

Perspective Matters

An Exploration of Perspectives on Data in the Political Debate



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ABSTRACT

People often look at data from a certain perspective, making data shift from purely objective to partly subjective, this level of subjectivity can also be increased when people visualize the data. This research is conducted in cooperation with Telos, a company that gathers and delivers data to municipalities based on the Sustainable Development Goals. In this study, qualitative research has been done where different perspectives have been made explicit, in order to see if the awareness on these perspectives could influence the discussion between policy makers. A research probe was designed to visualize indicators, as well as forcing extreme perspectives on the participants, these being the People, Planet, Profit perspectives. A thematic analysis of the results lead to the conclusion that restrictions in the discussion leads to creative thinking and the fact that the awareness on perspectives can be raised, although it is hard to empathize.

AUTHOR KEYWORDS

Perspectives; Indicators; Policy Debate; Irregularity; Micro Boundaries

WORD COUNT: 8290

1 INTRODUCTION

Objectivity is an unproblematic representation of how the world really is. Until recently, the belief was held that knowledge on how the world really is, is attainable in social research [14]. It is however argued that science is a subjective interpretation in which observers are always located to a particular position which determines their perspective [14]. Subjectivity of data exists in the way it is presented or when for example some parts of the data are omitted [9].

However, evidence based policy making, a method to support policy making with research evidence, is heavily rooted in a positivist worldview that understanding social problems is a matter of objective measurement [7,20]. Evidence can support policy in a number of ways, from which one is the evaluation of implemented policies [20]. In the field of policy making, sustainable development is becoming more and more a topic on the political agenda [19]. A model to investigate sustainability is the triple bottom line,

which integrates three separate communities: people, planet and profit [4]. In the measurement of sustainable development, indicators, which are measurement tools and in the case of the research created to measure the Sustainable Development Goals (SDG's), are central and break up complex issues in more readily understood chunks of information [17].

With the underlying positivist assumption of evidence based policy making and the critics on a positivist worldview from a relativistic standpoint, the question arises how perspectives on data can be taken into account in the political debate. While perspectives within policy making and the use of indicators have been reported, it is suggested that data in the policy arena shall provide policy makers with a background of information to affect their point of view rather than using data in an instrumental way [8,17,21]. Less attention is paid to the role of better analysis of the evidence available [21].

This paper aims to address the different perspectives on data in debate. This will be researched in the field of sustainable development in which indicators are used to measure sustainable development with the use of objective data.

This is carried out in cooperation with Telos, a company specialized in monitoring sustainable development with the use of indicators and the triple bottom line to categorize the used indicators. Telos provides a report of their monitoring of data about sustainable development to policy makers of municipalities. They use these data to revise and discuss their municipal policy.

This paper researches the use of visualization of data to address perspectives, as data always carries a degree of subjectivity when visualized [10], and can purposely be used to help the audience interpret the data [9]. As a means to introduce participants to the existence of their own perspectives and its influence on decision making, Irregularity, a Japanese theory on beauty giving room for exploration, is used in the visualization [15]. A research probe, in the form of a video is therefore created which took

upon the role as operator of the discussion in order to see its influence.

The outcome of this study is a descriptive framework of perspectives to understand the usage of perspective taking on data in the field of policy making and data visualization. Furthermore, this research proposes four design recommendations to promote a new way of indicator data handling in order to include perspective taking and creative problem solving in (political) debate.

The perspective framework can be used by data monitoring organizations (Telos, RIVM) and policy makers to understand the dependence of their perspectives. It also provides innovative ways to inform municipalities about methods to address problems of an increasingly complex and systemic nature. Public Sector Innovation (PSI) labs already explored how innovative thinking can inform the policy making process [18]. The outcome of this research can exist in line with the methodology of such PSI labs, at the same time also offering more concrete suggestions for designers on how to contribute to political issues.

The Scoping Onion

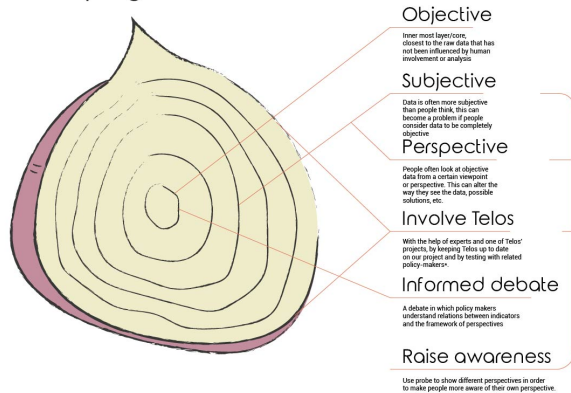


Figure 1: The Scoping Onion

While scoping the fields and stakeholders this research touches upon, a metaphor was created to make the connections more comprehensible and easy to oversee. It was important to set clear and specific definitions for recurring themes in the project, since the terms are widely interpretable. The Scoping Onion represents the context the research is in (see Fig. 1).

2 RELATED WORKS

Literature research has been done prior to the study in order to define positioning and scoping. Multiple theories have been researched, consisting of the theory of irregularity and the design theory of micro-frictions. Next to that research on the objectivity of data has been done. In order to understand Telos, the company this study cooperates with, research on the SDG's and the use of indicators has been done. Lastly,

the BIAS project gets explained, as it is the project this study originated from.

2.1 Irregularity

Irregularity is a Japanese philosophy centered around craftsmanship and the beauty of imperfection. "A conspicuous trend in modern art movements is the pursuit of deformation, discarding conventional form, as an expression of man's quest for freedom." Soetsu Yanagi wrote this in 1954 as part of a bundle centered around craftsmanship, adapted by his friend Bernard Leach in the book "The Unknown Craftsman" [24]. Irregularity is however not only found in Eastern craftsmanship, Lévy P. and Yamada S. incorporated the philosophy in a mix between human and technology with their study about 3D-printed Tea Ceremony Utensils [16]. Lévy and Yamada showed new opportunities for new technologies by forcing, for instance, 3D-printers to their limits, creating imperfections. Irregularity can be integrated in design in many ways, including using it in the form of micro-frictions which make actions more mindful by slowing down the user while interacting with a product [2].

2.2 Micro-frictions

Causing the participant to be more conscious of their decisions and beliefs can help them become more critical of their choices, which can be translated in this research to make the participants more aware of their perspectives. Micro-frictions, also known as design frictions, is a term that is often used when talking about problems or difficulties in user interaction. Since micro-frictions might cause user frustration or disengagement, the standard argument is that they should be removed from technology [2]. To counter this argument, in the study "Design Frictions for Mindful Interactions: The Case for Microboundaries", Cox et al. argue that a controlled use of micro frictions, so called micro boundaries, can be used to prompt and provoke certain behaviors. By causing the user to switch from System1 to System2 thinking, a more mindful interaction with technology can be created [2]. System2 is a term used to describe deliberate thinking, introduced in the book "Thinking fast and slow" by Kahneman, D [11].

Even a short break in interacting can make a user think more carefully about their next steps, as lockouts have been shown to improve attentiveness; partly because enforcing a brief pause stops people clicking mindlessly through modal dialogs, and partly because a pause gives people a chance to more carefully plan their actions before they execute them [2]. System 2 thinking causes a person to be more conscious and aware of the things they are doing, which can create a moment of intervention or reflection, and may initiate behavior change. This can be used in design by purposefully causing these micro-frictions in order to stimulate reflection and positive behavior change.

2.3 Objective Data

“Objective” or neutral data visualization does not exist; every visualization process relies on human definitions or mediation [10]. According to the philosophy of relativism, the truth is not always the same, but varies according to circumstances [19]. Factual data and its visualizations are often seen as objective by observers, which can cause problems when people draw the conclusions based on the way the data is visualized. On the other hand, the relation between data and the effect the visualization has on people can also create interesting design opportunities in the fields of research through design or visual design. According to Kohl, fundamental insights and a change of behavior can come from clearly mapping the relationship between abstract and actual, and from connecting it to a psychological experience [10].

2.4 SDG Indicators

In order to measure how well countries are on their way to become (more) sustainable, the Sustainable Development Goals use a global indicator framework based on seventeen unique SDG’s [22]. The global indicator framework includes 231 unique indicators. It was developed and agreed upon in March 2017 and is annually refined [22]. Telos, the company this study cooperates with, gathers data on these SDG indicators and categorizes them in order to write a report for the municipalities on sustainability. Working with these indicators makes it easy for municipalities to understand what needs to be done in order to become more sustainable, as these indicators are used as a global measurement tool and are used to push the global 2030 agenda on sustainability. Our research uses the indicators as a network of targets in its probe, mapping out the indicators and displaying connections, in combination with the triple bottom line [13]. The triple bottom line refers to a framework that recommends that companies commit to focus on social and environmental concerns just as they do on profits [12]. This research uses the People, Planet, Profit perspectives that are derived from the triple bottom line, which are also used by Telos. There is however critique on the use of indicators as well as the triple bottom line; with the attempt of making sustainable development measurable a number of problems arise. First, by treating the three pillars as separate the interdependence between them is neglected [4]. Furthermore the use of indicators is critiqued as it oversimplifies, particularly in highly complex contexts [17].

2.5 BIAS Project

This research has been based on the BIAS project, a student project from the Eindhoven University of Technology that worked in cooperation with Telos as well [23]. The BIAS projects explored the value of subjectivity in the act of data representation and data sharing, to facilitate informed debate and constructive discussions. However, where the BIAS project tries to discover how one’s subjectivity can be of value when interpreting data, this research tries to discover how one’s awareness of this subjectivity can change or

improve one’s perspective on data, and as a result influences a policy discussion.

3 DESIGN

In this section, the process of the study is elaborated on, in order to explain how the final design probe came to be. Multiple stages of the design process will be explained, including a problem definition, involvement of experts, explorative iterations, and the final design.

3.1 Layers of Perspectives Framework

“A perspective is a complex network of concepts and ideas that sets ‘a field of visibility bonded by a perceptual horizon’” [14]. Derived from this and based on the scoping of the project, a framework was constructed (see Fig. 2). For this, important related fields were explored. The framework shows how different layers are related. The levels influence and support each other. Two layers, the Telos report and the interpretation of policy makers (levels one and two), are based on top of the ground level. When one sees through the top layers as if they are transparent, the underlying perspectives appear. The direct data input on chosen indicators (ground level) are based upon goals the municipality has, and on the categorization of Telos. Those two layers are founded on the basement level which support all layers above. That layer consists of the Sustainable Development goals [22].

Framework of perspectives
with the role of Telos incorporated

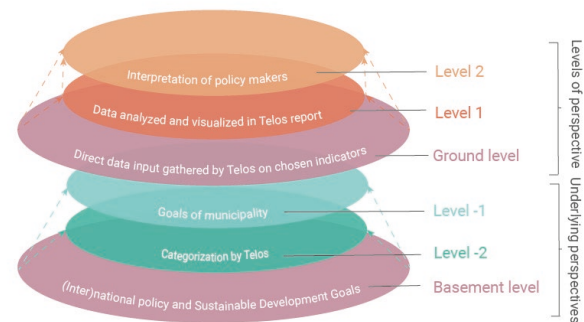


Figure 2: Framework of Perspectives

Exploring the layers of perspectives went hand in hand with framing the research question. The research question of this study is framed as follows:

“Does making perspectives on the indicators from Telos explicit, influence the discussion between policy makers?”

3.2 Embodied Exploration

To get a better grip and make the concepts of perspectives concrete, along with the implementation in the research in an early stage of the scoping, explorations were conducted in a theater with the use of a digital camera. The photographer gave instructions to the actors such as “move closer” “more

dynamic” and later on “what time is it” and experimented with framing, focus and capturing different poses. It was afterwards concluded that zooming in and out on the photograph could tell a completely different story, depending on what is (fully) in the frame. Point of view was important here, since the stance taken by the photographer would largely influence what could be seen and the sense that the photographer made from it: a different view would shed light on different things, influencing the overall image. This was later implemented in the design of the probe by looking at data from a different point of view, from a different perspective to see how it would influence the bigger picture (see Fig. 3).

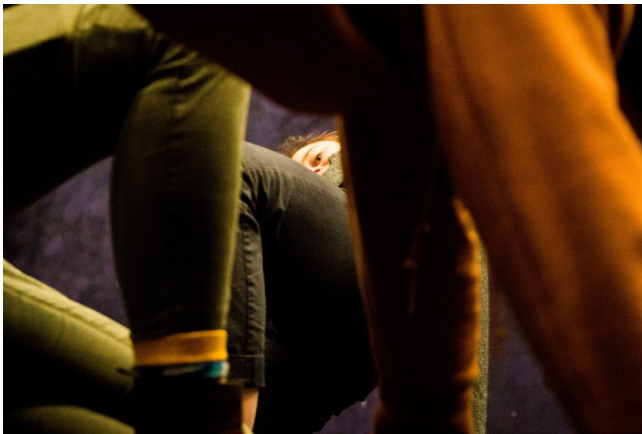


Figure 3: Exploration of Perspectives through Photography

3.3 Involvement of Experts

Scoping of the research and the development of the probe is iteratively done in cooperation with relevant experts, one of which being the director of Telos. Within three meetings with the expert we evaluated on our probe and scoping. Gaining a better understanding of Telos' categorization of data had an influence in shaping the layers of perspectives and led to a conclusion that underneath the data layers, more layers of perspectives emerged, influencing the selection of indicators. Due to the long term experience of the expert, he could point out several important aspects of the usage of data in the political debate. The inability of policy makers to see indicators related to other indicators was something critical touched upon by the expert, which was further analyzed and played a role in the scoping. With philosopher Jelle Bruineberg, a discussion emerged about the transition from objectivity to subjectivity through decision making and research methods, and how perspectives create subjectivity, from a philosophical point of view. Within policy making data is mostly used to validate their own created policy and policymakers are bound in their personal perspective, according to the expert at Telos.

