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Talking past each other: A discursive psychological analysis of discussions between climate activists and the general public on climate issues

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Abstract

Climate scientists and climate activists increasingly express the urgency to tackle environmental risks, like climate change, and call for policy-makers, politicians and the general public to take action. However, the climate debate shows controversy about the climate science and the communication between and among scientists and non-scientists seems difficult. Climate discussions seems to be limited to discussing facts, while often not the truth of these facts is at stake, but the speaker's identity.

To gain insight in the hidden interactional concerns and the identity work of speakers this study adopted the research perspective of Discursive Psychology on everyday talk about climate issues. Two discussions have been analysed; a face-to-face debate among climate activists and experts, based on the book by Naomi Klein – This changes everything: Capitalism vs. the Climate –and an online discussion based on 'the Climate case' that was initiated by the Dutch environmental organization Urgenda. The hidden interactional concerns were looked at in terms of the kind of knowledge claims the participants make and which identities are constructed or undermined.

The results show that the participants of the face-to-face debate are 'doing being an inspired expert', 'doing being a real activist' and 'doing being the better citizen'. Furthermore, the participants of the online debate are 'doing being a watchful observer' and 'doing being relaxed, not naive'. Based on these findings, this thesis presents three main conclusions, namely: 1) The participants of the face-to-face debate present their acceptable engagement in sustainability as justified and accounted for, 2) The participants of the online debate display themselves as independent from scientific reasoning, and 3) The participants of both debates seem to talk past each other. From this, recommendations are formulated providing guidance on how to create a fruitful discussion between scientists and non-scientists on climate issues. To improve the science-society dialogue aimed at genuine understanding the interactional concerns should be taken into account regarding accessibility, reasonability and autonomy.

Keywords: Climate change, identity, knowledge claims, online interaction, face-to-face interaction, science-society dialogue, Discursive Psychology

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Table of Contents

1. Introduction

1.1 Background

Contemporary complex environmental issues, like climate change, challenge scientists and policy makers to tackle environmental risks. Climate change is nowadays considered as one of the main challenges society has to deal with (Poortinga et al., 2011). Consensus within the scientific community on the anthropogenic causes of climate change increases (Doran & Zimmerman, 2009; Cook et al., 2013). This is also confirmed by The Intergovernmental Panel on Climate Change (IPPC) that repeatedly has assessed the climate change science (see IPCC, 2013) and to which hundreds of scientists voluntarily contributed their expertise and time. Climate scientists increasingly express the urgency to tackle the climate change and its risks, and call for policy-makers, politicians and the general public to support climate mitigation and adaptation initiatives, and other potential technical solutions. The United Nations Framework Convention on Climate Change (UNFCCC) accepted the 2°C target in Copenhagen during the COP-15 in 2009, in order to prevent dangerous climate change (UNFCCC, 2015).

However, climate deniers continue to thoroughly contest seemingly accepted scientific evidence (Poortinga et al., 2011; Whitmarsh, 2011). Climate deniers contest the robustness of scientific solutions to mitigate or adapt to climate change, or generally deny the occurrence of anthropogenic global warming (Poortinga et al., 2011; Whitmarsh, 2011). Despite the increasing scientific consensus, the proportions of climate deniers appears to be increasing in many countries (Tranter & Booth, 2015).

The public belief is thus challenged by the denier's arguments on climate change and their support to tackle environmental risks. This worries the scientific community (Withmarsh, 2011). As a result, many documents show how to communicate climate change more effectively to the public and how to deal with the arguments (e.g. Royal Society, 2007; Oreskes & Conway, 2010a; Kahan, 2010; Kahan et al., 2011). This implicitly assumes that the public opinion on climate change is merely determined by the *content* and the *format* of the provided information (Withmarsh, 2011), and that climate denial solely results from ignorance and misunderstanding science (Bain et al., 2012). However, several studies show that climate denial reflects fundamental differences in people's ideological values and worldview (Poortinga et al., 2011; Withmarsh, 2011; Kahan et al., 2011; Hulme, 2009) and therefore goes far beyond simply questioning the scientific certainty or evidence (Poortinga et al., 2011; Whitmarsh, 2011).

On the other hand, many concerned citizens or 'climate activists' also express the magnitude and the urgency of the climate change problem and the need to take action now (North, 2011). These climate activists often unite in so-called environmental groups or environmental organisations striving for instance for greenhouse gas emission reduction and a more sustainable lifestyle to ensure a liveable world for future generations. Such environmental organisations have been active since the early 1960s and have successfully put environmental issues on political agendas, raised awareness on environmental problems, and increased the environmental consciousness of the public (Boström, 2003). Examples of environmental organisations are Greenpeace, Word Wide Fund for Nature (WWF) and Friends of the Earth. These Non-Governmental Organisations (NGOs) and other grassroots organisations together form an environmental movement (Mol, 2000).

