

Thematic Research in the Frame Creation Process

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Abstract

Many of today's challenges that confront society are complex and dynamic and require new perspectives, new ways of looking at problems and issues, in order to be able to come to solutions that could not be found before. This process is called reframing and we suggest that one of the key stages in this process is thematic research, the search for themes that underlie these complex challenges. These themes generally turn out to be human themes, related to socio-emotional aspects of life. In this paper we report our experiences and lessons learned from a series of cases in which we experimented with various approaches to do this thematic research.

KEYWORDS: design thinking, frame creation, reframing, social design, thematic research

Introduction

Design as a discipline and design thinking as a practice are becoming more relevant in dealing with complex problems. We observe that today's challenges in many domains are open, complex, dynamic, and networked. More often than not, traditional problem solving approaches cannot properly deal with wicked problems (Rittel & Webber 1973) such as unemployment or Islamic radicalisation. Kees Dorst's work on Frame Innovation focuses on the practice of many professional designers to devote a great deal of attention to 'reframing' a problem before coming up with possible solutions and interventions (Dorst 2015).

Many complex problems cannot be solved within the framework of thinking that brought them about. This is the reason why it makes sense to first develop new perspectives on problems and issues in order to identify new directions for solutions. This is called reframing. The essence of Dorst's analysis of design practices is that reframing revolves

around a deeper understanding of human needs and human experience. The premise is that a deeper understanding of human needs, desires, and meaning related to a specific set of problems makes it easier to develop new perspectives without losing track of essentials. Dorst calls this important analytic step in dealing with complex issues ‘theme analysis’. If ‘trust’ and ‘fear’ are important human themes when dealing with security issues, then it makes sense to reflect on these themes outside the context of the original problem before trying to formulate new perspectives. Understanding these themes outside the original problem’s context is a useful starting point for formulating new frames.

One of the main research objectives of the group Information Technology in Society at The Hague University of Applied Sciences is to develop methods, techniques, and tools for professionals and students from various disciplines (ranging from interaction design to social work and safety and security management) that enable them to research human themes in the context of real life practice. With this research we contribute to the work of Dorst, by developing this particular aspect of the frame innovation methodology through the experiences and insights from cases (see also Dorst et al. 2016).

This paper reports our experiences and findings with doing thematic research and shares our lessons learned. We first position our research in the context of related work. We then present our methodology and discuss the Frame Creation process, with a focus on thematic research. We discuss one of the cases we worked on and then present our experiences and what we learned from executing and teaching the thematic research phase of frame creation. Finally, we discuss our conclusions and future work.

Related Work

We position this work in the upcoming field of social design. The term ‘social design,’ as described by Armstrong et al. (2014, p.15), “highlights the concepts and activities enacted within participatory approaches to researching, generating and realising new ways to make change happen towards collective and social ends, rather than predominantly commercial objectives. [...] Social design may be carried out by people who think of themselves as designers or who studied at design schools, or it might be an activity of designing that takes place involving people who are not professional designers.” Andrews regards social design as a field of service design and advocates the use of service design methods and techniques to address issues in the social domain (Andrews 2010, p.88). Manzini offers a slightly narrower definition and describes social design as “a design activity that deals with problems that are not dealt with by the market or by the state, and in which the people involved do not normally have a voice.” (Manzini 2015, p.65)

Social design addresses problems that challenge society by their complexity and often large-scale impact and requires an approach that embraces this complexity, rather than diminish it. Ignoring the complexity of problems often leads to solutions that encompass bureaucratic measures and regulations that are ineffective in the long term, addressing symptoms rather than causes. Acknowledging and working with the complexity of the problem allows us to identify underlying problems and find new perspectives and previously unimagined solutions (Rijken et al. 2014).

Verganti (2009, p.119) observes that design-driven innovation is successful when it offers new meaning. In his view, successful innovation does not rely on extensive user-centered research, which will only reveal meaning that people currently give to products and services.

