

Project aim and development

The aim of the project was to understand how people justify not acting or acting against their own understanding even when they believe in climate change and have knowledge. To most people, it is painful to live with discrepancies between knowledge and action, and to avoid taking the consequences of that knowledge, people justify, legitimize or rationalize the discrepancies in different ways. In this project, we planned to examine such justification processes as internal deliberations in written form. We also planned to examine arguments in the public discourse and to try and connect them.

As the project developed, we put more focus on survey investigations than discourse in the public sphere, where we relied on already published material. We circulated two surveys instead of one, and also worked with a travelling survey at a large Swedish university, applying our method on issues pertaining to academic travel.

Project implementation

During the first few months of the project, we distributed two surveys. The first one was a survey which was circulated March - May 2019. This survey had a guiding question: "Do you have sustainable values? Have you acted against your intention? Tell us about it!". The survey contained several questions, but some were more important to us than others. We asked the respondents to detail a situation when they had acted against their own knowledge or intention. And: "In that case, what arguments did you use? How did you convince yourself it was okay?" We eventually received ca 400 useable responses.

To analyse the internal deliberations, we used topos theory. Topos theory offers a conceptual framework to discern the structures of reasoning in multifaceted issues, often moral or political. A topos can be understood as a recurring way of organizing thinking that produces arguments, which are considered valid or have persuasive power in a certain cultural context. Topoi can be found within a material by looking at the rhetorical structures behind the arguments. Recurring argument types can be sorted, categorized, discussed, and described. As such they can also be used as prototypes for producing arguments in new but similar situations.

We also used a phenomenographic approach. Phenomenography is a qualitative, interpretive method suitable for capturing the *variety* of ways people experience or think about a phenomenon through its linguistic expression. Since we were interested in the specific experiences of a particular group rather than the average population, this approach matched our goal to describe a range of possible perceptions or views of a particular problem or question.

In our analysis of the first survey that we began in May, it quickly became evident that the most common situation when people had to legitimize their own behaviour to themselves was flying. We therefore also produced a survey with the aim of investigating the *argumentative* change process among people who had stopped flying for worry of climate change. We distributed this survey in suitable contexts late May – mid August 2019. In no more than a week, we had hundreds and hundreds of answers. We settled for a sample of ca 750.

To analyse the flight survey, we also used topos theory and phenomenography and in addition also Burke's theories of meaning-making. We were asked to publish the flight survey as a report in a series produced by the Swedish think tank as the topic was of great interest at the time. We did this in December 2019 and had a very good reach, as will be showed below.

The three most important conclusions

We have introduced and implemented a new method to study and analyse how people think and reason around climate change. This has proved fruitful, as we have indeed been able to describe and analyse a great spectrum of possible ways to reason. But it was also challenging. The method is transdisciplinary merging rhetoric and phenomenography with the social-science method of qualitative surveys. This proved challenging to some expert evaluators and even journals as the humanities, and rhetoric, normally do not work with surveys producing its own textual artefacts. Moreover, evaluators who do work with surveys often expect them to be quantitative. This forced us to articulate a precise and specific description of the method.

Secondly, in our first and main study, we were able to articulate thinking structures that people normally do not ponder, but immediately recognise when presented to. The findings in themselves are important, as they add to the research on the knowledge-action gap both empirically and theoretically. Our analysis has, however, also enabled a conversation about the ways in which inertia is practised argumentatively. The results have resonated extremely well with both the experience of individuals and with organisations. The first is illustrated by the wide media attention we have received during the project. The second by the fact that Maria Wolrath Söderberg was asked to write a report for Miljömålsberedningen precisely discussing our results in a manner useful to their work.

Finally, the flight survey disclosed a possible change process where different driving forces could be identified. We could furthermore see that contrary to some literature, knowledge was indeed important, albeit a particular type of knowledge; emotions were important and fear, again contrary to some scholars, was actually pivotal for change; social context was also key and support crucial; shame hardly surfaced. We were able to problematize several issues around climate change and response with our large and rich material and method of analysis.

New research questions

The role of emotions surfaced as a new field of insight and investigation during the project. We realised that there were a few popular narratives that were also repeated in the literature. To further investigate the affective dimensions of climate change is an important task.

A well-established notion in research on the knowledge-action gap is that you cannot inform people to change. This does, however, not mean that knowledge is futile as we could see in our flight survey. To further investigate when knowledge becomes real and actionable to people is an important research task.

It turns out that people despise unfaithful behaviour and thus not living according to your own standards, or the standards that people expect of you, is harmful to your message. To study people who work with climate issues, like researchers and investigate their particular arguments is of interest.

This is also connected to the issue of agency and responsibility, which can sometimes be reduced to a question of either the individual or the collective, as if nothing was in between and only one was needed. To look at those who try and do more than just change their own behaviour is a future research task.

We have written or been part of several research applications since we started the project. One came through with funding from Energimyndigheten focusing on what kinds of inertia is detectable in a few organisations that strive to help others in the transition. The aim with the

project is to identify those, articulate them and together with the organisations work to change them.

Results and communication

We have collaborated extensively with society and had a media imprint which is disproportional to the project size.

We have had meetings and taken part in workshops with members of parliament, civil society, public inquiries and state authorities; we have lectured at universities, think tanks, and on public conferences and meetings; we have arranged our own workshop and presented in academic contexts at seminars and conferences. A list of most interactions can be found at the project website:

The media interest was great even before we had any results. The framing was attractive as people immediately recognised themselves and their own struggle. Media has mostly been print media, but also some radio and television. Social media has also been used. Maria created the pod Klimatgap at Södertörn University College, which was a direct project spin off. A list of media impact can be found on the project website: