

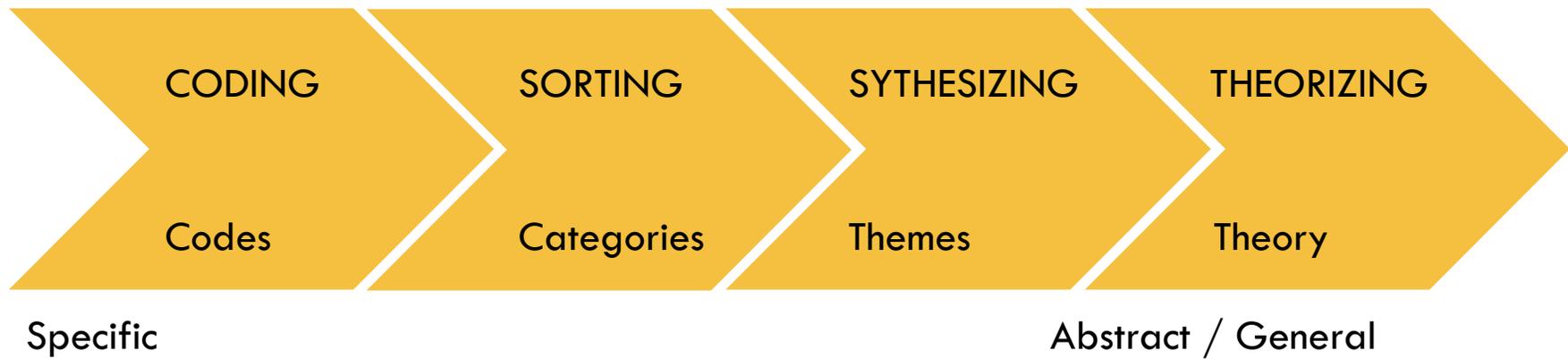
Søren Knudsen

CLUSTERING AND CATEGORIZING

Analyzing Qualitative Data



CODE DEVELOPMENT



- adapted from Saldaña, 2013

CODE DEVELOPMENT



Specific

Abstract / General

Categorize codes and build themes from:

- The relationship between codes
- The common meaning between codes

- Focused coding
- Axial coding
- Theoretical coding
- Pattern coding
- Elaborative coding
- Longitudinal coding

- adapted from Saldaña, 2013

Aim

To be able to say something meaningful on a topic

To understand what you still know little about

To describe in a paper, thesis, presentation, ...

Distilling the richness of the data,

Focus,

Relating concepts, ...

Make sense of the coded data

Clustering

Categorizing

Relating codes around a core focus

Example study: Data analysts imagine collaborative analysis on large displays



Workshop study on large displays and viz

Artistic photography

Knudsen et al., 2012

Excerpt of codes from this study

Compare many groups

Compare two groups [of data]

Novel
representation

Working with, representing and understanding
groups or segments in data

Persistency

Representations of data

Working with multiple different
representations of data simultaneously

Known representation

Confusing

Bubble plots

Knudsen et al., 2012

Excerpt of codes from this study

Compare many groups

Compare two groups [of data]

**Novel
representation**

Working with, representing and understanding
groups or segments in data

Persistency

Representations of data

**Working with multiple different
representations of data simultaneously**

Known representation

Bubble plots

Knudsen et al., 2012

Excerpt of codes from this study

Compare many groups

Compare two groups [of data]