Seeing the world through glasses is a metaphor often worked with in philosophy. After the discussion with Jelle, the metaphor was used to make the concept of perspectives on

data more concrete and ideas arose to translate the metaphor in the probe. While looking at the data glasses are worn, so data is seen in the color of the lens, for example red. In order to see the data through different types of lenses, one first has to be aware of the red lens in order to take them off. With the metaphor, policy makers could be made aware of the lenses they wear and make them try on different colored lenses, after which they then deliberately could choose with which perspective to look at a certain matter.

3.4 Iterations

In order to develop a meaningful design probe, the project went through multiple iterations of brainstorming and prototyping. Prior to the situation regarding COVID-19, the project focused on a physical design probe, which resulted in several lo-fi prototyping sessions. For the design probe, focus points were roles for the participants, perspectives that could show and hide certain attributes of the probe, and using the network of indicators.

One of the earlier concepts made use of the sunglasses metaphor, in combination with a multi-colored dataset. Due to the many colors on the dataset, the dataset would be unreadable without wearing glasses. By putting up sunglasses of a certain color, participants would see the dataset in a certain way. This way the participants could all look at the same dataset, while perceiving it in a unique way. Participants could only see parts of the dataset at a time, and were thus required to switch sunglasses in order to see the bigger picture. Other concepts in the iteration made use of point of view to illustrate the fact that people cannot always perceive everything.

A second iteration was done to explore more possible prototypes. One of the ideas was to use a physical data set in the form of a box. Participants of the discussion would be able to perceive this box from different perspectives by turning or moving the box; different sides of the box would show different parts of the data. This design was more interactive, as participants could rotate the box to get a different perspective on the subject.

Another concept made use of teamwork between participants to show a broader perspective. Multiple data points were connected to ropes and were hidden in rooms the participants could not perceive. By pulling the ropes simultaneously with another participant, the data points would become visible to the participants. This could be used to motivate the participants to work together in a discussion to understand the bigger picture.

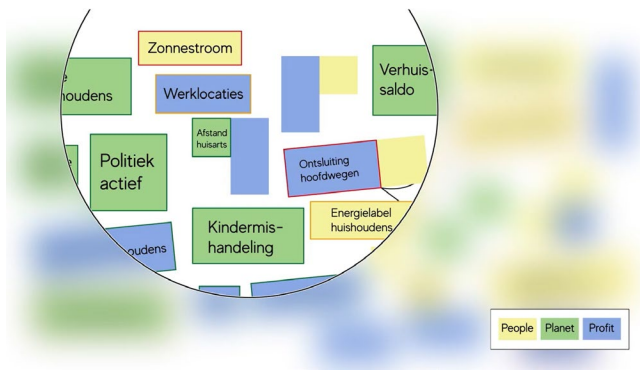


Figure 4: Screenshot of Probe

3.5 Final Design

The third and final iteration of the design intervention was developed in the form of a digital probe to obey the guidelines of the government regarding the situation of COVID-19. Inspiration was taken from the earlier iterations. The probe is a 20 minute long video (See Fig. 4), consisting of a web of indicators containing different colors, links between the indicators and a circle covering up all of the indicators except for those inside. The circle was a translation of earlier iterations mentioned in Section 3.4 (the sunglasses and the exploration of a point of view). The participants were instructed to discuss from the indicators visible.

Special effort was put in making sure that the concept of Irregularity was implemented in the probe, applied in the form of a micro-friction. The micro-friction exists in the form of the circle moving over a set number of indicators in the video. It would move for a total of six times during the discussion, showcasing different indicators each time. The goal of the micro-friction was to make the participants aware of the perspectives during the interaction with the probe.

In the method of drawing the circle and its path, the control of the design of the probe had been handed over, which is necessary to do for the emergence of an Irregularity [15]. Four different people unrelated to the research were asked to draw on a blank sheet of A4 paper, with the goal to be able to implement an irregular factor into the design. First was asked to draw a line, which would later be transformed to the path of the moving circle. Second, points on the drawn line where the circle would stay still during the video. Thirdly, a timeline to divide the path and points over the 20 minutes. Lastly, the sizes of the circle throughout the video. However, since most indicators were not visible with the irregular size of the circle, it was decided to increase the size with a factor of three. While the ratio of the circles stayed the same, the probe would generate research results based on the found Irregularity due to this approach.

The drawings are used in Adobe After Effects to create the circle. The indicators were selected carefully from a large amount of indicators linked to the SDG “Inequality” (see Section 2.4), six from each domain (people, planet and profit). The background with indicators was created in Adobe Illustrator, with the indicators clustered with categories People, Planet and Profit, placed somewhat randomly for the sake of irregularity.

In the probe, color changes were implemented. Yellow would be the people perspective, green would be the planet perspective and blue would be the planet perspective. The colors were divided equally over blocks of indicators and all switched after a set amount of time and stimulated perspective viewing more by changing perspectives while looking at an indicator. After the pilot test, some improvements were made to the probe: the coloured blocks of indicators were given coloured edges based on their status in the Telos report (e.g. a red edge would mean that the indicator scores under Telos’ norm). The added legend in the bottom right part of the video showed the perspectives with the corresponding colors.

The probe can be accessed using this link: <https://vimeo.com/428005490>

4 METHOD

To answer the research question, a qualitative approach was taken in regard to this explorative study, since the focus was on individual meanings and it was uncertain what the most important variables would be [3]. Because of the situation of COVID-19, the collection of data was in an online setting. The research protocol consisted of two parts; a group discussion and group interview without a design intervention (part one), and a group discussion and group interview with design intervention (part two).

4.1 Participants and Roles

Due to the situation regarding COVID-19, it was not possible to conduct the research with actual policy makers. Instead, Telos provided four research participants who were employees of Telos. These were appropriate participants as they had enough pre knowledge about using indicators in a municipal policy discussion. A consent form was constructed for them (see Appendix I). Roleplay was used as a means to simulate a situation of a real debate between policy makers with different backgrounds due to their areas of expertise. This way, the various concerns of policy makers were given the opportunity to come forward during the discussion. Thus, the participants roleplayed as if they were municipal officials, while still arguing from their own perspectives. Prior to the test with these participants, a pilot test with students participants was conducted to test the protocol (see Section 3.5) and the usability of the probe. It confirmed that a division of roles was indeed desired. Therefore, four roles were divided over the participants; policy maker at the Ministry of Infrastructure and Water Management, policy maker at the Ministry of Health,

Welfare and Sport, policy maker at the Ministry of Finance and policy maker at the Ministry of Education, Culture and Science. These roles were widely oriented just like the given topics of the group discussions, to ensure freedom in the discussions.

4.2 Protocol

The session was hosted on the video conferencing platform Zoom. During the session all participants as well as the researchers had both audio and video, and communicated in Dutch. A recording of the audio and a screenshot of the setup were made for analysis. During the session, next to moderation of the probe, reporting was done by four researchers to capture as many observations as possible. The so called blinded researcher had his screen turned off during the session and also did not see the probe in advance. His task was to capture the switching of themes during the discussions, paying attention to whether the discussion changed because of the probe or just because the participants changed the subject. This was done for later analysis in order to make a comparison with the repositioning of the circle in the probe, avoiding unconsciously looking for confirmation while interpreting the results.

In part one of the conducted research, the topic of the group discussion was the facilitation of Sustainable Development Goal 7: Affordable and clean energy in the municipality of Heusden [22]. This goal was chosen because of interesting relations to indicators. It concerned the municipality of Heusden because Telos already constructed an official report on that municipality, which the participants were acquainted to. The participants were given twenty minutes to discuss how to ensure access to affordable, reliable, sustainable and modern energy for everyone in the municipality Heusden. The participants were allowed to make use of the Telos report on Heusden, to base their arguments on data. In order to be present in the least possible way during the discussion, the microphones of all researchers were on mute, and only the spokesperson was visible on camera to express

availability for questions. After this discussion the group interview followed which only contained open-ended questions. The main purpose was to find out about the participants' reasonings during the discussion. The interview questions of part one and their translation to English can be found in Appendix II.

In part two, the probe was introduced via the sharing screen function in Zoom. The researchers explicitly asked the participants to use the probe in their reasoning. In this second group discussion, in order to prevent the learning effect, the topic was changed to the facilitation of Sustainable Development Goal 10: Reduced Inequalities in the municipality Heusden [6,22]. The participants were again allowed to make use of the Telos report on Heusden. The microphones of the researchers were on mute and their cameras were turned off except for the spokesperson. After twenty minutes of discussion, the second group interview was held. The interview questions were again all open-ended. In addition to the questions of part 1, another purpose in this interview was to find out about the participants' reflections and experiences around the probe. The interview questions of part two and their translation to English can be found in Appendix III .

4.3 Stakeholder Involvement

After the test with the probe, three policy makers from different municipalities in Noord-Brabant were interviewed. They worked respectively as: policy adviser energy transition, adviser energy transition and policy officer sustainability, environment and circularity. The policy makers were informed in advance about the study that was conducted. These interviews were held after the study with the probe, to stimulate more deliberative thinking, and in order to reflect the outcomes of the study with the policy makers. The goal of the interviews was on the one hand to become more aware of the political debate policy makers engage themselves in and difficulties they usually encounter during their discussions, and on the other hand to ask feedback and ideas for improvement on the concept of the probe and how it could be implemented in practice.

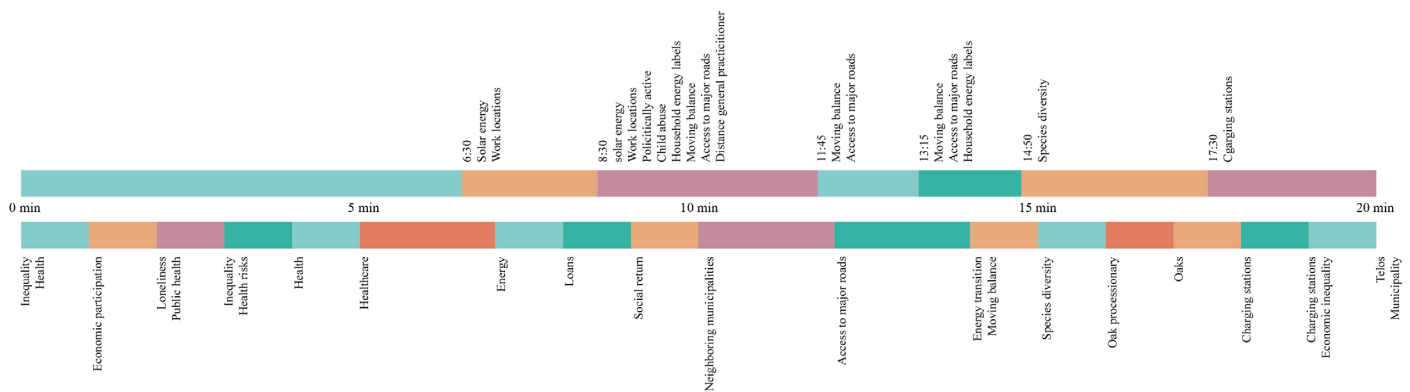


Figure 5: Timeline of Indicators Visible on Screen, as well as Topics of Discussion over Time

4.4 Data Analysis

After the data collection, both discussions and interviews were fully transcribed and afterwards went through an iterative thematic analysis (see Appendix IV). The four different transcriptions were first analyzed separate from each other by determining different codes. These codes were later categorized in overarching themes. After the individual analysis of the four transcriptions, the themes were compared and merged. The findings of the discussions and the interviews were compared and brought into relation with each other.

The notes of the blinded researcher were translated to a timeline and compared with a timeline of the change in position of the circle in the research probe. The timeline can be seen in Figure 5.

5 RESULTS

In total four participants participated in the online discussions. Both discussions were 20 minutes long and after both discussions the participants were interviewed. During an iterative thematic analysis, themes merged both from the analysis of the discussion as well as the analysis of the answers from the interviews. These themes are related to the structure of the discussion, the argumentation used by participants, their perspectives and changes in perspectives and the reflection on the research probe.

5.1 Structure of the Discussion

The structure of both discussions was characterized by a wide variety of topics and explorations of different solutions and counter arguments given against the proposed solutions. In the second discussion the emphasis partially shifted to the application of the topic of discussion in different areas.

5.1.1 Solutions

A major part of the discussion covered the exploration of different solutions of the discussed problem. Furthermore, the practical implications of these proposed solutions were discussed as well. Solutions discussed were wind and solar energy, energy generated by water and furthermore different solutions for problems directly related to these clean energy sources were discussed: Participant 1: “We kunnen ook op bedrijfsparken windmolens plaatsen”. (English translation: “We could place windmills on industrial parks.”).

In the second discussion the emphasis shifted a bit to putting arguments forward in favor of certain solutions when discussing the solutions.

In both discussions next to practical solutions, also a broader context for solutions was explored by proposing solutions regarded a cooperation with another party to solve issues: Participant 3: “Desnoods de jongens van de TU (University of Technology) gebruiken om daar iets moois voor te verzinnen.” (English translation: “If necessary, use students from the TU to come up with something nice for that.”)

5.1.2 Opposing Arguments

During the discussions, different solutions were brought up to reach the discussed goal, however also opposing arguments were given to those solutions. Opposing arguments were most of the time related to another perspective. Participant 3 mentioned a few times the visual pollution of windmills and also the economic perspective was highlighted: “Zorgen dat dat niet te duur is”. (English translation: “Make sure it is not too expensive.”).

In the second discussion, counter arguments were also given to argue against opposing the definition of the topic of discussion or a brought up solution: Participant 3: “Maar als die auto’s niet duurder worden dan zet je toch gewoon alleen die palen voor de rijken neer, dat is toch geen normale arbeider die een auto van dertig veertigduizend kan betalen, ik kan dat niet van een ambtenarensalaris.” (English translation: “But if those cars don’t get more expensive, then you just put those charging stations there for the rich, there’s no normal worker that can afford a car of thirty forty thousand, I can’t do that with a civil servant salary.”)

