

Understanding the Results of Conventional Qualitative Content Analysis for Design Research

A case of applying conventional qualitative content analysis to interviews with service design practitioners.

METHOD

INTERVIEWS

The topic of the interviews was service prototyping, inquiring the practitioners about their approaches and conceptions, but starting with some more general questions about their work process in the later stages of service design. The interviews were conducted over telephone (2) and Skype (4), most of the time not using video. So a large part of communication that can usually be accessed in physical interactions between people could not be used to enhance understanding of the material.

ANALYSIS APPROACH

A paper by (Graneheim & Lundman, 2004) was used to decide what the approach should look like. In this study the analysis was divided into stages:

- Identifying meaning units
- Condensing the meaning units
- Coding
- Constructing Sub-categories
- Applying the Sub-categories to categories
- Generalising categories into themes

ANALYSIS EXCERPT

Meaning unit	Condensed meaning unit	Code	Sub- category	Category	Theme
evaluating the prototypes is- can be difficult, what we know is that – it depends what the prototype is supposed to do you can always do more	hard to prototype but need to know what it should achieve	purpose important	under- standing	theoretical issues	mindset
research, but we have- we usually have- after a while you notice that you are getting the same answer.	research starts to generate similar answers after a while	patterns appear	under- standing	theoretical issues	mindset

WORKS CITED

Graneheim, U. H., & Lundman, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, 24, 105-112.

Hsieh, H.-F., & Shannon, S. E. (2005, November). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277-1288.

Kondracki, N. L., Wellman, N. S., & Amundson, D. R. (2002). Content Analysis: Review of Methods and Their Applications in Nutrition Education. *Journal of Nutrition Education and Behavior*, 34(4), 224-230.

Mayring, P. (2000). Qualitative Content Analysis [28 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(2), Art. 20, <http://nbnresolving.de/urn:nbn:de:0114-fqs0002204>.

THE STUDY

In this study we look closer at content analysis as a tool in design research and question some of the, more or less explicit, assumptions about what can be achieved by such analyses. To do so, we applied a qualitative content analysis (QCA) on six interviews with service design practitioners.

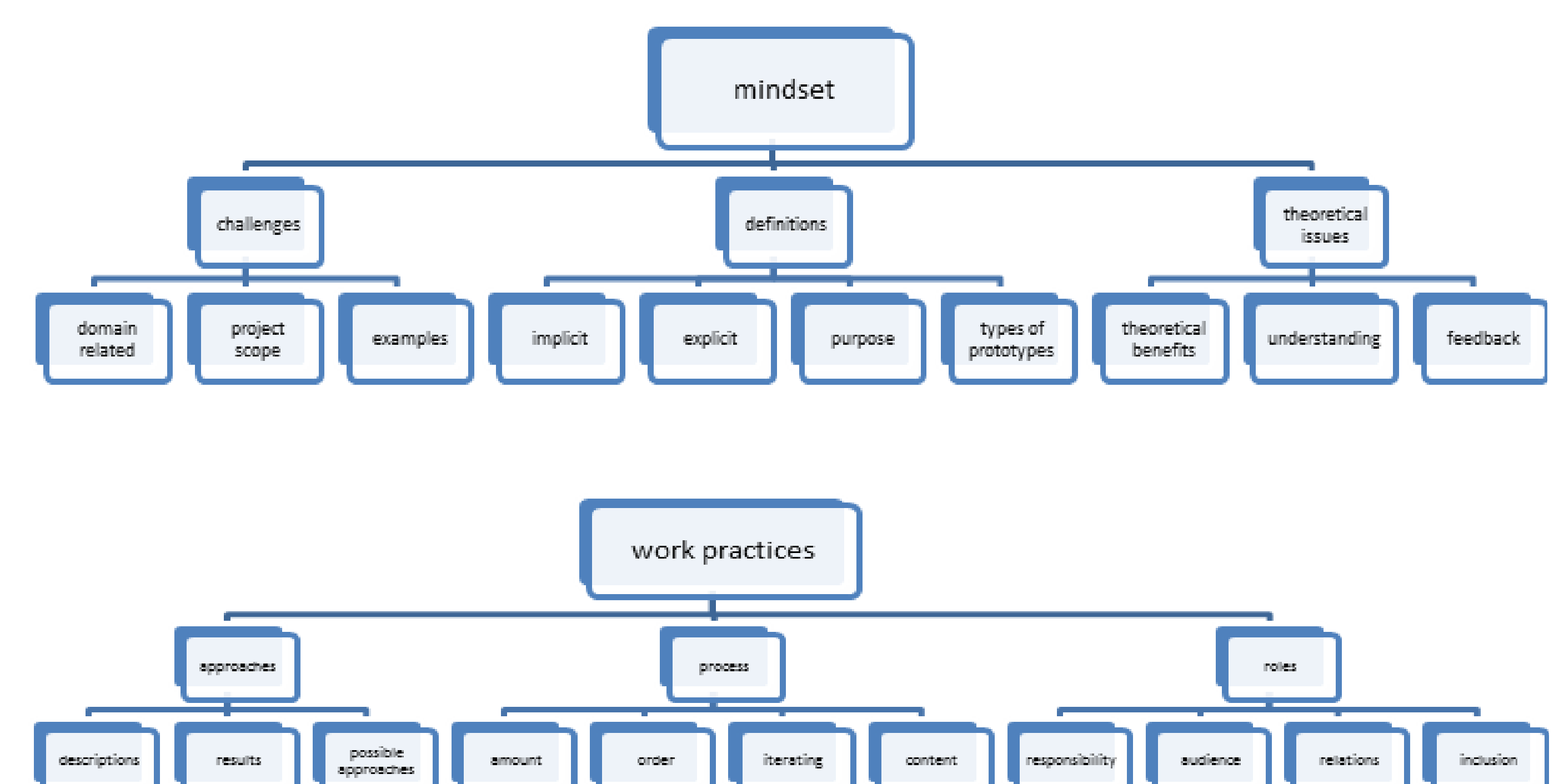
THEORY

Qualitative content analysis is used to create an abstract version of a larger data set. QCA is often understood as negotiating the weaknesses associated with qualitative approaches (Mayring, 2000). We discuss this understanding of QCA by looking at an instance where a conventional QCA was used. Conventional QCA is used when existing theory is limited (Hsieh & Shannon, 2005), and researchers are looking to understand a phenomenon by immersing themselves in data and letting categories emerge. This has also been called inductive category development (Mayring, 2000).

Little is known about service prototyping practices, making this an appropriate approach.

In our approach we avoided using preconceived categories (Kondracki, Wellman, & Amundson, 2002) and instead let them emerge from the data, keeping an open attitude to the content. We see this approach as way to go from a straightforward condensation of manifest content, and then, in creating categories and themes, a shift is made to underlying meaning and thus towards the latent content of the material.

EXAMPLES OF ANALYSIS RESULT



CONCLUSIONS

Using this example we show the many subjective choices involved in data collection: choosing unit of analysis (and thereby excluding material), dividing the material into meaning units, and in how to understand the collected data. Unlike the idea that the result of such an approach is somehow more objective or “scientific” than other types of qualitative analysis, we argue that the strength of QCA lies in transparency of data and analysis. The bottom-up approach does not ensure that the result is a consequence of the material, but rather that choices have been made visible. The analysis becomes a rationale for the decisions made during analysis that can be accessed by external researchers. This opens up the analysis for critique but should still be seen as the consequence of subjective choices, perspectives and understanding.

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