Novel
representation

**Working with, representing and
understanding groups or segments in data**

Persistency

Representations of data

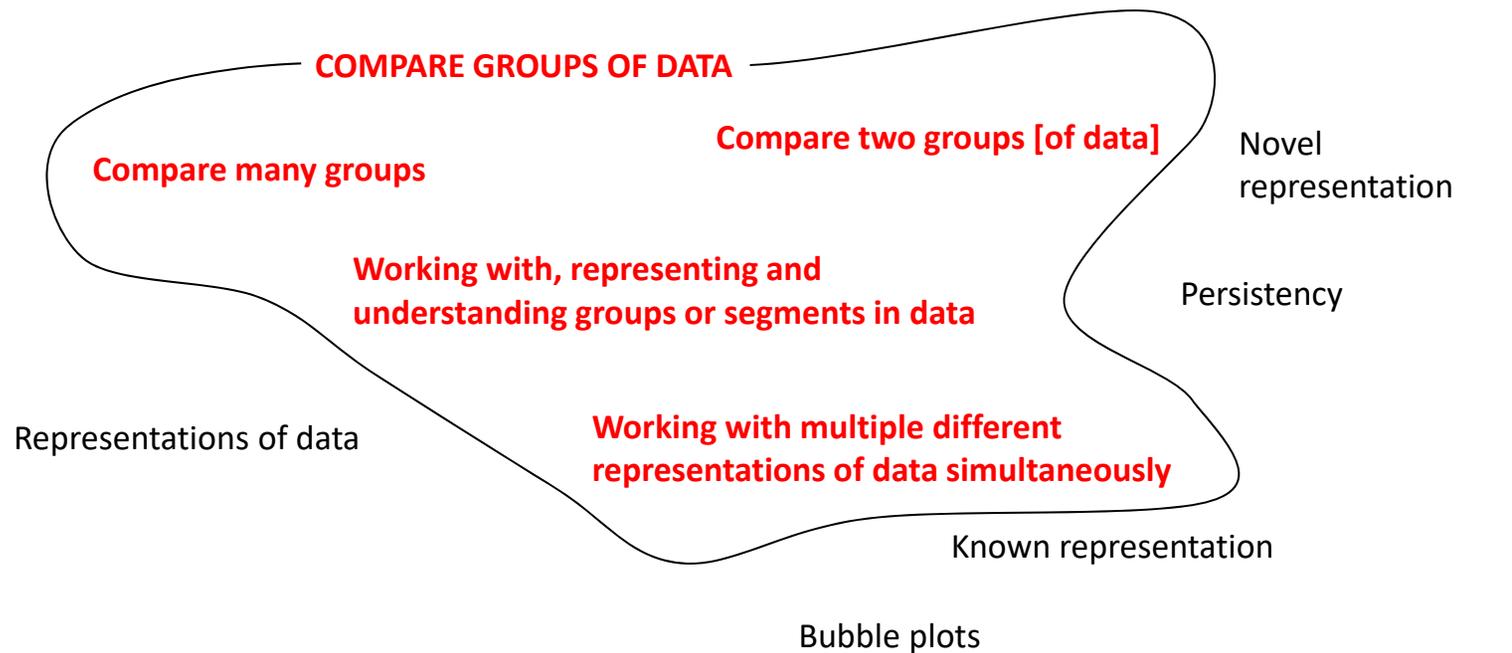
**Working with multiple different
representations of data simultaneously**

Known representation

Bubble plots

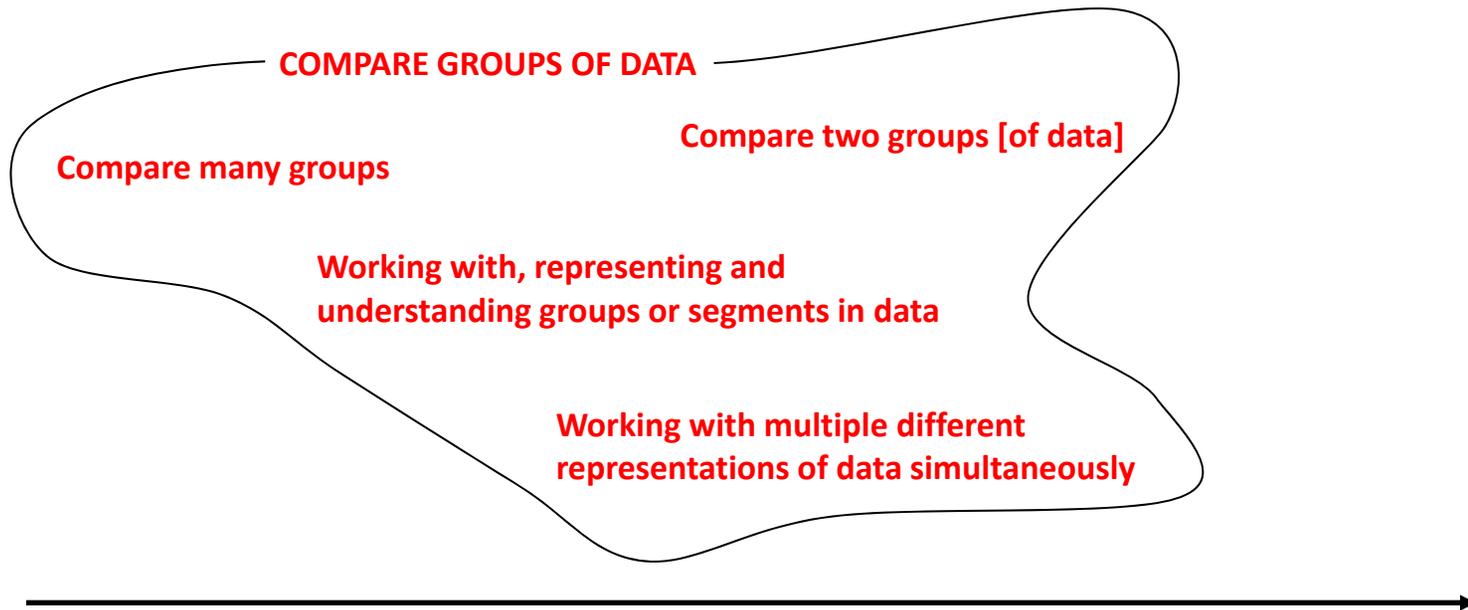
Knudsen et al., 2012

Excerpt of codes from this study



Knudsen et al., 2012

Excerpt of codes from this study



Excerpt of codes from this study

COMPARE GROUPS OF DATA

Compare many groups

Compare two groups [of data]

Working with, representing and
understanding groups or segments in data

Working with multiple different
representations of data simultaneously

?