Instead, companies that successfully innovate actively take part in the design discourse of an implicit network of what Verganti calls ‘interpreters,’ who closely study how people give meaning to things and then formulate new ideas that influence this meaning. These kinds of experiments with meaning and interpretations are very similar to the thematic research phase in frame creation.

According to Manzini, the role of designers then is to bring their design culture and creativity into the co-design process and form visions and proposals, steering clear of the extremes of big-ego design (the degraded form of genius design) and post-it design (where the designer only manages the creative process of others). This requires dialogic capabilities of designers: guiding other actors to design in a dialogic way, being “part of a broad design process that [designers] can trigger, support, but not control.” (Manzini 2015, p.66) Frame creation, and in particular the phase of thematic research, very much appeals to these dialogic capabilities of designers and participants in the frame creation process.

Methodology

The research group Information Technology in Society at The Hague University of Applied Sciences develops methods and techniques for reframing as an essential activity in conceptual design. Coming from different backgrounds, such as cognitive science, pedagogy, interaction design, product design, music, and theatre, we decided to embark on an explorative journey where we experimented with thematic research and frame creation for different problems. This has given us hands-on understanding of how frame creation can work. We also aim to assess the educational usefulness of different methods and techniques for thematic research in courses such as ‘service design’, ‘interaction design’, and ‘safety and security management’.

In close collaboration with Dorst’s research group in Sydney, we decided to focus on thematic research, since it plays a crucial role in the frame creation process. It is the moment where the thinking process has detached itself from the context of the original problem, and aims at a deeper understanding of underlying issues, as a foundation for actual reframing. Dorst observed, in his longitudinal study of design practices, that designers give much importance to finding the ‘real’ issues behind the given question (Dorst 2015).

Our efforts are also influenced by phenomenological practices (van Manen 1990) that address the analysis of lived experience, and by our own experience with more traditional scientific and philosophical literature research aimed at learning more about any given concept.

There are many different approaches to understanding a theme like ‘fear’, and one can easily lose oneself in a quest for deeper understanding. In the reality of professional practice, however, time is limited, and information sources (from scientific databases to websites with film fragments) are not always available at the moment of inquiry. If we were looking for any form of ‘truth’ or universal knowledge, we would be in trouble.

However, the role of thematic research in the design process is to provide inspiration for reframing, for new ways of thinking and understanding underlying issues. We decided to experiment with thematic analysis that takes many of these factors into account: in different projects, different members of our research group engaged in thematic inquiry from five distinct perspectives, using methods that they were curious about and felt comfortable with

and we frequently compared our findings. For example, 'trust' was investigated through interviews with police officers, but also through personal stories of people talking about their own lives. Group reflection on process and outcomes of different methods, however, was a regular activity. The next section outlines the different perspectives and methods we used in experimenting with thematic research.

Thematic Research

The essence of the Frame Creation process is that the complexity of the problem at hand is recognised, acknowledged, and developed into a potential context for solutions. According to Dorst (2015), the process starts with an investigation of the 'archaeology' of the problem - what is already known about the problem, its cause, and the attempts to solve it. Then, an inventory is made of the stakeholders and their values, interests, and behaviour related to the problem. So far, the process delivers an overview of the playing field, often in the form of a set of flipcharts that collects our observations of previous work and lists the stakeholders and their interests. Delving into the values and interests of stakeholders, looking for those shared among them and discussing what these actually mean, allows us to start identifying the underlying themes.

Identifying and investigating the themes

In complex problems, the emergent themes usually relate to human (inter)personal emotions, needs and values, such as ambition, fear, trust, insecurity, courage, dependency, etc. Thus, themes are conceptual notions that provide insight into the needs and motivations of the players in the field. Themes are often deeply personal and therefore hidden beneath the surface of everyday life. They are not normally made explicit in conversation, even when shared by all players.

Thematic research involves identifying the relevant themes, investigating the meaning of the themes, and finding inspiration from what we learn about them. This process takes us away from the original problem, not only because we enlarge our view on what constitutes the problem arena - we make the problem bigger by looking at related issues - but mainly because we study the themes outside the problem's context.