5.1.3 Topic of Discussion

The participants stated during the interview the topic of the discussions as too broad. For them, this led to a discussion with little depth. Participant 1: “De casus was heel erg open je hebt om te beginnen geen concreet voorstel of plan voor je liggen om op te schieten.” (English translation: “The case was very open, for starters you don’t have a concrete proposal or plan in front of you to criticize.”)

In the second discussion, often a new topic was proposed during the discussion. The topics were mostly applications of the topic of discussion in a new area; in this case they looked into new types of inequality. (which was the SDG the participants had a discussion about) In the introduction of a new topic, sometimes a link was made to the old topic. To map the topics put forward against the indicators visible on the screen, a timeline was created (see Fig. 5).

5.2 Argumentation

5.2.1 Argumentation on data

During the first interview, different aspects were named on which the participants based their arguments; Their own knowledge and the indicators from Telos. In addition, one participant explained that she had looked into the pie chart of energy in the Telos report and the SDG about which they had to discuss.

The usage of data was also observed in the first discussion, in which three times data from the report was used in an argument to point out an urgent problem in order to achieve the discussed goal. Participant 3 for example used data about the generation of solar energy to call for action. Participant 3: “Ik lees dat er steeds meer zonnestroom wordt opgewekt maar relatief nog weinig als wij betaalbare en duurzame

energie willen creëren”. (English translation: “I read there is more and more solar energy, but relatively little when we want to create affordable and green energy.”)

5.2.2 Creative argumentation

In the second part, the participants however emphasized creative thinking in their argumentation. They felt as if the probe forced them to think and argue more creatively. Creative thinking was needed in the argumentation to include other definitions of the topic of the discussion. It was however also experienced as difficult to make a link between the shown indicators and the discussion topic. One participant explained it would have been easier if all indicators on the screen were at least linked to each other. Participant 1: “En er kwamen ook dingen bij waarvan ik het moeilijk vond om de link met ongelijkheid te leggen.” (English translation: “And there were things where it was hard to make the connection with inequality.”)

During the discussion it was also observed that connections were made between two variables which had an influence on each other: Participant 1: “Energiearmoede is dan ook een punt misschien. Dat er toch nog een deel is dat niet genoeg vermogen heeft om over te gaan op zonnestroom.” (English translation: “Energy poverty is also a topic. There is still a part that does not have enough capital to make the switch to solar energy.”)

5.3 Perspectives

The participants experienced difficulties to take up the specific perspective of the assigned roles, or to empathize with the different explored perspectives.

5.3.1 Role

All participants indicated it as difficult to argue in the discussion from the perspective of their own role. Participant 2: “Lastig om rol te pakken, altijd wel eigen manier van denken en rol was heel breed” (English translation: “Hard to take on a role, people have their own way of thinking and the role was quite broad.”) One participant also reported it as difficult to take up the role because they didn’t have insights on the point of stance of this person. Participant 1: “Het is lastig om een rol aan te pakken omdat deze ook erg breed zijn en je niet weet of deze persoon voor of tegen een voorstel is”. (English translation: “It is hard to play a role because they are very broad and you do not know if this person is for or against a proposition.”)

5.3.2 Perspective

Participants did not feel that the discussion influenced their point of stance during the discussion, however the probe influences the ability to see possible solutions or other application of the discussion topic. Participant 4: “Het heeft misschien mijn standpunt verbreed, maar het is niet zo dat het je standpunt verandert.” (English translation: “It might have broadened my position on the case, but it has not changed my position.”) Participant 2: “Ik denk dat het in sommige gevallen wel echt goed kan zijn dat je op andere

manieren gaat nadenken.” (English translation: “I think that it could be really good in some cases that you think in different ways.”). Participants thought it is hard to take a certain perspective because you always think from your own perspective. Participant 3: “Mijn collega’s weten hoe ik naar de werkelijkheid kijk en dat verandert ook niet zo vreselijk veel.” (English translation: “My colleagues know how I view reality and it does not change all that much.”) Furthermore the knowledge you already have about certain subjects was also mentioned as something influencing a point of view or argumentation.

5.4 Reflection on the research probe

During the interview the participants reflected on the mental experience of the probe and the visual qualities of the probe in relation to the structure of the discussion.

5.4.1 Influence of the probe

Participants indicated that the probe had a forcing effect to think more creatively and out of the box. Participant 1: “Het voelde een beetje gedwongen af en toe”. (English translation: “Sometimes it felt like I was compelled.”) Participant 3: “Het dwingt ons om wat creatiever te zijn in onze argumentatie.” (English translation: “It forces us to be more creative in our argumentation.”) Several times in the interview the participants also indicated that the probe influenced the topic of the discussion.

Two participants also indicated that the border around the indicators influenced them during the discussion, because it gives immediate insights in the urgency of a problem.

5.4.2 Visual Information

According to the participants the probe changed too fast to provide depth to the discussion. Participants explained that the speed of the changes in combination with the amount of information led to an information overload. It was also mentioned that several visual communicators were not used in the discussion by the participants because it was not noticed or hard to involve in the discussion. The links between the indicators were not noticed by the participants.

5.5 Expert Insights

The research probe was also assessed in interviews with several policy makers from municipalities in The Netherlands (See Appendix V). Multiple insights were retrieved from the interviews, including options for optimizations and practical possibilities for the probe.

A main insight found in the evaluation interviews with the experts was that the current division of the indicators on the probe was too widespread. Remapping the indicators to be more connected to each other could support the discussion as it would be easier for the participants to see the connections between several indicators. By making certain connections clearer, the discussion can become more in-depth. Allowing the participants to select their own indicators for the design probe would force them to think about possible connections.

This could make the design probe more practical, as it would avoid putting indicators together that are completely unrelated.

One expert stated that making participants of a policy debate think actively from another perspective could help the discussion to arrive at a compromise faster. Since everyone has their own values, participants often bring their own perspectives and complexities to the debate. Creating awareness of someone's own perspective, and by making them see the problem from another point of view, can make it easier to understand each other, which could result in compromises being made.

Regarding a possible implementation of the probe, an expert stated that the tool could be useful for discussions about the framework policy document, because the probe enables people to look from another perspective and see the connections. It could help to initiate the discussion in a natural manner.

However, some experts also stated that the probe was trying to show too much information at the same time. Simplifying the probe would make it easier for the policy makers to understand what is going on on the screen; they already have to think about multiple issues and subjects, adding more to this would not be beneficial, while focusing with the probe on certain issues could help policy makers to keep an overview of the problem.

6 DISCUSSION

Discussion section is divided into three topics: explaining the implications of the results of our research, the limitations of our research and possibilities for future research.

6.1 Implication of Research Results

In this research it was explored if making different perspectives explicit on indicators could influence the discussion between policy makers, by visualization. From the comparison of the visibility of indicators on screen with the change in topics, it can be concluded that the visualization influenced the topic of discussion. This is also substantiated with the responses of the participants in the reflections on the probe, feeling forced to discuss the topic on screen. It seems that through the restrictive visualization of the research probe, the topic of a discussion can be changed and influenced.

The research probe stretched the definitions of the discussed problems by not only taking into account the indicators which directly describe inequality in the case of this research, but also connected indicators to create a broader network. The broadening of the subject of discussion helped participants of the debate to think more creatively about solutions. However, due to the broadness of the topic, it also made it hard to go in depth in the discussion, as participants were jumping from subject to subject.

The microboundary on which our probe was based raised awareness on perspective taking by creating new connections that did not seem related at first and were observed as somewhat peculiar. The micro boundary, as previously stated to raise awareness during an interaction seemed to influence people to think more creatively and created the possibility to look different at discussed problems [2]. Creative thinking was needed to make previously unknown connections between the shown indicators and the topic of discussion. As the chosen indicators belonged to the three perspectives - people, planet, profit - and the chosen indicators were brought into relation with the topic, it can be argued that the framework of indicators is a tool which helps to relate different perspectives to a problem. Furthermore, the character of the indicator itself changed as well. Rather than looking at the data of an indicator individually, the data was brought into relation to other indicators or to the goal the participants had to talk about. It is already argued that indicators can also create a platform for debate and critique [17].

However, missing such a specific link between topic and the perspective to view from, created diffusion, which was also reflected on by the participants of this research, stating that the assigned role was too broad and vague to empathize with, and putting a perspective on an indicator simply changing colors, is too abstract. This made it difficult for the participant to imagine their role and, in turn, made it harder for the participants to go in-depth with the discussion, as they had no clear view on their arguments.

The fact that changing perspectives and creative thinking are related to each other is already researched by Glăveanu and Beghetto, coming to the conclusion that creativity is embedded in the fact that multiple perspectives are possible on the same reality. This is mapped in the perspectival model of creativity [7]. With this research probe used, it can be concluded that this research offers a practical implementation of the perspectival model of creativity. In the same paper, wondering is being defined as being engaged in applying multiple perspectives on reality [6]. This research endorses the cited definition of wondering and making a transformation to the field of design in the form of Irregularity, as small Irregularities provide space for permanent exploration [16].

If the indicator has a certain link with the perspective, it is not much of a challenge to view the indicator from that perspective. However, if the indicator is unrelated to the perspective, e.g. richness of species and the profit perspective, participants found it hard to reason from the perspective and described it as abstract.

6.2 Limitations

This study has multiple possible limitations. Most of these limitations can be related to the fact that the field of policy making was new to the researchers; the researchers are students, not policy makers, and had to make decisions with little information, which resulted in difficulties when simulating the policy debate.

In the interviews, research participants stated that the case was experienced too wide and that the probe contained a too dense amount of information for the time of the discussion. Both these issues resulted in a shallow conversation. The assigned roles were not completely comparable to an actual municipality debate which made them hard to simulate. The set-up of the assigned roles missed the point of stance of the different participants in the discussion. In a standard political discussion, many different parties around the table have their own point of stance on policies: interests related to the perspective of the party. In the discussion merely the expertise areas were divided with the assigning of the roles.

Due to inability to test with actual policy makers because of the situation regarding COVID-19, the research was conducted with four employees of Telos, who were familiar with the report provided that the discussion was based on, which could have influenced the study results. The participants stated themselves that they are 'contaminated' with knowledge on the case, making it easier to switch discussion topics which could have had an influence on creative thinking. Also, the participants knew each other as they are colleagues, this contributed to the fact that everyone could have been more comfortable than usual in a discussion. Besides, one of the research participants also fulfilled the role of guiding the project process and could therefore be prone to bias.

There are certain frameworks of perspectives that exist in the scientific world, one of which is the approach of the macro, meso and micro levels of perspectives. In the field of sociology, a micro-perspective looks at "small scale interactions between individuals, such as conversation or group dynamics" while macro-perspective looks at "large-scale social processes, such as social stability and change" [1]. In the research, we have not taken this framework into account and as a result mainly focused on the macro level of perspectives. These concepts could be integrated into a more general theoretical framework.

6.3 Recommendations for Data Visualization

From this study, we propose four suggestions to benefit from the visualization of perspectives on data in order to stimulate creative problem solving. Next to this an explanation is given on how this could be implemented.

6.3.1 Use Visualization to Steer Debate

Visualization of data can select the context of data to be discussed. The form giving character of visual design can purposely be used to constrain possibilities in order to steer debate to make different perspectives part of the discussion.

6.3.2 Create a Concrete Link between Perspective and Topic

A concrete link or interpretation of perspectives are needed to integrate them in a discussion. Indicators can serve as

interpretation of perspectives and help to understand the underlying layers of perspectives. Data visualization should include concrete links between perspectives and discussion topics.

6.3.3 Take Underlying Layers into Account

By taking the layers of perspective into account, data visualization should be aware of underlying layers of perspectives. It seems that added layers give shape to the underlying layers and the understanding of underlying layers. Although visualization should be in line with the layers underneath, designers should also dare to reframe underlying layers if needed.

6.3.4 Use data Visualization to Promote Exploration.

We recommend using data visualization to promote exploration. Data visualization is currently focused on the understanding and the use of research evidence [5]. This research determined however, that data visualization could also be used to promote exploration of the discussion topic. A design method to achieve this for example, is to include Irregularities in the form of micro-frictions.

6.4 Future Work

In future research, a narrow focus should be put on working closely together with policy makers. Iterating on the research probe in cooperation with policy makers ensures more alignment with the field the research is about. To conduct the research from another perspective, the probe could be translated to a physical design, instead of being on a digital platform. Inspiration can be taken from explorations created during the prototype iterations (see Section 3.4). The probe should allow the research participants to go more in-depth during the discussion. Also more time should be provided on each set of indicators. Since the probe was now perceived as too general and abstract, a connection could be made to practical implementation, in other words to make the probe more practically applicable. It is an idea to let the participants select a set amount of indicators that relate to the topic of discussion best in advance of the discussion. The probe could also be used to visualize aspects of a political debate, not just to show perspectives, as this was shown as one of the applications of the probe in the qualitative study. An example of this application would be to show certain conditions of parties that are part of the discussion, to take them into account during the municipality debate.

The framework of micro level perspectives should be taken into account, to generate a more overall framework of perspectives. Working with micro level perspectives would take in mind the individual processes and interactions, also to make the probe more practically applicable. With the individual processes, the probe could stimulate the individual perspective changing, improving the empathizing ability in discussions for first person perspective taking.

7. CONCLUSION

The complex issues of today's policy making asks for more innovative ways of thinking. Although evidence and data can inform policy makers, data should not be regarded as something completely objective and as the sole evidence for one specific solution. Data is always above and underneath multiple layers of perspectives. Rather than to ignore these perspectives, we should benefit from the multilayered understandings of data. The ability to tweak the contents of the layers allows to open up the possibility to think more creatively about possible solutions for complex issues.

