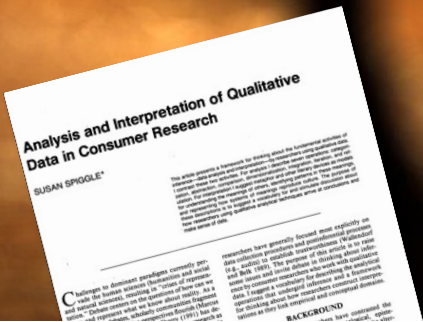


# DATA ANALYSIS 1/2

## CODING (WITH SOFTWARE!)



# ***AGENDA***

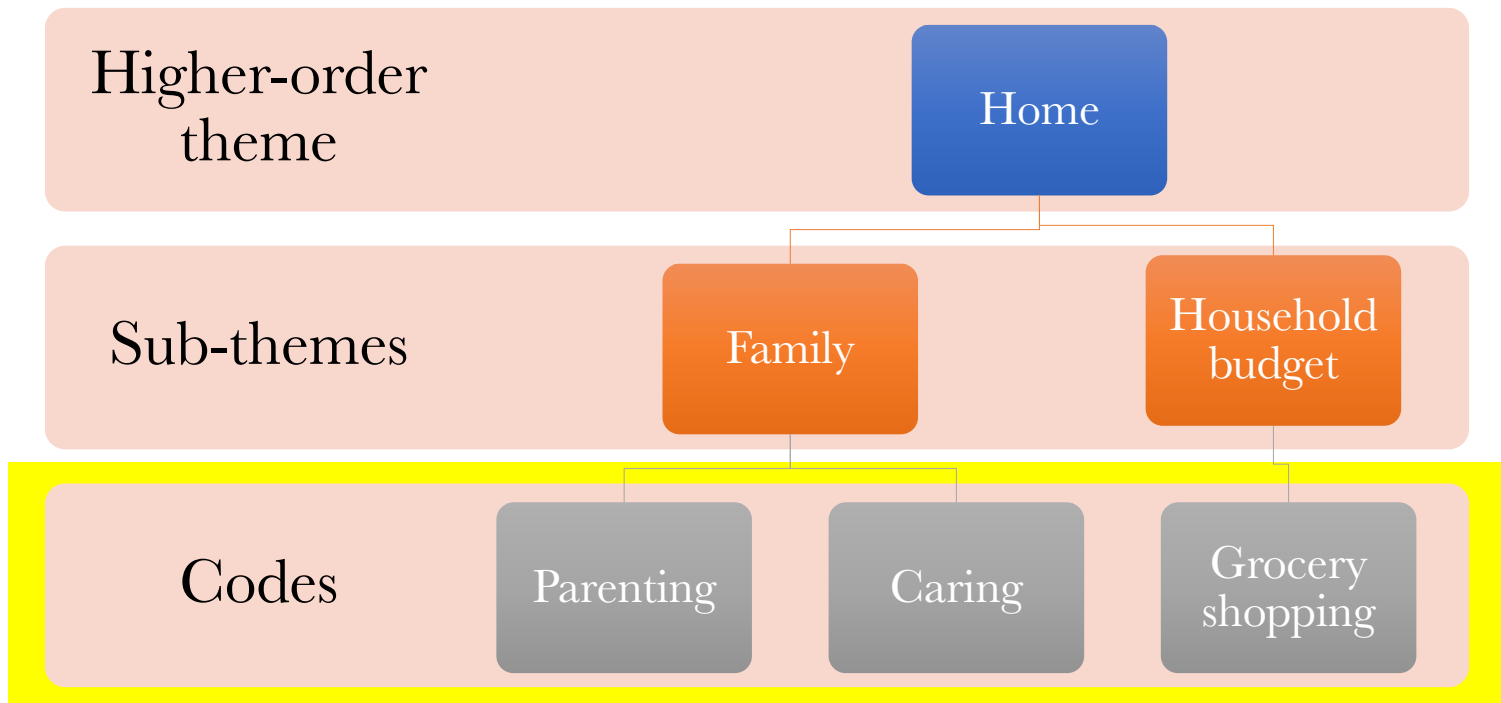
1. A brief reprimer on qualitative analysis
2. Coding
3. Workign with Atlas.ti!