Identifying and studying the themes is an iterative process: as we study the themes, we will begin to understand them better and be able to recognise which are central to the case. The following gives an idea of how we generally do this.

- » Identify potential themes - in a group session, a discussion of the stakeholder analysis leads to a first set of possible themes, from which some are intuitively chosen for investigation.
- » Immerse in themes - through individual research, various perspectives (see below) are used to immerse oneself in the themes.
- » Discuss themes - results from research are presented and discussed in a group session; new insights emerge and the key themes are determined.
- » Reflect on themes - this involves a deeper individual reflection on themes, again from various perspectives, and checking insights with stakeholders.
- » Visualise themes - in a group session the connections between the key themes are discussed and visualised.

This process must not be fixed but adapted when needed during execution and allow for iteration, divergence and convergence to get to an understanding of the key themes.

Studying the themes can be done in various ways and we found that the choice of approach depends on three aspects: (a) the personal preference and experience of the researcher (what will work best for them?), (b) the nature of the theme itself (some themes are well described in scientific literature, others are better expressed in art), and (c) the amount of time available. Inspired by methods used in phenomenological inquiry we identified four perspectives from which to do thematic research:

» **Perspective of stakeholders**

In situ research - offers rich accounts of feelings and emotions relevant to the stakeholders and related to the problem area.

» **Perspective of the researcher**

Personal experiences - are rich and offer direct accounts of feelings and emotions, not directly related to the problem area. These experiences and accounts can come from the researchers themselves or from others, not in the role of stakeholder.

» **Literature from different sources**

Scientific literature - will give valid information, but can be difficult and time consuming with more generic themes, such as 'pride.'

Philosophy - will help with understanding the structure and dynamics and interpret meaning and relations of themes.

» **Representations or expressions of the theme**

Art and culture - poetry, popular literature, music, film, etc. offer evocative expressions and interpretations of the meaning of themes. Good art can actually make you feel something as well as help you understand it.

Through these approaches, themes can be dissected, analysed, understood, felt, annotated, and exemplified. It is useful to describe the structure and the dynamics of each theme. The structure of the theme defines its aspects and relationships and how the theme relates to other themes and concepts. This can be plotted out in, e.g., a networked word cloud (see Figure 1).