Due to the increased recognition of the need for inclusive and interactive forms of policy making (Tatenhove et al., 2000; Bulkeley & Mol, 2003; Reed 2008), environmental organisations play a crucial role in the decision-making process by expressing their opinions and giving advice on how to improve practices (Boström, 2003). Moreover, environmental organisations themselves search for new forms of participation in policy processes, since the support for relevant practical solutions to tackle environmental problems is unsatisfactorily (Boström, 2003). This creates opportunities for new initiatives. Boström (2003: p. 176) , for example, stated that ''Private actors search for *new forms* of political participation within *new areas*, using *new instruments*, whereby new *alliances emerge*''.

1.1.1 Self-organizing initiatives

Despite participatory practices in policy processes, environmental NGOs and other environmental groups also engage in more outward-focused forms of climate activism. Climate activism occurs by individuals and communities, locally, nationally and internationally, and different techniques are used to mobilize additional people (North, 2011). These techniques include lobby campaigns on a national and international level aimed at sending a message *to* society, to raise awareness on environmental issues such as climate change, and/or to put pressure on political authorities to act (North, 2011). Furthermore, direct action takes place for example through headline demonstrations, peace camps, and climate marches. Thus, climate activism and environmental group participation is wide ranging and diffuse, and different techniques are used in complementary ways in order to mobilize action (North, 2011).

As a consequence, outside more formal and organised governmental arenas of debate, like inclusion in the policy process, self-organizing initiatives occur to mainstream environmental issues. Over time, many studies have been conducted about the resources and tactics social movements use. For instance, McCarthy and Zald (1977), the founders of resource mobilization theory, argue that activism usually emerges from groups who have access and control over resources like volunteer time, money, organisational skills, supporters, media attention, and alliances with those in power in order to be effective and to generate social change. Moreover, social movements arise when the 'structure of political opportunities' (i.e. the world outside) provides incentives for people to undertake collective action and in which activists claims would be more readily received by (at least some) governmental institutions (Meyer & Minkoff, 2004; Tarrow 1994). Furthermore, a tactic social movements use is framing (Benford & Snow, 2000). As Benford and Snow (2000: p. 614) argue ''collective action frames are action-oriented sets of beliefs and meanings that inspire and legitimate the activities and campaigns of a social movement organization''.

The climate case: Urgenda

Contemporary self-organizing initiatives make use of new resources and tactics since practical solutions to tackle environmental risks are lacking, frustrating many climate scientists, climate activists and other concerned citizens. A novel example is the legal approach used by Urgenda, a Dutch environmental organisation. Urgenda has initiated the 'klimaatzaak' (translated from Dutch: the Climate case) in the Netherlands in which the Dutch government is accused of lacking responsibility and not taking proper actions to reach the climate goals as has been agreed upon between the UN member states (Urgenda, 2015). Urgenda calls the negligence of the Dutch government a violence to human rights worldwide. The legal trial took place on the 14th of April, 2015 in a court room in the Hague. The decision was spoken out on the 24th of June, 2015: the Dutch government needs to cut greenhouse-gas emissions to at least 25% below 1990 levels by 2020 (Schiermeier, 2015). The case received much national as well as international media attention, and

could probably inspire citizens of other countries to try using legal avenues to force stricter climate policies (Schiermeier, 2015).

This changes everything: Blockadia
Another current example of a new approach towards climate activism is what Naomi Klein calls 'Blockadia' in her book 'This changes everything: Capitalism vs. the Climate'. Klein (2014) argues that governments agreed to the non-binding target of 2 degrees in Copenhagen, but when nothing will change in our economic structure ''this looks like an utopian dream''(p. 13). Since our society is dominated by neoliberal capitalism in which major fossil fuels companies rule our world, a radical change is needed in our entire societal system to give rise to a better climate (Klein, 2014). A big part of the contemporary environmental movement supports solutions that conform to market mechanism, such as emission trading and nuclear energy. Furthermore, the capitalistic system has resulted in marginalising collective action aiming to rule out the use of fossil fuels (Klein, 2014).

However, as Klein (2014) argues, it lies in our power to change this system by changing our environmental movement, formed by what she calls 'Blockadia'. This term was first invented by activist fighting the Keystone XL pipeline in Texas who called their camps 'Blockadia' (Klein, 2015). Nowadays more actions arise where activists fight new technologies by oil and gas industry to extract fossil fuels, like fracking (e.g. the Tar sands blockade in Alberta, Canada and the anti-fracking campaign in Balcombe, Great Britain). Blockadia is defined as a roving transnational conflict zone where regular people step in where our political leaders fail, who are trying to stop this extreme extraction with their bodies or in court (Klein, 2014; 2015).