Knudsen et al., 2012

“The purpose of axial coding is to begin the process of reassembling data that were fractured during open coding”

Strauss & Corbin, 1998

Empirical data can have many forms

Can be

Auditory

Textual (e.g., interview transcripts, web-material, papers)

Visual (e.g., photos, videos, drawings)

Artifacts

Process and approach

Computer Assisted Qualitative Data Analysis Systems (CAQDAS)

MaxQDA

nVivo

Saturate app

Based on pen-and-paper

Based on a large surface (e.g., whiteboard, table, floor)

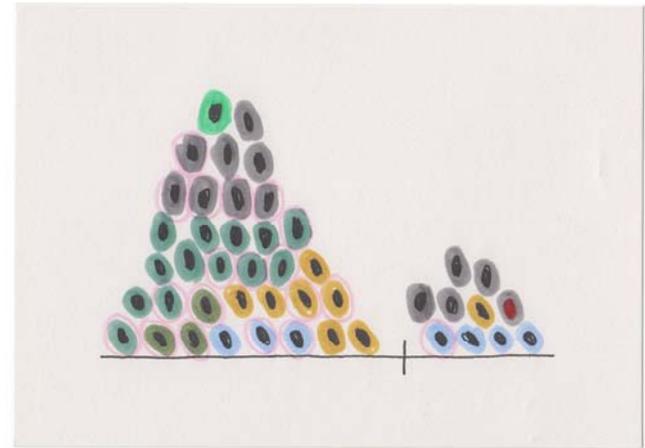
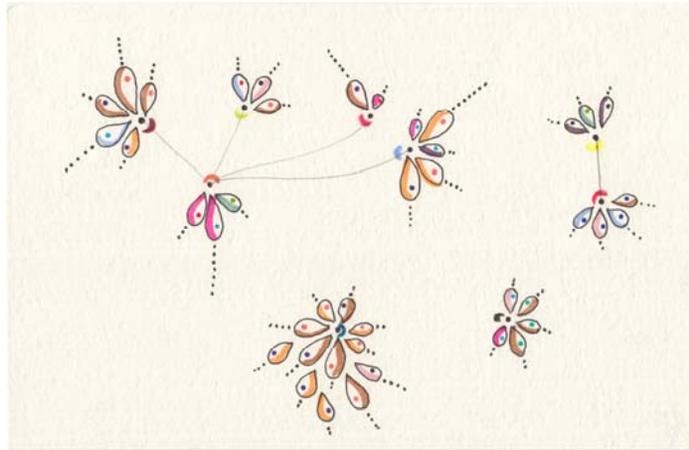
EXERCISE: CLUSTERING DATA

Analyzing Qualitative Data



VISUAL DATA

Collection of postcards by G. Lupi and S. Posavec
from the “Dear Data” Project



PROCESS

1. **Familiarize yourself with the data set**
 - spread out the postcards
 - look at them individually
2. **Group them in clusters**
 - find postcards that you think share a commonality
 - group these postcards spatially
 - create a label for these groups
3. **Look for potential spectrum**
 - based on the groups, consider spectrums/axes in the data

BACKUP SLIDES

List of CAQDAS's

ATLAS.ti: www.atlasti.com

HyperRESEARCH: www.researchware.com

MAXQDA: www.maxqda.com

NVivo: www.qsrinternational.com

QDA Miner: www.provalisresearch.com

Qualrus: www.qualrus.com

Transana: www.transana.org (for audio and video data materials)

Weft QDA: www.pressure.to/qda/

Saturate app: <http://www.saturateapp.com/>

Example

Participant talking about her personal visualization on display in the home:

“Having it in the house and visible for people to see, people would ask: ‘what is that you have over there?’ And my husband was following it and looking at it and I think he was interested in it. We could just talk about it without actually thinking about talking about it. It’s just something that happened because it was there. It triggered the conversations.”

Example

Participant talking about her personal visualization on display in the home:

*“Having it in the house and ^{visibility} visible for people to see, people would ^{being asked} ask:
^{curiosity} ‘what is that you have over there?’ And my husband was ^{awareness for husband} following it and
looking at it and I think he ^{interest by husband} was interested in it. We ^{enabling conversation} could just talk about it
^{serendipity} without actually thinking about talking about it. It’s just something that
^{presence} happened because it was there. It ^{triggering conversation} triggered the conversations.”*