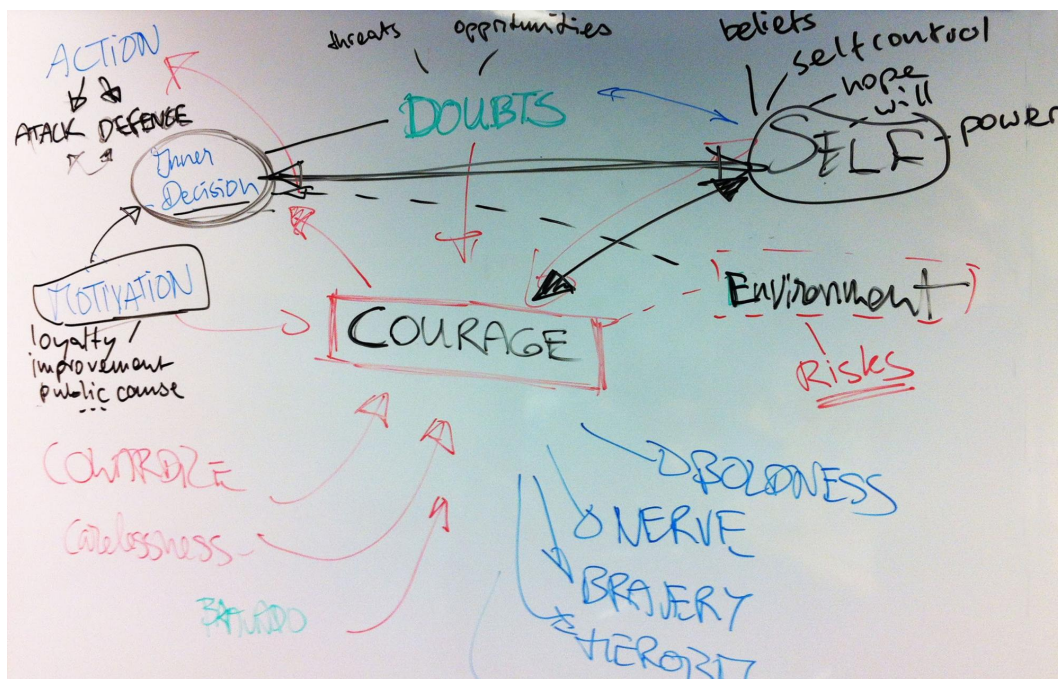


Figure 1 Representation of an analysis of the theme 'Courage'.

Complementing the structure of a theme, we also investigate its dynamics: what are driving factors or inhibitors in relation to the theme? What are causes and consequences, what are 'ways out'? What human behaviours and experiences are related to the theme; e.g., what leads to or follows from 'fear' and how is it dealt with in the moment? There are many ways these dynamics can be documented and creating a visual expression for it will help build a shared understanding in the team, for example in a causal diagram.

As the themes become more and more clear, we gradually get ready to return to the problem and reinterpret the ways it may be solved. From the themes, in particular those that are recognised and shared by the stakeholders, new frames of thinking about the problem can be created. Since these frames emerge from the deeper, universal themes that were not recognised in the original problem situation, they are more likely to lead to innovative and effective solutions.

Design case

In differing contexts, we have engaged in a number of projects aimed at finding innovative solutions to complex problems. Some projects were executed by an experienced research team, others by groups of students, guided by this team. In all projects we collaborated with stakeholders that were professionally involved or in the target group of the problem situation. Most of these projects were commissioned by municipal government bodies and concerned challenges such as radicalisation and neighbourhood resilience. These projects have yielded design frames for solutions in their respective problem areas, but we also used the projects as cases to experiment with doing the thematic research from the various aforementioned perspectives and with various techniques. We will discuss our approach in thematic research and the outcomes thereof for a project on the topic of accountability in neighbourhood governance.

Case: Public accountability for district policy in The Hague

Municipal governance bodies in urban neighbourhoods are challenged with multifaceted and complex problems that require an integral approach to be effective as well as reduce costs. Such an integral approach has been developed and is being executed in the Mariahoeve district of The Hague, where currently around 90 projects address issues of, for example, public safety and issues in social housing at the same time. When different policy domains are addressed and the budgets from various municipal departments are joined, accounting for an integral approach to such projects proves to be challenging, even when the results are promising. The programme manager of this district struggled with this accountability and was looking for new ways to handle her formal relationship in the municipal governance.

In this case we experimented with techniques to define the themes, in terms of structure and dynamics, as discussed in the previous section. We started by discussing the subject of 'accountability' both with stakeholders in the immediate context of the problem owner and with other professionals that deal with this subject. These discussions gave us insight in present experiences and allowed us to identify issues, needs and concerns, as experienced by these stakeholders and professionals. This resulted in a list of circa 25 topics that play a role with respect to accountability. From this list, we made a selection of 12 topics that were more central in the discussions: autonomy, attention, pride, courage, commitment, trust,

dreaming, playing, challenge, confidence, duty, and fear. We very briefly investigated these topics from various perspectives, outside the context of accountability, mostly by identifying interesting sources (e.g. scientific sources or cultural expressions) that define and discuss these topics either in a generic way or in an entirely different context. We then presented and discussed the results thereof within the team.

After this first exploration, the team jointly identified five themes that were regarded as the most interesting, that were most frequently used in conversations with stakeholders, and that, together, closely represented the problem area of accountability. These five themes were: pride, commitment, sharing, playing, and duty.