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APPENDIX

APPENDIX I: CONSENT FORM

Toestemmingsformulier participant

Perspective Matters - Onderzoek naar discussies en data

- Ik heb informatie gekregen en ik begrijp waar dit onderzoek over gaat. Ook kon ik vragen stellen. Mijn vragen zijn voldoende beantwoord. Ik had genoeg tijd om te beslissen of ik meedoe.
- Ik weet dat meedoen vrijwillig is. Ook weet ik dat ik op ieder moment kan beslissen om toch niet mee te doen of te stoppen met het onderzoek. Daarvoor hoef ik geen reden te geven.
- Ik geef toestemming voor het gebruik van audio opnames en een schermafbeelding van het onderzoek. In de schermafbeelding zullen gezichten onherkenbaar worden gemaakt.
- Ik weet dat sommige mensen mijn gegevens kunnen inzien. Die mensen zijn Timon Adriaanssen, Elke van Dael, Daan Rozinga en Malin Winter.
- Ik geef toestemming voor het verzamelen en gebruiken van mijn gegevens voor wetenschappelijke publicaties en meer of ander onderzoek op mijn gegevens.
- Ik geef toestemming om mijn gegevens op de onderzoekslocatie nog 5 jaar na dit onderzoek te bewaren.

Ik wil meedoen aan dit onderzoek.

Naam participant:

Handtekening:

Datum : _ / _ / _

Ik verklaar dat ik deze participant volledig heb geïnformeerd over het genoemde onderzoek.

Als er tijdens het onderzoek informatie bekend wordt die de toestemming van de participant zou kunnen beïnvloeden, dan breng ik hem/haar daarvan tijdig op de hoogte.

Naam onderzoeker (of diens vertegenwoordiger): Elke van Dael

Handtekening:

Datum: 04 / 05 / 2020

De participant krijgt een kopie van het getekende toestemmingsformulier.

APPENDIX II: RESEARCH PROTOCOL

Testing date 07/05/2020

Old RQ: “Does making the levels of perspectives on the indicators from Telos explicit help for a discussion between policy makers about the underlying goals?” with sub questions: “Which factors of perspective taking can create a more informed debate? How would they do that” or “What are the implications of these factors for designing a tool for the "informed debate"”

NEW RQ: *“Does making the levels of perspectives on the indicators from Telos explicit, influence the discussion between policy makers?”* with sub questions: *“How does the discussion change in topic, argumentation, motivation behind decision making and atmosphere?”* and *“Is the discussion more about the underlying goals instead of merely the indicators and their data?”*

- Goal of the explorative research: Find out what the discussion is about with influence of the probe.
- Verify that the participants were aware that the tool makes perspectives explicit.

METHOD DRAAIBOEK

4 participants of Telos will get a **case** of municipality in which they use data.

Ieder teamlid krijgt een verantwoordelijkheid:

1. luisteraar, tijdbewaker en notulist
- a.
2. praatjesmaker, aanspreekpunt, interviewer en recorder
 - . Elke
 3. hoofdnotulist
 - . Daan
 4. schermdeleer/toolmoderator en notulist
 - . Malin

Hele sessie opnemen met beeld en geluid → platform Zoom

Van tevoren

- Participanten inlichten over case en hen vragen zich erover in te lezen en een standpunt met wat argumenten voor te bereiden. Wat vindt u ervan en waarom vindt u dit? Ze zijn gemeenteambtenaren. Konden geen specifieke lijst vinden van gemeenteambtenaren in Heusden, en verschilt per gemeente, dus besloten om het op het groter geheel te trekken. (laat deze comment staan ok).
- Laten weten dat ze een camera moeten hebben, oortelefoontjes en een stille kamer.
- **CONSENT FORM** → laten tekenen via PDF handtekening
- 4 ambtenaren van gemeente Heusden. Om de situatie van een discussie tussen beleidsmakers zo veel mogelijk te simuleren dat er verschillende expertises zijn (we try to address that they're stuck in their own expertise).
 - U werkt als beleidsmaker bij het ministerie van Infrastructuur en Waterstaat
 - U werkt als beleidsmaker bij het ministerie van Volksgezondheid, Welzijn en Sport
 - U werkt als beleidsmaker bij het ministerie van Financiën
 - U werkt als beleidsmaker bij het ministerie van Onderwijs, Cultuur en Wetenschap

• Korte introductie project en onderzoek

- Bedanken voor beschikbaarheid en tijd
- Team voorstellen: namen, 2e jaars bachelorstudenten studie ID aan TU/e
- Semester project, research project, onder begeleiding van coaches
- Het onderzoek bestaat uit 2 delen; 2 discussies en 2 nabesprekingen. Wij gaan deze discussies analyseren. Gedurende de hele sessie is er de vrijheid om vragen te stellen. Om onze beschikbaarheid

te uiten zal ik mijn video aan laten, u kunt mij beschouwen als aanspreekpunt. De rest van het team zet de camera tijdens de discussies uit. **Record on this computer.** Laten we beginnen.

Part 1: zonder design interventie

- **Discussie over case (20 min)**
 - SDG 7: Betaalbare en duurzame energie
 - Verzeker toegang tot betaalbare, betrouwbare, duurzame en moderne energie voor iedereen. Hoe kunnen we dat bewerkstelligen in de gemeente Heusden?
 - U mag het rapport van gemeente Heusden erbij pakken om uw argumenten te baseren op data.

Nabespreking over de discussie: vragen over redentatie

- Hoe vond u de discussie gaan?
- Kunt u ons uitleggen hoe u deze discussie heeft voorbereid?
- Denkt u dat dit vergelijkbaar is met hoe beleidsmakers hun vergaderingen voorbereiden?
- Waarop heeft u uw argumenten in de discussie gebaseerd?
- Heeft u indicatoren gebruikt in de discussie en, zo ja, op welke manier?
- Had u begrip voor de discussiepunten van de anderen?
- Heeft de discussie uw manier van denken over de case veranderd?

Introductie probe (hoe het werkt, niet wat de achterliggende gedachte ervan is)

- Gebruik deze design interventie in de volgende discussie
- Malin naar voren roepen, scherm delen

Part 2: met design interventie

- **Discussie over case (20 min)**
 - SDG 10: Ongelijkheid
 - Dring ongelijkheid in de gemeente Heusden terug. Hoe kunnen we dat bewerkstelligen in de gemeente Heusden?

Nabespreking over tweede discussie: vragen over redentatie en probe

- Hoe vond u de discussie gaan?
- Door de probe werd u aangemoedigd te discussiëren vanuit een bepaald standpunt, hoe beïnvloedde dit voor u de discussie?
- Hoe beïnvloedde de verandering in kleuren van de indicatoren uw argumenten tijdens de discussie?
- Hoe werd de discussie voor u beïnvloed door de cirkel die bepaalde indicatoren belichtte?
- Is uw standpunt over de case aangepast door de probe tijdens de discussie?
- Waarop heeft u uw argumenten gebaseerd in deze discussie?
- De probe probeerde u tijdens deze discussie steeds te laten argumenteren vanuit een bepaald perspectief, denkt u dat u in de vorige discussie ook al vanuit een bepaald perspectief naar de case keek?

Afsluiting

- Bedanken voor participatie
- Uitleggen wat de volgende stappen zijn (analyseren, conclusies trekken)
- We zullen de heer Dagevos hiervan op de hoogte houden
- Bij interesse wordt final report op 12 juni doorgestuurd
- Schermopname maken
- Consent form

APPENDIX III: Interview Questions with English Translations

Group interview questions of part one

The following questions were asked to the participants (in Dutch) after they had the discussion without design intervention. The English translation can be found below each question.

1. Hoe vond u de discussie gaan?
(English translation: *What did you think of the discussion?*)
2. Kunt u ons uitleggen hoe u deze discussie heeft voorbereid?
(English translation: *Could you explain to us how you prepared this discussion?*)
3. Denkt u dat dit vergelijkbaar is met hoe beleidsmakers hun vergaderingen voorbereiden?
(English translation: *Do you think that is comparable to how policy makers prepare their meetings?*)
4. Waarop heeft u uw argumenten in de discussie gebaseerd?
(English translation: *On what did you base your arguments during the discussion?*)
5. Heeft u indicatoren gebruikt in de discussie en, zo ja, op welke manier?
(English translation: *Did you use indicators during the discussion and, if so, in what way?*)
6. Had u begrip voor de discussiepunten van de anderen?
(English translation: *Did you emphasize with the discussion points of the others?*)
7. Heeft de discussie uw manier van denken over de case veranderd?
(English translation: *Did the discussion change your way of thinking about the case?*)

Group interview questions of part two

The following questions were asked to the participants (in Dutch) after they had the discussion with design intervention. The English translation can be found below each question.

1. Hoe vond u de discussie gaan?
(English translation: *What did you think of the discussion?*)
2. Door de probe werd u aangemoedigd te discussiëren vanuit een bepaald standpunt, hoe beïnvloedde dit voor u de discussie?
(English translation: *You were encouraged by the probe to discuss from a certain point of view, how did this influence the discussion for you?*)
3. Hoe beïnvloedde de verandering in kleuren van de indicatoren uw argumenten tijdens de discussie?
(English translation: *How did the change in colour of the indicators affect your arguments during the discussion?*)
4. Hoe werd de discussie voor u beïnvloed door de cirkel die bepaalde indicatoren belichtte?
(English translation: *How was the discussion affected for you by the circle highlighting certain indicators?*)
5. Is uw standpunt over de case aangepast door de probe tijdens de discussie?
(English translation: *Was your point of stance in the case adjusted by the probe during the discussion?*)
6. Waarop heeft u uw argumenten gebaseerd in deze discussie?
(English translation: *On what did you base your arguments during this discussion?*)
7. De probe probeerde u tijdens deze discussie steeds te laten argumenteren vanuit een bepaald perspectief, denkt u dat u in de vorige discussie ook al vanuit een bepaald perspectief naar de case keek?
(English translation: *The probe tried to get you to argue from a certain perspective during this discussion, do you think you already looked at the case from a certain perspective in the previous discussion?*)

APPENDIX IV: THEMATIC ANALYSIS OF TRANSCRIPTIONS

Part 1: Discussion

Codes and themes:

Creatief denken/creative thinking

- Oplossing andere hoek (bekeken)

Probleemstelling/ Problem definition

- Problemen mbt tot duurzame energiebronnen/problems regarding sustainable energy sources

Redenatie rapport / argumentation from report

- Redenering vanuit indicator/argumentation from indicator

Perspectief/ Perspective

- Aanhaken op toebedeelde rol/ relating to assigned role
- Tegenstellende problemen vanuit ander perspectief/ counter problem from another perspective

Oplossing SDG/Solution for SDG

- Verkennen van oplossingen voor problemen duurzame energiebronnen/ discovering of solutions for problems of sustainable energy sources
- Nieuwe soort energiebron/ new form of sustainable energy

- Omschrijving Heusden/description Heusden

- Discussie begint op gang te komen. P3 neemt de leiding en start.
 - P3: “Ja, wat moeten we nou met Heusden. Een gemeente met 9 aparte kleine kernen.”
 - P3?: “Veel oppervlakte. Veel dorpsgezichten ook”. “Setting the scene”
 - P3: “Jij wil in ieder geval geen visuele verontlasting (dus)?”
- Begin met een neutrale opening van de discussie. P3 stuurt het gesprek naar een perspectief: “dus jij vindt dit?”
- Rapport wordt erbij gepakt. Punt gemaakt vanuit het rapport.
 - Participant 3: “Hebben ze nou de goede dingen in kaart gebracht? Ik hou me met onderwijs bezig. Hebben jullie daar verstand van?”
- Praten vanuit perspectief van de gemeente, lukt om in te leven.
- “Steeds meer zonnestroom, maar relatief nog weinig” “als wij betaalbare en duurzame energie willen creëren, moeten we daar mee mee doen.” redeneren vanuit de indicatoren.
 - Mee eens. Meedenken voor een oplossing door het probleem te noemen.
 - “Hoe gaan we om met [we willen verduurzamen] terwijl we tegelijkertijd met beschermde/historische dorpsgezichten zitten. Dan wil je daar eigenlijk geen windmolens plaatsen”
 - Opties na gaan vanuit indicatoren en data die beschikbaar is.
- Tegenargument vanuit people perspectief: mooi dorp wil je niet verpesten met duurzame oplossingen (in dit geval windenergie).
 - Oplossing vanuit ander perspectief, windmolens plaatsen langs de snelweg?
 - “Zorgen dat dat niet te duur is” Lachen.
- Verder op de oplossing om meer windmolens te plaatsen. Lijken het veel met elkaar eens te zijn.
 - “We kunnen ook op bedrijfsparken windmolens plaatsen. Win-win situatie”. “Bijvoorbeeld in Tilburg heeft Fuji een aantal windmolens geplaatst.”
 - Argument vanuit eigen kennis en hierop verder discussieren. “Is dit reëel?”
 - “Toch met zonnepanelen op het dak alleen gaan we het niet redden”
 - Tegenargument warmtepomp. “Veel klachten vanwege geluidsklachten”, people perspective.
 - Andere participant mee eens, draait het naar een andere oplossing beargumenteerd vanuit indicatoren. Vraagt nu naar wetenschappelijke onderbouwing.
 - “Daarom is het toch goed om te kijken naar windenergie.”
 - Argument vanuit een ander perspectief. Skeptisch over oplossing.
 - “Op bedrijfsterreinen moet het niet in de weg zitten van de innovatiekracht, niet dat alle bedrijven straks trekken naar den Bosch of Waalwijk.”