# **SPIGGLE (1994): PROCESS OF QUAL. ANALYSIS**

- 1. CATEGORIZATION** putting (your) labels on data
- 2. ABSTRACTION** linking categories into higher-order constructs
- 3. COMPARISON** how categories and constructs vary e.g. across interviews
- 4. DIMENSIONALIZATION** the range and "boundary conditions" of a construct
- 5. INTEGRATION** Linking the constructs and dimensions, creating "the conditions of the context"
- 6. ITERATION** Revising categories and constructs as you move between datasets
- 7. REFUTATION** Finding negative cases to ensure construct validity

# ***BASIC ANALYTICAL PROCEDURE***

# BASIC ANALYTICAL PROCEDURE

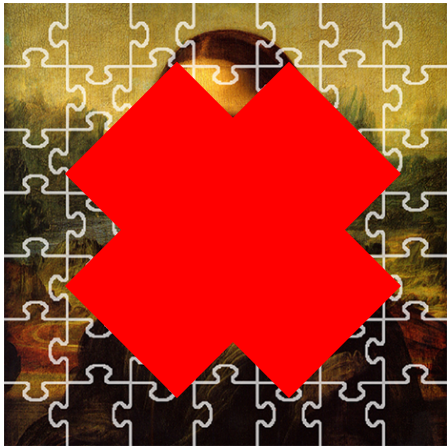


# CODING



# CODING

- Coding is about “reducing data into meaningful segments and assignment names for the segments” (Cresswell 2007, p. 148)
- Codes are meaningful concepts or names that are applied to *all instances of similar content in a piece of data*
- Codes are heterogeneous (a word can host multiple codes), but codes should always be *useful and productive*
- Coding is a *personal and creative process*; don’t try to find the “right codes”







## Experiencing creativity in the qualitative data analysis

A theoretical model for pedagogy

*Edith Ellefsen*

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### Abstract

In this paper, a theoretical model is proposed to understand how creativity is involved in the qualitative data analysis experience to support students' learning. It is important to ensure that students' intuitive and personal knowledge about creativity is structured in a conscious manner. To do so, they should develop ways of reflection in action enabling them to adapt their own individual creativity in the qualitative data analysis experience. In this original model, I describe the process of qualitative data analysis as a reflection-writing dialectic combined with three movements of creativity which are: inspiration, working-out and detachment. This text highlights specific skills that are required at different times of the qualitative data analysis process to encourage teachers to support these skills development among their students.

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## Creative Thinking in Qualitative Research and Analysis

DOI: <http://dx.doi.org/10.18778/1733-8077.15.3.01>

**Abstract** I would like to present the possibility of broadening the traditional methodological and technical skills of researcher and analyst, but also the intellectual capacity of the researcher associated with combining data, categorizing, linking categories, as well as the interpretation of the causes and consequences of the emergence of certain social phenomena. Some methodologies, methods, and research techniques are more conducive to creative conceptual and interpretive solutions. Therefore, I describe the serendipity phenomenon in such methodologies as grounded theory, ethnography, phenomenological research, and contemplative inquiry. The problem of intuition in qualitative research will be also described in the paper.

There will be presented also some suggestions how to be creative in qualitative research.

From the review of issues of creativity in qualitative research we can derive the following conclusions:

1. Creativity in qualitative research depends on the strength of *a priori* conceptualization and stiffness of the adapted methods of research and analysis.
2. If the methodology is more flexible (as the methodology of grounded theory), the researcher can get to phenomena that he/she has not realized and which are still scantily explored in his/her field of expertise.
3. The phenomenological and contemplative approaches allow the use of the investigator's feelings and experience as they appear in the studied phenomena, which usually does not take place in objectifying and positivistic research.
4. The investigator may therefore consciously use these methodologies and approaches that foster creativity.
5. The researchers can improve their skills in thinking and creative action by doing some methodical exercises (journal writing, writing poetry as a summary of the collected data, the use of art as representation of the phenomenon, the use of meditation, observation of the body feelings, humor, etc).