With these five themes, we did further research, again from various perspectives and using a variety of techniques. For example, the theme ‘playing’ was investigated through a conversation with a child, which gave interesting insights in the child’s emotions regarding playing; the same theme was also investigated in a card-sorting session with one of the key stakeholders, which gave insight into how space for play is important in her job. The theme ‘duty’ was investigated through storytelling sessions, using visual cues, with three local family doctors. The theme ‘pride’ was the subject in conversations and a guided tour with a local policeman. ‘Commitment’ was investigated through observations at the service desks of a housing corporation.

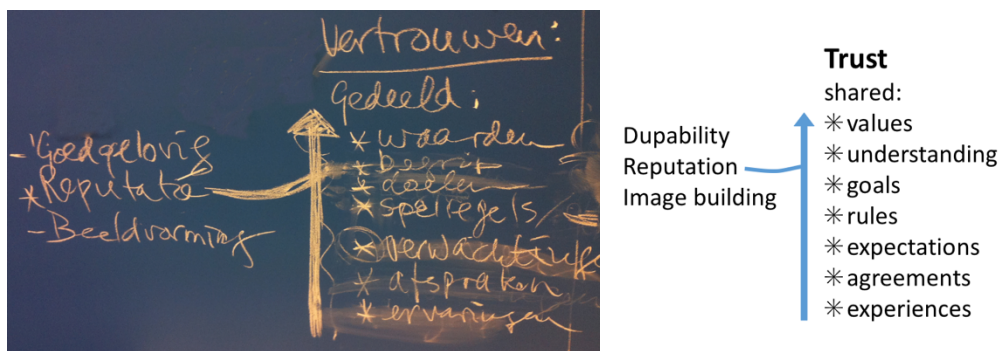


Figure 2 Levels of trust

Through discussing the relationships between these themes we found that ‘trust’ has a central position here. Trust is both given and received; it is required for experiencing and giving freedom; trust can lead to pride, courage, playfulness; and it is a condition for commitment and truly sharing. We found that trust can exist on multiple levels and depends on (or determines) what we share (see Figure 2). At the lowest level, trust is gained by sharing good experiences. Next up, there is trust based on solid agreements. At the top, trust comes from mutual understanding and sharing the same values. Lacking trust leads to the urge to control and audit – a reaction that will discourage innovation and experimentation in dealing with complex problems.

‘Trust’ became the pivotal point for the formulation of new frames. Creating frames out of the results of thematic research is the next phase in the frame innovation process and is outside the scope of this paper, but we will briefly mention the frames that resulted in this project. The first frame we arrived at was denoted as: “Organising accountability in a way that quickly leads to a higher level of trust.”

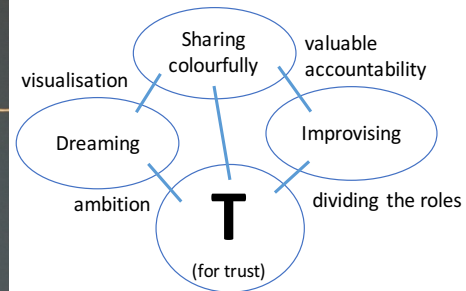
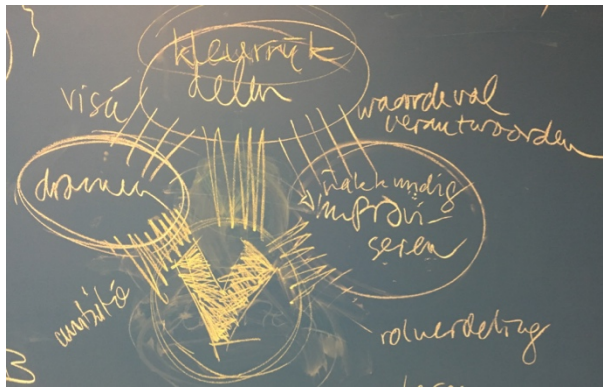


Figure 3 Moving towards frames from the central theme of trust.

