquad (open source)

Quirkos (visual exports)

Saturate (app-based)



Pros

- Ability to Interlink Components
 - e.g., memos, comments, codes, coded segments
- Significant Manual Diagramming Options
- Great Mapping Tool
 - Google Earth is Embedded
- Customizable Interface
- Great User Support

Cons

- Flat Coding
- Some Data Sources Not in Project
- Comparatively Complex Process to Facilitate Teamwork
 - No Automatically-Generated Scores for Intercoder Reliability

D-Lab Support

Consulting - by librarian
Workshops - Thur, Feb 7
1:30 - 3:00 p.m.

Pros

- Intuitive Interface
- Allows for Weighing Codes
- Teamwork is Simple
 - Does Not Require Additional Infrastructure, Shared Location
- Internet Based
 - Easy to Access from Any Computer
 - No Difference Across PC, Mac, or Chromebook
- Monthly Access
 - No Charge if Not Active

Cons

- Larger Projects = Lower Speeds
- Poor Internet Connection = Interrupted Work
- No Auto-Coding
- Limited Query Options
- Cannot Merge Projects

D-Lab Support
Consulting - by appointment
Workshops - TBD

Pros

- Accepts Most File Types
- Great Automated Data Visualization Tools
- Most Advanced Visual Coding Abilities
- Allows for Weighing Codes
- Available in Several Languages
- Can Import Social Media
- Integrates EverNote, EndNote, Survey Monkey, & OneNote

Cons

- Steep Learning Curve
 - Interface May Not Feel Intuitive
 - Advanced Features May Clutter Control Options
- Time-Consuming Coding Process
- Comparatively Complex Process to Facilitate Teamwork

D-Lab Support
Consulting - by appointment
Workshops - TBD

Pros

- Intuitive Interface
- Variety of Coding Colors
- Allows Weighing Codes
- Flexible Application for Different Methodologies
- Accepts Most File Types
- Great Automated Data Visualization Tools
- Semi-Customizable Interface
- Good Integration of Statistical Data for Mixed-Methods
(not advanced stats)

Cons

- Comparatively Few Users
 - Translates to Less User Support
 - Less Likely to Find Collaborators Already Using the Program
- Comparatively Complex Process to Facilitate Teamwork

D-Lab Support

Consulting - by appointment
Workshops - current week + TBD

Why Use MAXQDA?

- Reasonable License Prices
- Compatible with Many Data Sources
- Allows for Different Kinds of Research Projects
- Some Integration of Quantitative Data
- Identical Across Macs & PCs
- Great User Support

Why Choose a Different Program?

- Mapping & Connection of Metadata is Better in ATLAS.ti
- Teamwork Is Easier with Dedoose
- Manual Diagramming & Auto-Coding is Better in NVivo

Visit MAXQDA's Website to Prepare for Upcoming Workshops

- Learn about the software on the [What is MAXQDA?](#) page.
 - Download the [trial version of the software](#).
 - Review the helpful info available on the [Getting Started](#) page.
 - Learn about other support services, such as free webinars & video tutorials, on the [Learning](#) page.
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