**Keywords** Contemplation; Meditation; Creativity; Grounded Theory; Phenomenology; Serendipity; Qualitative Research; Ethnography

# BRIEF DETOUR: ANALYSIS VS. INTERPRETATION

## ANALYSIS

- Systematic investigation *of* the data
- Analysis **trims** and **crystalizes** the text
- Reveals on the **explicit meanings** of the data
- Coding and categorization; making the data more manageable

## INTERPRETATION

- Developing explanations *from* the data
- Interpretation **expands** the text
- Reveals the **implicit meanings** of the data
- Contextualizing the data and tying it to theory; creating a story

## OPEN/EMERGENT CODING

Coding the data “as is”; identifying data sections that are similar

*Pro:* most potential for truly novel discoveries

*Con:* ”coder bias” and risks “reinventing the wheel”

## AXIAL CODING

Developing the results of open coding further

Exploring their relationships between codes

## SELECTIVE CODING

Testing emerging ideas

Finding boundary conditions and negative cases

## THEORY-BASED/A-PRIORI CODING

Working with theoretical constructs to code the data

*Pro:* gives a proven theory for interpretation

*Con:* may stifle imagination for surprising discoveries

# ***OPEN CODING: THINGS TO LOOK FOR...***

## **Metaphors and analogies**

### **Any “emic stuff”**

Slang and language clearly tied to context

## **Repetition**

## **Strong emotions**

## **Narrativity and connections**

”Then... Then... And after...”

May reveal processes

## **Axiological statements**

“You should”... “It’s wrong...” It’s cool when...”

## **Actions and practices**

What people “actually do”

Struggles in getting what you want

## **Motivations**

## **People**

## **Contradictions**

# **IMPORTANT!**

**Analysis, interpretation, and theorizing are essentially personal**  
**Qualitative research is not about finding THE story but A story**

“Qualitative inquiry depends, at every stage, on the skills training, insights, and capabilities of the inquirer... Qualitative analysis ultimately depends on the analytical intellect and style of the analyst”

(Patton 2004, 436)

**Your argument must but be “interesting” (Davis 1971), but rigor comes from transparent and systematic analysis that lets the “data speaks for itself” (more on this later!)**

## UNDERCODING

Going for “too abstract too early” at the expense of missing out on details

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed sit amet ligula vehicula, hendrerit dui sit amet, ornare arcu. Fusce libero leo, commodo vitae nunc ac, convallis elementum lacus. Fusce feugiat sollicitudin turpis, vitae scelerisque tortor pellentesque vel. Phasellus aliquet tortor at arcu mattis, ac facilisis leo placerat. Sed tristique cursus augue at venenatis. Mauris mollis posuere velit non rutrum. Nulla varius rhoncus sagittis. Aenean id molestie lacus, sed cursus ante. Nunc gravida fringilla massa, id condimentum diam hendrerit vel. Pellentesque vitae sodales libero, in elementum nisl. Sed mattis, eros at imperdiet sodales, augue erat efficitur nunc, in volutpat neque libero quis mauris. Ut et gravida urna. Nunc ultrices mauris massa, ut ullamcorper elit facilisis in. Aliquam erat volutpat. Cras dapibus ante nulla. Nunc luctus mauris magna, eu tincidunt odio elementum blandit.

## OVERCODING

Getting lost in the details and losing a sense of the whole

Nullam sapien risus, lacinia at viverra sed, pharetra molestie sapien. Aliquam suscipit tincidunt est, pharetra bibendum enim. Fusce ut bibendum nunc. Ut iaculis sit amet nisl at consectetur. Pellentesque nec risus vel mauris vulputate tempus non ut tellus. Phasellus finibus enim sit amet ultricies aliquet. Donec pharetra augue et fermentum fermentum. Proin tempor feugiat est, eu ultricies metus rutrum eu. Donec dignissim tortor sit amet pellentesque vulputate. Aliquam finibus in justo id porttitor. Sed viverra, mauris sed maximus tincidunt, risus dolor auctor sapien, nec faucibus arcu sem a enim. Sed vitae magna mattis lectus maximus pellentesque. Suspendisse sit amet dictum nulla, consectetur convallis mi. Etiam interdum tempor porttitor. Sed non nulla vestibulum, lobortis lorem pulvinar, cursus ligula. Curabitur vitae blandit leo.