- Onderwijs wordt meegenomen
 - “Zou ik ook even in meenemen dan. Maar dan wel kijken naar Tilburg of Eindhoven (niet zo relevant in Heusden).”
 - “We zouden kunnen kijken naar een zonneheide om de kern energieneutraal te maken.”
- *Veel met elkaar eens, maar vanuit meerdere perspectieven proberen de beste oplossing te vinden.*
- Denken vanuit medebewoners van Heusden over energie.
- Andere oplossing: “benutten van biomassa?”
 - Geen antwoord. Checkt report.
 - “Eigenlijk geen oplossing. Zou een tussenoplossing, een overgangperiode” waarschijnlijk beargumenteerd vanuit eigen kennis. “We moeten nu eigenlijk kijken naar de lange termijn”.
 - “Eerder investeren vanuit minister van financiën in lange termijn” bekijkt probleem vanuit eigen perspectief (rol). “Kwestie van kosten en opbrengsten”. “Of kijken naar samenwerken meerdere investeerders”.
 - “Hoe denk je dan voor de sportverenigingen? Kunnen we de daken daarvan ook benutten voor zonnepanelen?”
 - “We moeten niet visueel verontreinigen. Niet in het (mooie Heusden) (lelijke) dingen neerzetten.”
 - “In dorpskern Drunen kunnen we wel het een en ander plaatsen”
 - “En een grote zonneweide op Loonse en Drunense duinen? Wat vinden jullie daarvan?” (Lachen)
 - “Een extra kern opwekken met alleen maar energie opwekken?”
- Stroom van rivier gebruiken voor energie. Beredeneerd vanuit eigen kennis en innovatieve oplossing. Denken buiten zonne- en windenergie.
 - “Zoals tussen Texel en Vlieland, zou je kunnen nadenken om de stroom van de rivier te gebruiken om energie op te wekken. Desnoods de jongens van de TU gebruiken om daar iets moois voor te verzinnen”.
 - Tegenargument vanuit eigen kennis over realisme van het idee.
 - “Stroming van de Maas genoeg energie opwekken?”
 - Argument: klimaatverandering biedt nieuwe mogelijkheden voor dit idee.
- *Alle participants lijken even betrokken in de discussie.*
- Nieuwe oplossing vanuit eigen kennis beredeneerd om iets anders te doen dan wind- en zonne energie. Gas voor stadswarmte waarbij gebruikt gemaakt wordt van de kenmerken van Heusden.
 - P3: “Mest kunnen gebruiken voor een en andere oplossing, vergisting van slip, mooi project zijn (voor gasopwekking)”.
 - “In het kader van we moeten van gas af?”
 - “Je zou kunnen nadenken of de boeren niet op hun eigen gas kunnen draaien”.
- Er wordt even groter gekeken. Vanuit een ander perspectief gekeken. Rol als gemeente.
 - “Blijkt dat de huishoudens van Heusden relatief veel energie gebruiken. Zien we als gemeente daar ook een rol weggelegd om daar iets mee te doen? Of voor de bedrijven?” “Zeker. Gas- en warmtegebruik terugdraaien”
 - “Taak van ons of voor de burger?” “Ik denk dat wij sinds kort aan zet zijn, regering speelt geen rol meer”. Lachen over de situatie.
- “Je ziet dat in onze gemeente al heel veel elektrische auto’s rijden” Beredeneren vanuit onderzochte indicatoren uit het rapport.
 - “Neemt niet weg dat de warmtevraag op een andere manier moet worden opgelost dan gasverbruik”
 - “Toch nog even terug naar het vraagstuk hoe we onze warmteverbruik kunnen veranderen, eigen vooral geen gestapelde bouw, dus wat meer energieverbruik. Als woningbouwcorporaties kunnen we een slag maken (samenwerking).”
 - “Bijvoorbeeld op coöperatief verband kansen pakken, in ieder geval in mijn kern”

Afronding, conclusies

- Bedrijfsterreinen inzetten
- Maas, water opties om energie op te wekken
 - Onderwijsinstellingen gebruiken om tot een oplossing te komen
- Windenergie langs de snelweg
- Lange termijn > korte termijn

Part 1: Interview

Vraagstelling/ Question

Rol/ Role

Rapport/Report

Mening/Opinion

Eigen kennis/Own knowledge

- We kennen elkaar heel goed
- De casus was heel erg open, je hebt om te beginnen geen concreet voorstel of plan voor je liggen waar je op kan schieten
- John heeft deze discussie in Heusden al eens geleid, hij kent de context
- Omdat er geen gestructureerde vragen liggen en de casus zo open is, is het lastig om diepgang te creëren.
- Het is lastig om een rol aan te pakken omdat deze ook erg breed zijn en je niet weet of deze persoon voor of tegen een voorstel is. Normaal kijken wij juist over alle perspectieven heen
- Het is belangrijk om te beseffen dat ambtenaren ook vaak burgers zijn in de dorpen.

Vorbereiding

- Ik heb kort de monitor doorgebladerd en de SDG bekeken
- Iemand anders slechts naar zijn rol gekeken

Waar zijn argumenten op gebaseerd

- Je hebt kennis waar je je argumenten op kan baseren
- Iemand heeft gekeken naar de taart van energie
- Andere hadden het document open om deze te kunnen raadplegen

Denken veranderd?

- Ik heb begrip voor het argument van de ander.
- Mijn denken is er niet over veranderd
- Mogelijkheid van energie opwekken met water niet aan gedacht.

Part 2: Discussion

argumentatie/ argumentation

- redenatie voor de ongelijkheid/ reasoning for inequality
- Gebruik gegevens in argumentatie : use of data in argumentation
- link leggen in argumentatie/ creating links in argumentation

Inbrengen vormen van ongelijkheid/ Bringing in a new form of inequality

- economische ongelijkheid/ economic inequality
- benoemen nieuwe topic/ mention a new topic
- andere vormen van ongelijkheid/ new forms of inequality
- link leggen naar nieuwe topic/creating a link to a new topic

Oplossingen/ Solutions

- Acties gemeente/ actions municipality
- samenwerkingen/ coöperations
- Argumentatie voor oplossing eigen visie/ argumentation for own vision

tegenargumenten/ counterargument

- gebaseerd op data/ based on data
- Tegenstellend argument/counterargument

P1: Dus, ongelijkheid in de gemeente Heusden,

P2: Ja dat is in onze gemeente helemaal geen discussie toch? Iedereen is rijk

P1: (lacht) Nou is klaar

P2: Of zie je dat anders?

P1: een ander type ongelijkheid dan? Als je het hebt over gezondheid bijvoorbeeld

P2: Veel ouderen he, dus er zit natuurlijk veel ongelijkheid wat dat betreft

P1: ja of als je in de kern woont of in de landbouw

P3: ken je klassiekers he, Heusden kende natuurlijk vroeger gewoon een, uh hoe heet het, het was een onderdeel van Rijnschool, schelder van rool (heel slecht te verstaan wat hier gezegd wordt). Heel veel gastarbeiders in de gemeente dus wat dat betreft is er wel een forse ongelijkheid in gemeentes zoals Oosterwijk waar je dat veel hebt. Die industrie in de jaren 50 60 ontzettend veel gastarbeiders, en dat zijn niet de rijksten. En we hebben meerdere kernen he, ik bedoel ouwe kern is natuurlijk rijk, maar daar rondom heen is er natuurlijk uh, al die boeren op het land zijn natuurlijk niet allemaal rijk.

P2: Als ik toch eens inderdaad naar het rapport van Telos kijk naar de voorraad economische participatie, dan zie ik één grote groen gekleurde taartdiagram

P3: Ja maar goed jij weet net zo goed als ik dat je gewoon als je dat naar wijk en buurt niveau gaat verbijzonderen dan gaan er hele grote verschillen zijn. Dus het gemiddelde is goed, maar dat gemiddelde zorgt zich toch uit verschillen. Jij als geen ander zou dat moeten weten.

P2: Nou ja ik werk bij volksgezondheid

P1: Er is ook veel eenzaamheid, omdat ook even te noemen

P3: En, ik bedoel, jij weet toch ook gewoon, Ruben (P1), dat volksgezondheid toch sterk gecorreleerd is met cest van mensen. Dus een lage cest werkt negatief uit op de volksgezondheid.

P2: Zeker, zeker, maar we missen in de informatie op buurt en wijkniveau om daar echt iets over te kunnen zeggen op die manier.

P3: Dat lijkt me een mooie klus, in het kader van de ... (niet te horen),

P2: Denk dat we Telos moeten inhuren

P3: Praten om dat gewoon te verbijzonderen. He maar die gegevensfases, als vraagstuk van de SDG rondom ongelijkheid wat ik wel een hele interessante vind als emancipatorisch hoogtepunt. We moeten gewoon veel betere informatie hebben. Weet dat ze bij Telos op dit moment hebben ze gewoon iemand rondlopen, een stagiaire, dit houdt zich dus bezig met, lage cest en gezondheid en kijkt dus ook in welke mate dat zeg maar buurt en wijkenmerken daar gewoon variabele in zijn die gewoon verstorend kunnen werken. En daar zouden wij als gemeente natuurlijk wel iets kunnen doen, want we kunnen dus kijken; als die buurtkenmerken gewoon van invloed zijn, dan zouden we daar iets aan kunnen doen.

P2: Nee is een goed middel lijkt me ook. We zien natuurlijk wel dat een groot gedeelte van onze bevolking kwetsbaar is voor corona op dit moment. Dus dat speelt natuurlijk ook volop als je kijkt naar ongelijkheid, in termen van risico's. Omdat de oudere bevolking het natuurlijk zwaar te lijden heeft.

P4: Daarnaast blijkt uit het GGD onderzoek ook dat veel inwoners roken in onze gemeente, dat is natuurlijk nog een extra risico betreffende corona.

P2: Ja, dat is een extra probleem. We hebben nu natuurlijk een enorm hoge levensverwachting in onze gemeente, maar het kan zijn dat dat klappen gaat krijgen. Dat we onze voorsprong daar kwijt gaan raken.

P4: Maar John (P3) jij had het net over wat wij als gemeente kunnen doen in de buurten en wijken, heb jij daar zelf een idee over?

P3: Ja zeker, kijk als wij gewoon als onderwijs. Dat is natuurlijk vooral op. Kijk, ik denk dat we toe moeten naar zorg corporaties. Dat we uhhh, ik ben niet voor niks een geitenwollensokken mens. Ik geloof dat we zouden moeten kunnen streven om in onze kernen een veel grotere mate van zelfvoorzienendheid te realiseren. Als er iets is wat de coronacrisis natuurlijk ook duidelijk maakt is het dat alles wat van ver weg komt niet per se goed werkt. En in ons geval ons afhankelijk maakt en ik denk dat we op dat punt zelfvoorzienendheid, daar gaat onze discussie natuurlijk overheen, maar ik denk dat we dat ook zouden kunnen hebben als het gaat over hoe kunnen we de zorg gewoon goed organiseren op wijk en buurt niveau. En van Esbeek

krijgen we daar ook hele mooie voorbeelden van om zorgcorporaties proberen in ieder geval, wat Telos ook ondersteunt, dat we daar nog wel wat data aan geleverd kunnen krijgen. Dat zou toch wel interessant zijn.

P4: Dat voorbeeld is voor mij even onduidelijk

P1: Wat zeg je?

P4: Ik zeg dat voorbeeld is voor mij even onduidelijk, wat doen ze in de gemeente Esbeek?

P3: In Esbeek zijn ze bezig om zorg op te richten, met andere woorden, je probeert dus op het niveau van het dorp probeer je rondhuis voorzieningen wat collectiever te exporteren en bij elkaar te brengen, waardoor je ehm kijk uhm en dan ga je dat gewoon niet doen in allemaal aparte winkeltjes of dat soort nee je probeert het bij elkaar te pullen zodat je draagvlak daarvoor verbetert. Er zijn ooit studenten van het lectoraat duurzame streekontwikkelingen van Fontys zijn er ook mee bezig geweest om dit soort modellen mee uit te werken in mijn tijd. Dus dat zou bij ons ook kunnen en er zijn natuurlijk, onze bevolking is natuurlijk gewoon wel redelijk coöperatief ingesteld. Dus dat is een, zeker die kleine kernen, als ik kijk naar die wooncorporaties, en waarom zouden we niet daar een zorgcorporaties aan kunnen koppelen.

P1: Nouja het is wel iets als je het hebt over ongelijkheid, denk ik uhhh de economische kant er van zoals ik ook al aangaf, gaat het over het algemeen best wel goed in Heusden. Dus misschien is die gezondheidsverschillen weliswaar iets waar we met ongelijkheid meer op kunnen richten.

P2: Nou tegelijkertijd zie je dat, hoewel onze bevolking dus echt welvarend is, dat de ene kern veel meer op zonnestroom inzet dan de andere kern.

P1: En werklocaties ook

P2: Ja nee daar zit ook verschil in, absoluut, absoluut. Je ziet dat de ene kern, daar liggen alle daken ongeveer al vol met zonnepanelen, en een ander houden hun geld op zak om het zo maar te zeggen.

P1: Energie armoede is dan ook een punt misschien. Dat er toch nog een deel is dat niet genoeg vermogen heeft om over te gaan op zonnestroom.

P2: Ja dat zou kunnen, maar goed misschien dat wooncorporaties daar toch een rol in kunnen spelen. Dat die bepaalde woningen toch van zonnepanelen kunnen voorzien. Daar waar de bevolking het zelf niet voor elkaar kan krijgen financieel, of we moeten een soort leningenstructuur in gang zetten, ik weet niet of onze financiën persoon daar nog aan gedacht heeft

P1: Uh ja leningen ben ik natuurlijk altijd voor te porren, in plaats van subsidies.

P4: Je hebt nu ook dat nieuwe warmtefonds wat ze aan het opzetten zijn, waardoor mensen die niet mee kunnen met de energietransitie tot een beetje een lage rente een lening kunnen afsluiten, dat zou eventueel de ongelijkheid wat minder kunnen maken.