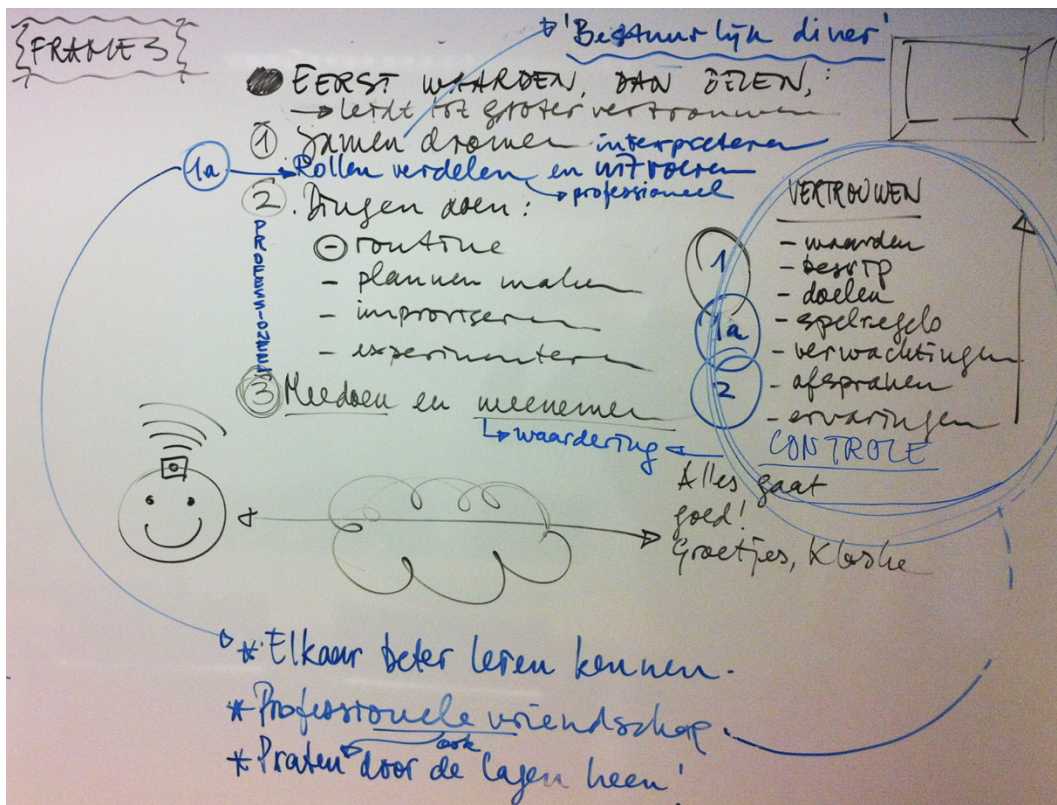


Figure 4 Draft (in Dutch) of the four frames resulting from the thematic research and reframing. The drawing indicates the range of possible forms of accountability: on the left a live webcam shares all action 24/7; on the right a simple note is saying: 'all is well, best regards.' The parties involved need to find the optimal middle way.

Subsequently, we developed the following four frames (see Figure 3 and Figure 4):

- » “First values, then sharing” - both parties involved in accountability need to first acknowledge and share each other’s values, before goals, approaches, and results can be shared meaningfully.
- » “Professional improvisation” - professional activities do not need to be routine or fully planned in advance. It is important to recognise the value of improvisation and experimentation, to consider activities as such, and to trust the professional to do it the best possible way.
- » “Illustrate vs. participate” - two ways of sharing results: by communicating step by step how results were obtained; or by inviting participation in the actual process.

- » “Professional friendship” - nurturing informal relationships between professionals, across hierarchies, cultivating trust on higher levels.

Experiences & Learnings

Through the cases that we worked on, we have experienced what factors influence the quality of thematic research. Here we summarise our main findings.