own home  
 alone/lady  
 people around  
 When you move into your own home, you're alone. There is no bustle of people around the house. (miss having someone to chat to when I get home) I put the TV or some music so there's some background noise. the silence makes me feel so alone. Sometimes I will be sat watching trash TV and thinking it should be out doing something rather than watching this rubbish. I read a lot but sometimes I am too tired and just want to veg out. But it's been good to move out of mum and dad's as it's not healthy to rely on them as they won't last forever. become independent and made my own decisions. (it's good they still there when I need them) it's good to have some distance as when I was at home I was arguing a lot with my dad and that was made me decide it was time to go.

X-Newsreader: Microsoft Outlook Express 6.00.2800.1158  
 X-MimeOLE: Produced By Microsoft MimeOLE 76.00.2800.1165  
 Message-ID: <Kqmb.1946>  
 NNTP-Posting-Host: 12.217.131.25  
 X-Complaints-To: abuse@achsi.com  
 X-Trace: attbi\_s02 1067029418 12.217.131.25 (Fri, 24 Oct 2003 21:03:38 GMT)  
 NNTP-Posting-Date: Fri, 24 Oct 2003 21:03:38 GMT  
 Organization: MediaCom High Speed Internet  
 Date: Fri, 24 Oct 2003 21:03:38 GMT  
 From: [redacted]  
 I realize part of the results may be due to my experience in pulling shots or fluke of nature or or or...  
 I am using a Gaggia Espresso a super Jolly Grinder Panamanian Baru Green roasted in Franken roaster.  
 Anyway I read [redacted]'s opinion of trying a low to no temp, adjusting the flow rate by a finer grind.  
 It does work, a nice tiger fleck crema (fairly thick) consistent shot time (in the 20's) good to excellent taste.  
 So as most things espresso are Italian I am dubbing this the (inni) method.  
 The posting email address is not read or received to contact me email me [redacted]

FIGURE 7.2 HAND CODING OF ALT.COFFEE NEWSGROUP POSTING

REACTION: It was really good. There was a variety of activities, the overhead and information where they talked about it, and the opportunity to practice the activities together. I liked it. The 5 hours went really quickly. We had a good group, and felt very comfortable because everyone was open and sharing. And the lunch was wonderful. Having lunch was a good idea.

REACTION: Yes, the structure helped my grasp the information, and I enjoyed the group size and variety of activities. 5.5 hours was good enough, and it went quickly. It all seemed to follow their outline, and it gave the opportunity to listen and then practice and get to know other people, because I was there by myself.

REACTION: I think I would have gotten the same information either way with the overheads and printouts, but the interpersonal and opportunity to relate to other people and have back and forth and the ability to ask questions was more personal and enjoyable. In a webinar, I don't feel comfortable asking questions to someone I don't know, so the personal, face to face was better than if I did the webinar. I imagine I would have gotten the same information, but it wouldn't have been as enjoyable, and without the activities and other people's questions, I probably wouldn't remember as much.

REACTION: It is great because I do survey development and work with people that develop surveys. It was really helpful. Afterward, I analyzed surveys and it made me wish I had attended the training before, because now I know there's better ways to do it. Yes, it has definitely met my expectations.

CONFIDENCE INCREASE IN KNOWLEDGE: I think my confidence increased because before I just did it, and now I know the reason why I should be doing such things. I am more confident in my abilities. I feel more knowledgeable. The one trap I know to be very careful of the double barreled questions and to use simpler words in the surveys so it's more easily understood. I also like the idea of putting similar kinds of questions together, like putting yes/no questions together and putting multiple choice questions together, and other formatting issues that make it pleasing to the eye and easy to follow. The double barrel one is the one that I have encountered in the past.

STRUCTURE ACTIVITIES  
 COMFORT LEVEL  
 VARIETY  
 SOCIAL NETWORKING  
 FACE-TO-FACE VS REMOTE  
 ON-SITE IMPACT  
 EXPECTATIONS  
 SURVEY FRAMEWORK  
 TRAPS!  
 "BILLMAN"  
 PILOT



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