P3: En ik las recent in het, bij toeval kwam ik dat tegen, in het jaarverslag van de bank Nederlandse gemeente, dat die aan het zoeken zijn naar, die hebben, grote organisaties moeten doen aan social return of investment, en zij zeggen: eigenlijk zijn we op zoek naar projecten waar we dus social return kunnen realiseren. Dat zou natuurlijk hele mooie casussen kunnen zijn als die mee bij zouden kunnen dragen aan het financieren eigenlijk. Dat zou ik willen voorstellen. Dat zou wel interessant kunnen zijn. En sla je weer twee vliegen in één klap, die bank die doet iets van social return en wij zijn in staat gewoon om iets voor mensen met een minder vermogen te realiseren. Dat zou wel mooi kunnen zijn, of we zouden kunnen nadenken of we ons social investment bond kunnen uitgeven als gemeente, geholpen bij van spreke door deskundige. Zou best interessant kunnen zijn.

P2: misschien moeten we in dat kader wel nadenken of onze ongelijkheid niet te laag is, zeg maar, omdat onze ongelijkheid binnen de gemeente misschien laag is, maar vergeleken met andere gemeenten juist hoog is. Tussen gemeentes is ie hoog, dus misschien moeten wij wel meer doen om meer mensen met een lage ces aan te trekken in onze gemeente. Als ik kijk naar betaalbare huurwoningen, daar zijn er nog maar heel weinig van in onze gemeente

P3: Dus het omgedraaide doen van wat Helmond doet?

P2: ja

P3: Want Helmond heeft eigenlijk een lage ces en heeft vervolgens gewoon dat probleem. Dan zouden we ook gewoon iets kunnen doen, we zouden ook een samenwerking met Waalwijk kunnen kiezen he, onze burens, want die hebben gewoon

heel veel lage ces in de buurt. Dus je hoeft het niet binnen je eigen grondgebied op te lossen. Je doet het gewoon samen. Je moet nadenken hoe je het samen zou kunnen doen.

P1: Ja je ziet natuurlijk dat onze bewoners gewoon politiek actief zijn, maar dat die inwoners in Waalwijk natuurlijk veel minder politiek actief zijn. Dus dat wordt misschien wel moeilijk om die processen aan elkaar aan te laten sluiten.

P2: Dan stemmen ze ook niet tegen die waalwijkers, dat is dan weer een voordeel.

P3: We zouden ook kunnen nadenken hoe dat met bol.com kunnen samenwerken he, misschien kunnen we nog een aantal van die arbeidsmigranten die zij daar schandelijk uitbuiten zouden we misschien wel goede huisvesting kunnen geven, dat zou ook nog een manier kunnen zijn. Lossen we dat probleem meteen ook op.

P2: Ja dus eigenlijk zouden we toch al meer in kunnen zetten op betaalbare huurwoningen, niet dat onze eigen bevolking dat nodig heeft, maar juist om de problemen in onze omliggende gemeentes op te lossen.

P3: Is overigens, als je meer mensen, als je wat dat betreft qua omvang wat zou groeien zou dat ook het raakvlak voor voorzieningen gewoon wel kunnen ondersteunen. Betekent ook dat we iets minder afhankelijk zijn van die toeristen waar collega ... het over had, dat zou op die manier natuurlijk wel kunnen oppakken.

P1: We moeten natuurlijk wel in de gate houden dat de ontsluiting van de hoofdwegen op een goed niveau blijft zitten. Anders kunnen we natuurlijk mensen niet heen en weer laten bewegen met een panel naar hun werk enzovoorts.

P3: A59, dat is het probleem van Rijkswaterstaat he, dat is geen provinciale weg, gemeenteweg moeten we met Rijkswaterstaat over hebben.

P2: Ja want het is natuurlijk, dat Dus een extra afslag hier of daar zou misschien ook wel zode aan de dijk zetten. Misschien dat mensen vanuit Waalwijk dan ook eerder in onze gemeente zouden wonen als ze makkelijker terug naar Waalwijk konden rijden voor hun werk.

P3: Nog meer afslagen? Er zijn er al zo veel, toch?

P2: Ja toch staat de ontsluiting op hoofdwegen onder druk, zie ik aan het rooie lijntje.

P3: Jaja, maar ik vind dat eigenlijk wel heel goed, doordat het toch iets minder makkelijk bereikbaar is wordt die druk gewoon op die kern wordt enigszins verminderd. Anders hebben we wat dat betreft, wordt het verhaal alleen maar lastiger.

P2: Ja en qua openbaar vervoer is het natuurlijk een drama in onze gemeente, dus we zouden er toch over kunnen nadenken of we toch niet een soort lightrail kunnen installeren met behulp van andere gemeentes om ons heen.

P1: Vind ik wel erg duur vanuit de financiën, maar snelfietspaden kan ik me wel inleven

P3: En jij denkt dat met die nieuwe dwaas die daar in het provinciehuis, met de aanbesteding van meer openbaar vervoer, dat het daarmee beter gaat? Daar geloof ik toch helemaal niks van.

P1: Ja dat is nog een jaartje dan zijn ze weer weg, kunnen we helemaal opnieuw beginnen.

P3: Dat is de ellende

P1: Nieuwe plannen maken

P2: Dat is de ellende ja,

P3: Continuïteit van bestuur is natuurlijk gewoon wel een van de grootste zorgen ook in het kader van de energie transitie dat die, ik bedoel, huizen, dat we die gewoon proberen te isoleren, dat we daar daken met zonnepanelen proberen op te leggen, en binnen de kortste keren worde die subsidieregels weer gestopt en dergelijken. Heb je net heel je voorbereiding gedaan en nagedacht als boer over hoe kan ik mn asbest dak saneren en vervolgens heb je je plan klaarliggen en vervangbeleid gevonden om daarmee te investeren en dan wordt de subsidieregeling weer ingekort. Over overheid gesproken, mijn zwager stond daar op het malieveld, want die denk van, shit

P1: Ja misschien kunnen we als gemeente zelf ook een impuls geven om de energielabels van huishoudens beter te krijgen. Nouja om gewoon te zorgen dat we niet stoken voor de buitenlucht, maar voor onze huizen zelf.

P2: Het zou ook de soortenrijkdom in onze gemeente te goede komen, de ongelijkheid tussen verschillende soorten moeten we natuurlijk juist vergroten.

P1: Ja ... is belangrijk natuurlijk, wat dat betreft.

P4: Vanuit een economisch perspectief, kan de soortenrijkdom weer zorgen voor meer economische input van mensen die heel graag in onze gemeente willen wonen. We zagen net natuurlijk dat het verhuissaldo positief is, dus dat wordt toch eigenlijk wat heen en weer verhuist naar onze gemeente toe van buiten.

P3: Ja ik ben bezig binnen de basisscholen gewoon projecten te ondersteunen om de leerlingen van de basisschoolgroepen 6 7 en 8, om die eigenlijk in kaart te laten brengen van welke soorten we allemaal op bepaalde plekken tegenkomen en daarmee die kinderen gewoon een soort besef te geven van de rijkdom van hun eigen natuurlijke omgeving. En het principe is eigenlijk altijd van ik weet dat de wereld begint met de kinderen, maar gaan die ouders, die zouden dat mee moeten oppakken, voor hele leuke projecten samen met het EVM. En we hebben daar een kleine subsidieregeling vanuit de gemeente en de provincie deed daar iets aan. Daar ben ik niet zo zeker van

P1: Tegelijkertijd zijn er natuurlijk wel extra middelen nodig binnen de gemeente om de eikenprocessierups te bestrijden, want dat uitje vorig jaar viel natuurlijk mooi in het water.

P3: Ja ja ja, ik heb begrepen dat een van die mensen die ook betrokken is bij dat project waar jij Ruben rondom die omgeving, dat die bij de provincie nu projectleider is geworden van de Eikenprocessierups. Ik weet niet of

P1: Het is hard nodig in onze gemeente, er is natuurlijk veel groen,

P2: Kan het ook ongelijkheid te weeg brengen, eikenprocessierups? Mensen met veel geld gaan misschien juist in een buurt wonen waar geen eiken staan, dat je daar geen last van hebt.

P4: Nou ik geloof niet dat dat een hele grote impact heeft, ik zou juist zeggen dat in een rijkere buurt meer bomen staan.

P1: Maar we zien

P3: Eeuwenoude eiken Sanne, eeuwenoude eiken, cultureel erfgoed

P1: Ja we zien dat die mensen zelf het geld hebben om eigen bestrijding in te huren, terwijl de rest op de gemeente moet teren en laten we eerlijk zijn, daar laten we toch steken vallen op het moment. Kijk in tegenstelling tot laadpalen

P2: Ik wist het

P3: Ja maar die laadpalen, dat is nou echt zo'n ding van de rijken, alleen maar voor die Tesla-rijders. Dat is gewoon niet voor de gewone mens, laadpalen, dat is niet gewoon voor die gastarbeider uit Spanje die in de jaren zestig hiernaartoe is gekomen. Dat is gewoon voor de Tesla-junks

P2: Maar rijke mensen met een oprit die hebben zelf ene lader op hun oprit natuurlijk, en ik als arme burger met mijn Nissan lease, met mijn hybride derdehands golfje, ik moet wel ergens aan de straat kunnen opladen natuurlijk

P1: Daar moeten we wel meer op in zetten inderdaad, anders wordt het gewoon een speeltje van de rijken.

P3: Maar als die auto's niet duurder worden dan zet je toch gewoon alleen die palen voor de rijken neer, dat is toch geen normale arbeider die een auto van dertig veertigduizend kan betalen, ik kan dat niet van een ambtenaren salaris.

P1: Die prijzen zakken natuurlijk fors de komende jaren en daar moeten we als gemeente wel op anticiperen.

Elke: Als ik jullie heel kort mag onderbreken, de twintig minuten zijn bijna tot een einde gekomen, dus dan kunnen jullie weer tot een conclusie komen.

P4: Oke, ik uhhh, wat we in ieder geval kunnen concluderen is dat de economische ongelijkheid binnen onze gemeente best wel laag is, maar dat er op gezondheidsgebied zeker wel ongelijkheid is.

P2: Ja en op grote schaal ook, de ongelijkheid met buurgemeentes is best groot, dus we zouden best meer kunnen dragen van de lasten van de buurgemeentes

P1: We zouden hen wel kunnen helpen inderdaad

P3: En ik vind dat die mensen van Telos wat preciezer zouden moeten kijken. Dus we zouden moeten verbijzonderen naar plekken, want dan zie je wel degelijk dat er verschillen zijn en daar zouden we natuurlijk als gemeente, bijvoorbeeld met zorgcorporaties

P4: Ja en zeker wij als gemeente met vier verschillende kernen

Part 2: Interview

Hoe vonden jullie het gaan?

Creatief denken/Creative thinking

- link leggen met ongelijkheid/ creating a link to inequality

Invloed probe/ influence probe

- nieuwe topics/ new topics

Betrekken info visual/ involve the information of the visual

- Information overload/ information overload
- betrekken van data/ involve data

Perspectieven/ Perspectives

- de invloed van eigen kennis/ the influence of own knowledge

Participant 1: in het begin heel moeilijk iets met het filmpje te doen, moet ik zeggen. En er kwamen ook dingen in het filmpje voorbij, waarvan ik het moeilijk vond om de link met ongelijkheid te leggen. Het voelde een beetje gedwongen af en toe, zovan hier moet je het over hebben terwijl de discussie daar helemaal niet over ging. Maar dan gooide participant 2 het er toch in.

Participant 2: ja ik smeed de discussie alle kanten op, dat is de bedoeling. Ik volgde netjes de regels juist.

Ze lachen

Klopt het dat de eerste 5 minuten de video stil stond, misschien liep ie vast. (Dat was de bedoeling).

Participant 3: wat ik wel leuk vind, het dwingt je gewoon, jullie sturen onze discussie doordat je iedere keer interventies hebt. Het dwingt ons gewoon ook om wat creatiever te zijn in onze argumentatie en ik had het idee dat gaandeweg de rit we daar redelijk in slaagde. En ik vond ook eigenlijk het gesprek ook allerzins natuurlijker worden.

Participant 1: Het is natuurlijk wel dat je nu misschien iets creatiever wordt in waar je nog meer ongelijkheid in ziet, anders waren we misschien bij economische ongelijkheid of gezondheids verschillen blijven hangen. Nu hebben we ook energie en elektrisch rijden en van allerlei dingen waar je ongelijkheid in ziet bediscussieerd dus dat vind ik wel een positief punt.

Participant 1: Ja zeker, je denkt toch meer out of the box, je word gedwongen eigenlijk. Dat je gaat denken, wat moet ik hier nou weer mee? Als we het op een gegeven moment over de ongelijkheid van soortenrijkdom gaan hebben dan weet je dat we afdwalen.

Vraag 2

Enigszins wel, maar ik vond het wel ingewikkeld dat je, en je kreeg een nieuwe indicator in beeld dus daar moest je het dan over hebben, de kleur was dan perspectief en het randje. Dat was dan veel om snel te interpreteren.

Hij veranderde af en toe van kleur, dat ie van people naar planet ging bijvoorbeeld, maar in de discussie vond ik dat moeilijk te betrekken.

Participant 1: Het is al wel genoeg om je discussie compleet om te gooien.

Participant 3: Daar is de tijd dan ook eigenlijk te kort voor, je gaat dan redelijk snel naar een ander ding en je moet perspectief wisselen, dat is wel lastig. Op zich het in beeld brengen van een indicator waar je je toe moet verhouden dat vind ik een hele goeie. Kleurtjes en dergelijke dat vind ik dan een complexiteit toevoegen waarvan de vraag is of dat toegevoegde waarde is.

Participant 2: Ik zou zelf zeggen, kleur hem dan vol groen of vol rood, dat je een idee hebt of het goed of slecht gaat met deze indicator

Participant 3: Dat is precies wat ik wou zeggen, dat randje eromheen vond ik wel goed werken. Dat je snel in één oogopslag ziet “ daar gaat het wel goed of daar gaat het niet goed.