Who is involved

Preferably, the project team consists of a mix of ‘design thinkers’ and stakeholders. Without the stakeholders there may be insufficient connection to the case and it may become difficult to involve stakeholders later on. Doing the frame creation with only stakeholders is possible, but an experienced ‘design thinker’ may be needed to guide them in the process.

Stakeholders with a strong interest in existing solutions may have a tendency to block or frustrate the process. They may find it difficult to detach from the original context during thematic research. In this case, it can be beneficial to involve them only after the thematic research has been done, when new frames are being generated. Also, during frame creation new stakeholders may come into view that can play an essential role in possible solutions.

Initiation

The first time that students or professionals participate in a frame creation process, the method and techniques are unclear to them and guidance is needed. The overall approach and the focus on understanding the problem by making the problem space bigger and more abstract must be explained. It takes effort, with students but also with seasoned professionals, to relax their tendency of either focusing too quickly on possible solutions or keeping the focus too long on the problem. In both cases, they will have difficulty discussing the themes in a universal context, unrelated to the original problem and without moving towards solutions. Remarks often heard are: Why are we doing this? What is the use? Aren’t we making the problem too big now?’

To help participants take this step, it is necessary to make the different perspectives explicit and focus on either personal experiences or external sources for researching the themes. This must be a very conscious and deliberate effort. For example, asking them to tell about the last time they felt lonely will clearly take them outside the problem area.

Choosing research perspectives

Time available is always of influence when deciding how to approach the thematic research. When there is a small number of key themes and sufficient time taking multiple perspectives (art, literature, science, etc.) leads to a richer outcome and broader understanding of themes. In our experience studying a single theme with several team members, each from a different perspective, leads to deeper insights. With limited time available the team can divide the themes, but even so, doing the research from different perspectives will enrich the discussions and stimulate sharing of insights.

We also experienced, and recognise from phenomenology, that when the discussion of results from different perspectives converges to a single notion, this will probably be a valid notion. We experienced that this convergence happens rather quickly. For example, in our case on public accountability, 'pride' and 'responsibility' were driving factors in the work of the district programme manager (primary stakeholder). Our conversations with other stakeholders independently pointed out the same key elements. A local police officer stated to be proud of his activities and his personal successes in the neighbourhood; it is not the police as organisation that gave him this pride. Local family doctors talked in the same way about how they perceive the aspect of 'duty' in their job, which is strongly motivated by their personal values and related to their pride.

Dialogue and discussion

Probably more important than the choice of perspectives are the dialogue and discussion in the team about the results of the research (Figure 5). It is through these discussions that the team will gain insights and taking sufficient time for this in sessions is essential. This dialogue should give space to both reason and personal involvement when discussing the structure and dynamics of themes, as well as complementing, illustrating, and verifying that with lived experience.



Figure 5 Open-ended sessions, with no time pressure, for dialogue and discussion are essential in the process of thematic research.

During discussions and dialogues, the team should create output on flipcharts or whiteboards, making the discussion visible and building a shared understanding of the themes and structures. Sketching itself gives new insights as it gets people in a different frame of mind. Many creative forms, materials, and annotation techniques can be used for this. The discussion should remain lively and in motion, which can be supported through asking questions, asking for examples and experiences, and a persistent motivation to go deeper and refine how the themes are understood and interpreted.

Documentation is essential for several reasons. Firstly, it aids the thinking process as it happens when concepts are written down, related to each other and reorganised. Secondly, when there are multiple sessions, it is important that the group can easily recall what happened previously. Thirdly, documented sketches and photographs of whiteboards can be used to explain the thinking process that led to certain choices to others that were not involved. Documentation will trigger recounting the stories and insights gathered during the thematic research and can help explain the foundations of conclusions.

We often experience that students need guidance in the process of thinking about themes (Figure 6). However, surprising results may show once they start recounting personal stories and then collectively discover what these mean. They will then begin to understand that this approach is a new way of taking responsibility and can lead to effective innovation.



Figure 6 Students need guidance in the thinking process and the dialogues about themes.