1.1.2 Constructing lay expertise
Environmental organisations are recognized to play a central role in translating the climate change science into understandable language for 'lay people' (Doyle, 2009) and serve as ''mediators between public opinion and scientific expertise'' (Mormont & Dasnoy,1995: p. 56). But, appeals to scientific evidence and expertise have also become central for a broad range of activists and social movements in order to bring about change (cf. Epstein, 1995; McCormick, 2009). This shows that traditional views of the science-society relation have become blurred. Traditionally, science is seen as the 'knowledge holder' delivering scientific evidence to policy-makers, decision-makers, and the public since these non-scientists are likely less aware of safety, health, and environmental risks and therefore strongly rely on scientific experts (Lidskog, 2008). Nowadays, the idea that scientists and the public are mutually exclusive entities whereby the scientists have relevant knowledge and the public does not, has changed into the increased recognition that the public, or non-scientist's knowledge and critical perspectives should be taken seriously in scientific and technological developments (Mogendorff et al., 2012; Lidskog, 2008; Wynne, 2005). This implies that non-scientists' expertise is not inferior to scientific expertise anymore (Te Molder, 2012). 'Lay expertise' however differs from scientific expertise in the sense that non-scientists' concerns, while they do include an (interest in) scientific evidence, are broader. They also cover issues outside risks related to health, safety and the environment (Te Molder, 2012; Marris, 2001; Macnaghten et al., 2005). Common 'expert-lay'[1] roles seem to be changing, whereby concerned citizens or climate activists are 'talking as experts'; citizens taking scientific evidence into their own hands and even produce new knowledge independent from experts (Epstein, 1995; Eden et al., 2006; McCormick, 2009).

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[1]Lay people are defined here as non-scientists, while scientist are defined as experts. Much literature uses these concepts interchangeably, which is also the case in this study.

1.1.3 Maintaining the expert-lay division

Thus, modern society enters a phase where citizens take the role of experts and where science and society are co-mingling in new (scientific) knowledge production (Lidskog, 2008; Nowotny et al., 2001). This makes the expert-lay division less relevant. However, much emphasis is still put on this division (Collins & Evans, 2008) obstructing a fruitful science-society dialogue. This is because of several reasons. 1) First, 'deficit thinking' is still apparent among scientists who engage in the public debate (Irwin, 2001; Wynne, 2006; Kurath & Gisler, 2009). According to this line of thinking the public rejects or mistrusts science since citizens have limited understanding of scientific knowledge, or the process leading to this knowledge, or generally have no trust in the science itself (Te Molder, 2012). By continuously re-inventing deficit models scientists and non-scientists are still seen as two separate entities opposing each other, restricting mutual learning and reflective exchange, which are the prerequisites of a more democratic involvement (Kurath & Gisler, 2009). 2) Secondly, even when non-scientist are involved in science-society dialogue, 'expert views' automatically outdo 'lay views' because scientific expertise is privileged over experiential expertise (Kerr et al., 2007; Felt et al., 2009). Moreover, as Felt et al. (2009) show in their study, (scientific) facts are often considered superior to values by both scientists and non-scientists in discussions about ethical issues. Thus, the need for letting the scientific facts decide in discussions counts for both scientists and non-scientists. However, in practice scientists have the authority to build factual statements, while non-scientists are entitled to talk about feelings, emotions and values (Felt et al., 2009). The latter are often overlooked or not taken seriously in public debates (Swierstra & Te Molder, 2012).

This thesis is not so much about studying climate activists and their intentions, motives and actions. Rather, the *interaction* among environmentalists and the way how the general public responds is particularly interesting for this study. Climate activists (united in environmental groups) and the general public (who are not directly involved in climate activism) are both important players in the climate debate. Climate activists pass on the knowledge generated from climate science and contribute their own knowledge to the debate in order to get people 'over the line' to take action. On the other hand, other concerned citizen also claim access to the debate by showing their knowledge on the matter. The climate debate seems an infinite debate based on 'right and wrong' whereby the robustness of the climate science and possible solutions are often contested. However, deployed facts in the discussion never stand alone; participants *do* something with their talk in order to achieve certain interactional goals, consciously or unconsciously (Edwards & Potter, 1992; Edwards, 1997). These goals include for example constructing the identity of an expert and claiming entitlement to speak. Examining how climate activists and involved citizens account for their knowledge and what they achieve in the interaction in terms of the knowledge claims they make and what knowledge rights and identities they ascribe to oneself or others may shed new light on the discussion. This may provide new insight for improving the science-society dialogue on climate issues whereby both expert and lay concerns are incorporated in the debate. Eventually, this study analyses a climate discussion among climate activists and experts, and a discussion among involved citizens.