Participant 3: En ik denk ook als je in die gemeente bent, dat iemand toch wel naar die indicator kijkt vanuit zijn rol. Dat ga je niet veranderen. Ik vond 20 minuten te kort voor de hoeveelheid indicatoren die je krijgt en ook qua perspectief wissel

Participant 1: De discussie blijft daardoor vrij breed, want zodra je de diepte in gaat komt er een nieuw woord op het scherm waar je je dan toe te verhouden hebt.

Participant 2: Er zat een soort versnelling in voor mijn gevoel waarin we nog meer nieuwe indicatoren kregen. Beter iets gelijker kunnen ophakken in x minuten.

Participant 1: Misschien was dat juist het idee van het filmpje.

Veranderingen van kleuren van de indicatoren

Participant 1: Ik heb er niet specifiek rekening mee gehouden in de discussie. Het was al lastig zat met de randjes , de woorden en de wissel.

Vraag 3: invloed cirkel

Participant 1: Ik heb me laten sturen. Ik denk niet als dit een setting zou zijn in de gemeente dat ik me zo zou laten sturen. Ik zou altijd mijn punt wel afmaken.

Participant 2: Op een gegeven moment kwamen er in de cirkel ook meerdere indicatoren te staan, toen werd het wel ingewikkeld. Als die woorden die daar dan komen te staan iets met elkaar te maken hebben, dan kan je je daar wel toe verhouden denk ik, maar nu waren het soms ook hele verschillende dingen die dan erin kwamen en dat maakte het wel lastig.

Vraag 4: standpunt aangepast

Participant 1: Het heeft niet echt het standpunt aangepast, het verandert wel de discussie natuurlijk omdat je het steeds ergens anders over hebt. Maar ik denk niet dat mijn argumentatie of gedachtegang veranderd doordat ik iets nieuws op het scherm zie.

Participant 2: Daarvoor gaat het ook te snel.

Participant 4: Het heeft misschien mijn standpunt verbreed maar het is niet zo dat het je standpunt veranderd. Meer van, dat kunnen we ook onder ongelijkheid scharen en in de discussie meenemen, maar het is niet dat je daardoor anders denkt over.

Participant 1: Alleen het randje dat je dat een beetje laat beïnvloeden, maar niet sterk.

Participant 4: Dat randje inderdaad wel want als je ziet er is veel eenzaamheid, dan ga je daar ook anders mee om natuurlijk.

Vraag 5: Waarop zijn argumenten gebaseerd

Participant 4: Ik denk dat het randje zeker wel invloed heeft gehad en daarnaast gewoon de kennis die je hebt over bepaalde onderwerpen.

Participant 1: De kennis is wel de basis en dat randje beïnvloed je een beetje.

Vraag 6: bepaald perspectief

Participant 3: Dat weet ik zeker, mijn collega's weten hoe ik naar de werkelijkheid kijk en dat verandert ook niet zo vreselijk veel. Ik denk overigens ook dat het bij gemeenteambtenaren niet zo anders is. Ten eerste hebben ze opvattingen vanuit de rol die ze gewoon hebben en de kennis daarvan en waar ze als de gemeente mee bezig zijn. Het leuke wat jullie met de probe

gedaan hebben is dat het ons wel dwingt om uit je comfortzone te komen omdat je steeds een ander perspectief moet nemen. Alleen in die zin net te oppervlakkig om aangehaakt te blijven.

De snelheid waarmee je verschuift dwingt je wel om anders na te denken maar daardoor beklijft het minder.

Participant 2: Ik denk dat het in sommige gevallen wel echt goed kan zijn dat je wel op andere manieren gaat nadenken. Dat je het niet alleen over economische ongelijkheid gaat hebben maar dat je bijvoorbeeld denkt: die laadpalen, hoe kan het een link met ongelijkheid hebben. Wat dat betreft ga je uit je comfortzone denken.

Participant 4: Ik vond het wel lastig, bij soortenrijkdom bijvoorbeeld kreeg je opeens een economisch perspectief, dat stuurt je natuurlijk wel in de discussie en dat was lastig omdat je zelf daar nooit zo over nadenkt.

Vraag 7: Had het invloed dat sommige indicatoren alleen in de greep stonden?

Participant 2: Dat had zeker invloed, dan moest je je daar op richten terwijl als je er 5 hebt dan kan de discussie alsnog alle kanten op, maar als het er maar een is dan is het wel de bedoeling dat je het daarover hebt dus dat was ook de reden dat ik de discussie som op een aparte manier over liet slaan.

Vraag 8: Wat was de invloed van de linkjes?

Participant 1: Ik vond het heel lastig die te zien omdat je niet het totaalbeeld zag. Je zag dan wel een lijntje vertrekken maar niet waar hij heen ging.

Participant 4: Het is me niet opgevallen.

Participant 3: Dat is natuurlijk ook lastig met ons want wij hebben natuurlijk een model, Ik kan iedereen midden in de nacht wakker maken en dan kan ik ze overhoren en dan weten ze precies hoe dat model eruit ziet en hoe de verbindingen in het model eruit ziet.

Daardoor ga je op die manier ook niet meer bewust naar dingen kijken. Wij zijn natuurlijk niet de ideale testgroepen.

Participant 2: wij zijn besmet met kennis.

Participant 3: Wij hoppen makkelijk van het een naar het ander, omdat we overal kennis bij hebben, makkelijk voorbeelden hebben en argumenten. Dat neem je allemaal mee, daardoor verdwijnt Heusden ook wel een beetje uit beeld.

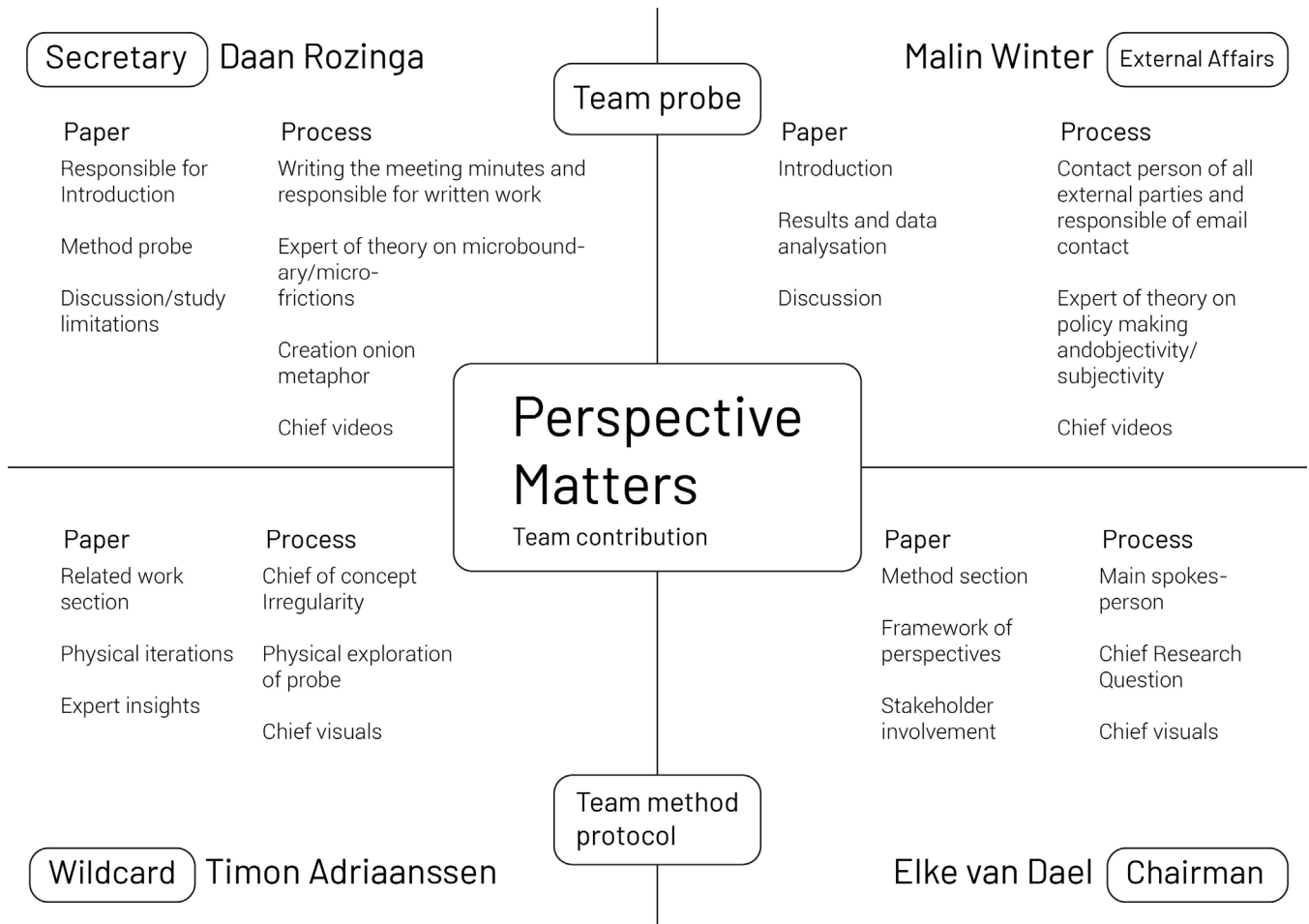
Maar als je ambtenaar is Heusden bent en je loopt er iedere dag op straat en je bent met je bewoners bezig dan is dat natuurlijk wel anders.

Participant 1: Ik vind het leuk hoe jullie bezig zijn. Hoe je met iets creatiefs de discussie zo'n beetje kan sturen.

APPENDIX V: Experts Interview Questions

1. Introductie team en korte uitleg gesprek
- a. Vertellen hoe wij de discussie hebben aangepakt
2. Kunt u een voorbeeld noemen van een vraagstelling van een discussie tijdens een gemeentedebat?
3. Tegen wat voor problemen loop je wel eens aan tijdens het gemeentedebat? Wordt er af en toe gekeken vanuit een ander perspectief?
4. Introductie project en probe
- . Voorbeeld van perspectief: PPP
5. Hoe willen we onze probe verbeteren, hoe creëren we meer diepgang in de discussie over de indicatoren? Vindt u dat het op deze manier een te abstracte weergave is?
- . Wat is er nodig om de meer praktische kant te belichten?
6. Hoe kan de probe gebruikt worden in gemeentedebat?

APPENDIX VI: Division of Teamwork



APPENDIX VII: Reflections

Reflection Timon Adriaanssen

This semester I did my B2.2 Research Project in the squad Transformative and Inclusive Practices. I worked together with Elke van Dael, Daan Rozgina and Malin Winter, in a team called Perspective Matters. For this project I had two main goals; one was learning how to set-up a design research and write a research paper, the other being improving my prototyping skills. While I still really enjoy being the chairman in a project, I gave up that role to someone else as she really wanted to experience it as well, because of this, I had no specific role in the project. However, I believe I managed to work on a lot of different subjects and I've definitely learned a lot this project.

I learned a lot this project about running a research project. The scoping and positioning of the project went so much deeper than I had anticipated, and it made me realize a lot of subjects or problems need a lot of research in order for you to truly understand them. The group had to define a lot of abstract subjects for themselves first, in order to make sure we were all on the same page. I really enjoyed this as I had never dove so deep into theory before when working on such a project. A great thing about this team is that we went really deep into the matter in a very playful way as well, which made me, and I believe the others as well, even more motivated to work with the theories as much as possible.

This also became visible when working on the research paper. I decided to write the Related Works section, which meant I had to read a lot of papers, articles and even books on different theories. First of all, I enjoyed this a lot, but it also improved my writing.

While I was really motivated to work on physical prototypes as much as possible in this project, having to switch from a physical research to a digital research made me lose my motivation to work on the prototype. I mainly wanted to work on the prototype to improve my crafting skills, and this was no longer a part of the prototype. In the meantime, Daan and Malin, who were also interested in prototyping, were still really motivated to work on the prototype, which is why I decided to work on other parts instead.

Because I was no longer working on the prototype, I mainly focused on working together with Elke on the protocol of the research. This taught me a lot about how to prepare a research project and what comes to play when actually doing a research study.

When looking at the team, I think this has been the best teamwork in all my projects yet. The communication was always on point and it never felt as if one team member was doing less than the others. The mood was always great and I believe the team got quite close to each other during the project. This was also clearly visible during the online meetings because of the situation regarding COVID-19. While at some other meetings the digital meeting space felt as a barrier, this was almost never the case with this team.

Next to working amazingly well as a four man team, the team also made use of a couples-structure. Daan and Malin were mainly working on the prototype, which resulted in Elke and me working closely together. This double structure helped the team to work really efficiently on small parts and big parts of the project simultaneously, while keeping communications very structured and efficient as well.

This project was my first real experience with the squad Transformative and Inclusive Practices. I chose this squad because I felt as if it really connected with my vision, and luckily, I was right. While not necessarily coming up with a design to tackle a social problem, I got to have a look at the focus points of the squad and what it means to run a TP project. The whole experience has been very positive and I hope to be able to do my FBP in the squad as well.

I would like to thank my teammates for working so well during this project, it was amazing to work together. Also I would like to thank John Dagevos and the other experts for the counseling. Lastly, I would like to thank our coach Jun Hu, as well as the other coaches of TP, for the guidance.

Reflection Elke van Dael

This B2.2 research project within the Transformative and Inclusive Practices squad has been a valuable experience of which I have reaped the benefits. In this reflection, I highlight important topics and insights that occurred during my learning process and mention future plans for new learning intentions. Also, my professional identity and vision be linked to the aforementioned topics.

Being in the Transformative and Inclusive Practices squad for the first time opened my eyes to the designing and doing research for societal challenges. I joined the squad because I wanted to explore the area User & Society. I discovered that specifically the approach to look for the transformations of practices and perspectives for the ones we are designing for, as well as for the transformations of our own practices and our perspectives as designers, caught my attention. Being aware of this transformative practices framework makes me reflect on my vision because I now have a growing interest in social design, a field that I have only yet begun to explore.