Planning

The frame creation process can take on many forms and can be done within a short time frame or over a longer period of time. The process includes a sequence of sessions with dialogues and discussions, interspersed with individual research activities. These sessions can get rather intense, as, indeed, they should. This requires each session to have ample time, with no stress on expected outcomes. Also, distributing sessions over time is necessary to allow participants to reflect on findings and discussions and to do further research if required. Yet sessions should also not be too far apart (more than a week), because recollecting memories of previous sessions should not require much effort. Documenting during the sessions is essential but not an adequate replacement for vivid memories of these sessions.

In the reframing process, the phase of analysing themes gradually shifts towards the phase of formulating frames. When and how this takes place varies with each case and deciding when to move forward is a matter of intuition. Concluding the thematic research may prove difficult, as there are always loose ends and more relationships to be discussed and clarified. On the other hand, we should not be too eager to move toward solutions. With experience, the team will intuitively know when themes are understood sufficiently and start formulating frames.

Role and influence of personal experiences

Sharing personal experiences is useful when they are expressed in sufficient detail and with genuine emotions. We take inspiration from phenomenological practice to guide this process. It requires a confidential atmosphere that must be created in the team explicitly. Without confidentiality, stories will remain generic, impersonal and not contributory.

Investigating a given problem by looking into one's own experiences obviously has the pitfall of projection. Through discourse and critical reflection on recounted experiences, the team can be alert and be sure to identify the common ground. Having multiple team members provide personal experiences of the same theme helps finding shared aspects of the theme.

Participants with a strong background in the examined theme may undermine the team's open and inquisitive view. Foreknowledge can be motivating but may also lead to a bias in the interpretation of experiences. Being clear about one's background in discussing a theme, e.g., from the viewpoint of a particular theory or model, helps to deal with this.

The perspective of the researcher's personal experience is a fast way to find universal elements in unique experiences, since different researchers bring different perspectives you quickly sense the wholeness of the experience.

Conclusions & future work

Reflecting on our work process, where we experimented with many different methods and techniques to investigate human themes, we realised that variation is essential. Quickly using three methods creates richer understanding than spending the same amount of time in one chosen method. When looking for inspiration, breadth is more powerful than depth for two reasons: firstly, the quest for new perspectives benefits from different conceptual approaches, and secondly, these different approaches facilitate a reflective discussion about idiosyncratic differences and common patterns relating to a theme.

Further reflection on our own working process made us realise that there is more to methodological variation than initially apparent. After experimenting with different problems, different themes, and different methods and techniques for investigating themes, we found that the main methodological issue in all this is the quality of the choices to be made: what to do when there are dozens of methods and techniques available but not enough time to try them all? Firstly, we noticed strong personal preferences: some of us feel more comfortable using methods that are more objective and scientific, while others prefer personal experiences and artworks as sources of inspiration. Comparing outcomes from different participants using different methods, we soon realized, however, that this focus on methods and techniques tends to be a trial and error process with varying results, and that it is more effective to also think about desired outcomes: do we know what we want to learn about a theme? Are we interested in the emotional impact of a concept like 'anger' or in its dynamics: what triggers it, how is it processed, and what can it lead to? For example, philosophical investigation tends to result in deeper ontological understanding: what are key concepts, how are they related? Personal stories, on the other hand, tend to provide insight into emotional dynamics: what triggered a certain emotion, what did it feel like, and what happened afterwards? We aim our next research efforts at developing a better understanding of these connections between conceptual goals (what do we want to learn about a theme?) and methods and techniques (what to do in order to learn?). When investigating themes like 'accountability' and 'trust', it makes sense to look for emotions and social structures, and use appropriate methods and techniques. Investigating 'ambition', it may make more sense to find out more about the spiritual depth of what a person aspires to in life. We believe that this approach is also promising for education: if you want to learn about structure, ask 'what does X mean to you?', but if you want to know how a theme unfolds in daily life, ask 'what made you feel X, what did you do, and how did you deal with it?'

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