I also noticed that being part of the squad changed my attitude in the sense of approaching a project with a theory at hand. I liked that this approach made me built on top of something concrete. I realized that this way designers and design researchers can support each other with their knowledge and make more grounded designs and probes. This relates and adds to my professional identity, since I believe that designing in cooperation results in something greater than when a design is isolated and stand-alone.

The theory used in this research was Irregularity. It was interesting to incorporate the essence of this theory into the study. Sometimes it was quite challenging to implement the theory as I often already had my own ideas while brainstorming. However, since my team and I had a genuine interest in Irregularity, we kept turning back to the theory. I noticed that it even functioned to spark my creativity and let me think of concepts I would not have thought of before. Other literature insights?

By putting this research project into practice and taking responsibility in creating the method, I learned in general how to set up a qualitative research study. This made me grow in Design & Research Processes, which is part of the competency framework. While framing the research question, I realized how important it is to have every term crystal clear in the sense of definition within the research. Scoping played a large role in understanding. We went through an iterative process of scoping and dissecting the research question. This did not only make things clear, but also made sure we included the whole picture. An additional insight was that using metaphors helped a lot in clarifying matters.

The result that came out of the scoping was the Framework of Perspectives. Visualizing this framework made me aware of the explanatory power a visual has in creating understanding. Developing my skill in graphics was a goal of mine which I set in the beginning of the project process, because I like to express myself and my ideas via multiple channels. By making visuals for the project, for example for the midterm and final Demoday, I got to practice working with Adobe Illustrator and develop an eye for graphics. The constructive feedback from my team members on my visuals helped me grow.

The feedback from our project coach was often practical, which was a refreshing experience. I myself am working on thinking more in a practical way. This relates to the development of my professional identity, because I think it is convenient for a designer to be able to switch attitude and think in different ways. Therefore, it was beneficial that the coaches of the Transformative and Inclusive Practices squad have various expertise. Talking to different people exposed our research from multiple angles which gave interesting perspectives. Also, the involvement of experts and keeping close contact with the stakeholder provided much value for the project because it pulled us out of thought loops we sometimes got stuck in and expanded our own knowledge in the field of research.

In this project, I had the opportunity to take on the role of being a chairman. I wanted to explore a leading role like this, because I am starting to envision myself in my career path as a project leader and I have a growing interest in (people) management. My team members already had experience in being a chairman and supported me throughout the project. An insight was that through preparing each meeting by making an agenda, I never felt like I was losing control and I always had overview which was a pleasant feeling. I also have learned a lot from being the main spokesperson. I am now more comfortable with being 'out there' by taking the lead in a conversation, and I have grown in getting the points I wanted to get out of meetings.

My team members all had different personalities and ways of thinking, which made the collaboration extremely fruitful. For example, my team taught me in the process some approaches to spark creativity, like embodied exploration and rapid prototyping. I had never actually used these approaches in a project, but it turned out that they have the determining power to give shape to the project. I also learned from my team members to engage in discussions and take on a more critical mindset.

For my development in the future, I am going to explore social design and management some more as these fields could be important in formalizing my vision, professional identity and career path. I also am going to experiment some more with putting my improved skill in graphics into practice in personal projects. Lastly, I think it would be interesting if I try to incorporate a theory again, this time in a design project.

I would like to finish this reflection with my most important insight: perspective matters.

Reflection Daan Rozinga

Before the project started, I had set up a handful of goals in order to develop in certain areas of expertise. With the research project, I had aimed to focus on Math, Data and Computing, Technology and Realization, as well as User and Society, which is why I signed up for the Transformative Practices squad. Since I had not a lot of experience with working with data except for a couple of courses I had completed in the past, a main goal of mine was to get more acquainted with analyzing and applying results from data. However, I had not fully specified this goal, which is why the process went a little different than I had expected. Within Transformative Practices, I had set a specific goal for myself to apply my knowledge obtained in the semester before on designing for the larger context of society, with the 'big picture' in mind (after Trends and Forecasting and my USE). I had planned to learn to apply this knowledge to gain specific skills in co-creation and working with stakeholders from different

backgrounds. This is something that we as a group got familiar with quickly, although not always as easy given the situation regarding COVID-19. Lastly, I wanted to apply my making skills in the project and learn how to create a physical probe in the context of data gathering. Also due to COVID this ended up being a little different than expected.

A few weeks into the project, the team and I set specific roles. I had taken upon me the role of Secretary, with a main task to take minutes during the meetings and be responsible for all written work of the process. Since I am used to be in a position of a leader during most projects, assigning myself to a more passive role was a challenge at first but made me experience the other end of group meetings. I experimented with being more passive than usual and letting go of some control by not always trying to manage the group, as this had already been a goal of mine in previous projects. I believe that trying out different roles in a team makes me a more all-rounded team player in the end, which I believe is an essential skill as a designer. Although I started well with being more passive, I sometimes relapsed into being maybe too present again during meetings. This is something that I could work on in the future, by convincing myself that not always taking the lead is a good thing. Since letting go of control is something that I am not very used to while working in a group, I feel like I kind of overshot this attitude during the second half of the project, where passiveness sometimes got translated to being less involved. I often let others take the word during expert meetings and became comfortable, almost lazy. A goal for myself in the future would be to find the balance here between the active and the passive attitude.

I had not expected to learn so many new skills during this project. These were goals that often unconsciously floated around in my head and managed to come forward during the process. One of which being storytelling to a larger audience via video. Malin and I often took the lead in creating the videos for the TP squad, which was quite interesting. I have a lot of experience with video making, although this was such a different way of working. By having to tell the story of our project often in less than a minute, we became creative with the shots, voice-over and editing, balancing creativity and our passion for the project together with having a story that is still clear to the audience. I never made videos that were so artistic/abstract and professional/clear at the same time. I discovered what a powerful tool video making can be in telling a story, whereas in the past I had only used my skill in presenting or for my own personal projects.

Interaction design is a field of design that I have a great passion for. I was not surprised when I found out that I became very inspired after reading the paper on microboundaries and micro-frictions in interaction. These papers provided useful theory for both the designing of the probe and my knowledge as a designer. Due to my enthusiasm, I was later assigned to 'Chief Microboundary', being responsible for translating the theory, which is based on creating awareness in interaction, into our research probe. The creation of the probe is another task that me and Malin took upon us. Although not creating a physical probe, as one of my goals stated, I still benefited a lot from working on the probe. In a technical way, it was not so interesting. However, given the fact that it was a research project, the probe had to be created with the research participant as the user in mind at all times which was new to me. The first iteration of the probe was not clear enough, which would then generate worse research results. I discovered the importance of making sure your probe is fool proof, adding to my prototyping skills.

Scientific writing is a skill that is new to me, since I don't have much experience with writing research papers. At the start of the project, writing in a scientific way cost a lot of energy and I am confident to say that with putting in much effort, I got familiar with the skill at the end of the process. While writing on the paper, I knew how to be critical of my own and other's written parts and got a feeling for writing in Academic English. As this is of course only the start of my development as a researcher, I hope to get comfortable with this skill in the future by also writing papers for projects that I am individually responsible for, since working with a team of course takes a lot of work out of your hands. This is a skill that in my opinion can only be improved by doing it a lot, which is why I hope to be able to work on it a lot in future projects and my internship, which I hope will be research focused. Together with scientific writing comes reading papers, of course, and this is one of the only points that I wish to have done differently in the project. I often did not put in the effort to write many papers, which was something that I hoped to have done at the start. Reading many papers would have made me more familiar with the world of research but also more involved in the theory of the project, creating a better overall research paper.

All in all, I can confidently say that although the situation regarding COVID-19, I have developed in a few areas of expertise which I had hoped to do, and have gained new skills and knowledge, although not always planned. Looking back at the process, I have become familiar with taking upon me a different role than I normally would which placed me outside of my comfort zone, having to adapt, even though conforming to the role was not as easy. I have experienced the fact that not always taking the lead and letting teammates play a more directing role also suits me as a designer. I am ready to experiment with this further in projects and maybe even get acquainted with comfortably switching between these attitudes instead of committing to a role for the entirety of a process. I got familiar with closely working with experts in a project as one of my goals had stated. However,

I still did not experience a co-creation, which would be a goal for a future project. I see this project as a start to my development as a design researcher, and hope to be able to look back in the future to see that my academic writing has greatly improved over time, since it is still something that I struggle with at the moment, I hope to be able to develop this skill in future works of mine, by reading and writing more

Reflection Malin Winter

Perspective matters

This research was about the understanding of different perspectives on the same reality and how we can have different interpretations of the seemingly same thing. This concept is also related to the idea that different people can have different perspectives. In our research however the focus was not necessarily on understanding how different people experience reality, but how one and the same person can take upon different points of views.

As a designer I'm interested in understanding the people you design for and with. Although I was already aware that people have different experiences of the same thing and think differently, the concept of perspective taking can help me to understand the stakeholders I work with better.

In our research we also concluded that data can actually help in giving shape to these perspectives and can serve as a tool to put a certain perspective on a topic. This contributes to my development in two ways. Firstly, it helps me to use data in a more valuable way. I saw data first as something absolute, however as a designer I don't think this fits design thinking. This research gives room for me to use data in a way where discussion and multiple understandings and perspectives are possible. At the same time our research also made clear for me how difficult it is to understand the glasses of someone else and that detailed descriptions and concrete aspects are needed to understand and empathize with a person's perspective. Our research took place on a more abstract, or macro level, of perspectives and I'm personally also interested in perspective taking on a micro-level and a first person perspective which is a better fundament for showing empathy.

Furthermore, I believe, complex social issues don't necessarily require 'smart solutions', but merely a different way of looking at the problem. In this project I explored how different perspectives can also help us to show different ways of approaching problems and solutions. My interest to work in multi-stakeholder networks also give me the opportunity to benefit from the various perspectives present.

Next semester I will do my internship at a social design bureau who has a focus on designing together with different stakeholders in the form of co-design, and also promotes a different way of looking, to give shape to the future. Two main aspects of this research I can further develop and apply in my internship. First of all, the company is working on a way more practical level as our research was held and part of my learning goals is to gain experience with understanding the persons I design for and with. This combination gives me the possibility to explore and gain knowledge in attaining a first person perspective or perspectives on micro-level. Furthermore, I would also like to apply the notion of exploring different perspectives to promote creative thinking in a more practical way.

Goals

At the beginning of this semester I set different goals to work on. I will shortly touch upon these topics but also elaborate on unintended learning points.

To develop business and entrepreneurship I set the goal to work in close contact with a stakeholder. In this project we got the opportunity to work with Telos as our stakeholder and in the end of our project we gained feedback from three other experts in the field of sustainable policy making. During the project I was appointed as contact person, which allowed me to experience a process of working with stakeholders.

As main contact person I developed my communication skills to approach stakeholders but also keeping them up to date about our process. Furthermore, I experienced the value of working with stakeholders as experts to benefit from their knowledge but also to increase the social relevance of our research. As those experts are working in the field we researched, they know better which problems shall be encountered and where new knowledge and different ways of looking are needed for improvement. Our contact person of Telos for example gave us much insights in the categorization of data and indicators, to make the SDG's measurable, but also gave us insights in the problem they encounter: Policy makers who look at the indicators individually, rather than understanding the relations between indicators.

A second goal for me in the area of creativity and aesthetics was having an embodied brainstorm as a means of generating new ideas. My experience with physical theater makes me interested in using the affordances of our body and movement to come up with new ideas. In an early stage of our project we used body storming as a means to make sense of perspective taking in a different way as just reading and arguing about it. The body storm made us experience physically how taking a point of view literally leads to a different picture, and we therefore can reframe what we see.

By being engaged in this activity, I felt that an experience of what you think (in our case, that your point of view affects what you see) is more powerful and that the explorative nature of body storming leaves much room to generate new ideas in a different way.

I would like to apply this way of brainstorming in a co-design session, which is challenging because it could initially be seen as 'weird ' for participants.

A third goal of me was applied in the area of design research methods. Looking back at the goal I set for myself, I feel that the goal is too vague to specifically reflect upon however I would like to highlight some learning points which are related to my goal of doing more explorative research and design research methods.

First I have always been interested in philosophy and have seen the opportunity to combine philosophy with design, because philosophy has the strength to make you wonder about the world and therefore also helps in looking at the world differently. Until this year however, I didn't have the chance to gain experience with this perhaps odd combination of two fields. A philosophical theory which fits our research best is relativism, as this theory holds that reality is always looked at from a certain point of view. During this research a transformation from abstract philosophical concepts about perspectives, subjectivity and objectivity was made to a rather practical context: the political debate. In this project I experienced the strength of a designer to give shape to abstract ideas in order to make these ideas or theories more concrete.

This is also related to another strength of mine: the transformation of an unorganized bunch of information to something to make sense of and to connect my work and research with existing theories. I developed this skill further due to having the shared responsibility for writing both the introduction and the implications of our research in the discussion section. In the introduction we had to frame our research question based on existing work and place research in the network of existing research. Next to being inspired by philosophy, theories in the field of social research are also a source of inspiration for me, and due to my systematic way of thinking I can organize and connect different theories and transform them to valuable information for design.

Lastly, during this research I also experienced that I put importance on existing research and data analysis methodologies because I believe that this leads to better research. For example, during the analysis of the discussion and interview transcriptions we had a first iteration of the thematic analysis. After this first iteration while writing up the results I felt like our thematic analysis wasn't done in the right way. This made me investigate in understanding this methodology more thoroughly, and as a result I went through another iteration of analyzing our results, by coding it and dividing the codes underneath different themes. Later we reflected as a group that the result section of our paper was significantly improved by doing the thematic analysis in a proper way.

However I think our research could have benefited from existing research or data acquisition methodologies to lead to more depth. In the future I would like to dive in existing research methodologies and gain experience with them in the field of design research.