1.2 problem statement

Both scientists and non-scientists appeal to scientific facts and aim to let such 'hard facts' decide in discussions. Also climate activists talk as experts by taking science into their own hands and produce new facts independent from or in collaboration with experts. This shows that traditional expert-lay roles are changing. As Te Molder (2012, p. 104) argues, society not only talks back to science (see also Nowotny et al., 2001) but in practice often initiates the talking. However, much emphasis is still

put on the expert-lay division in discussions about science and technology whereby laypersons knowledge is perceived as less important than scientific expertise and lay concerns are often overlooked, obstructing a fruitful science-society dialogue.

In the climate debate attention is driven to environmental issues supported by scientific evidence. However, this same science is very much contested by people who do not seem to take this evidence for granted. The question remains why the robust evidence does not speak for itself and why the scientific arguments do not convince the wider public. Scientists often think that communicating scientific understanding puts an end to the debate (i.e. 'deficit thinking'). Also, climate scientists think that communicating scientific consensus on global warming, and showing a commitment to their expertise and the need for the public to better understand scientific evidence, will eventually win public opinion and public trust (Oreskes & Conway, 2010a, 2010b). However, the ongoing climate debate shows that this is not the case. This does not mean that the facts are not important, but only presenting the evidence does not likely account for the intensity of the debate (Te Molder, 2012). Scientists build up the authority to produce scientific facts, but non-scientists also express claims to knowledge (Te Molder, 2012). People use factual descriptions to claim access to the public debate since such descriptions are difficult to rebut or undermine (Edwards & Potter, 1992). Discussions on climate issues therefore seem to be limited to discussing facts, such as scientific evidence. These arguments routinely serve interactional concerns, such as building a credible expert identity and entitlement to speak. However, these concerns are often overlooked in the debate, also because they are largely invisible to speakers and recipients alike (cf. Swierstra & Te Molder, 2012). Participants of the debate do not only use knowledge claims and facts to transfer information but also to perform certain interactional business.

Widening the perspective of people's utterances is urgently needed, so that these interactional concerns can be revealed. Then, climate scientists, policy makers and technological actors will better understand what participants of the debate aim to achieve with deploying certain knowledge claims at certain moments in the interaction, consciously or unconsciously. This increased understanding could broaden the focus from a discussion solely based on facts, to the incorporation of other relevant concerns in the debate that underlie these knowledge claims. In turn, climate activists and citizens might become more aware of how they claim access to the debate and what they achieve with that, empowering them to engage in a better dialogue on climate issues. Moreover, this thesis contributes to overcome continuous 'deficit thinking' and the emphasis put on traditional expert-lay roles. Revealing the interactional concerns of climate activists and citizens hopefully provides a new point of departure for climate science communication (Te Molder, 2012), by making visible how these concerns obstruct or facilitate the dialogue on climate issues.

1.3 Research objective and research questions

The objective of this research is to *provide guidance on how to create a fruitful discussion about climate issues by identifying the hidden interactional concerns of climate activists and citizens in climate discussions.*

In public discussions on science and technology, scientific experts and technology actors mainly focus on 'hard impacts', like impacts on health, safety, and environment (Swierstra & Te Molder, 2012). Subjects are often only up for discussion when the facts are available, allowing for a seemingly rational debate. Therefore, people's 'soft concerns' tend to get removed from the topical agenda: concerns that are (treated as) subjective, emotional, and value-laden (Swierstra & Te Molder, 2012).

A *fruitful discussion* is therefore a discussion in which the soft concerns of participants are considered equally.

However, soft impacts are hard to identify in interaction since they are often not put forward directly in the content of the arguments, but rather implicitly appear as interactional concerns (Swierstra & Te Molder, 2012), such as the need to present oneself as a credible farmer, activist or involved citizen. Knowledge assertions are not 'simply' claims to knowledge but are also drawn upon to establish a certain identity, and vice versa. For example, somebody may construct the identity of an expert in order to get entitlement to speak and the other way around. This thesis therefore adopts the research perspective of Discursive Psychology (Potter, 1996b; Edwards, 1997), in order to reveal such hidden concerns. The focus hereby is not merely on the content of the arguments but also on how and to what effect(s) these arguments are put forward (more on this in Section 2.3).

These concerns need to be brought to the surface making it possible to give guidance on how to improve the dialogue and creating a fruitful discussion about climate issues. Therefore, the hidden concerns will be looked at in terms of what kind of knowledge claims the participants make, the knowledge right and responsibilities they ascribe to themselves or others, and which identities are constructed or undermined. To achieve this thesis' aim the following research question will be answered:

(How) do climate activists and citizens claim or negotiate knowledge rights and responsibilities in public discussions, and what is achieved with that in the interaction?

This research question is further broken down into sub-research questions (SRQs). The first two SRQs focus on what kind of knowledge claims the participants make and how these claims contribute to identity construction. By answering SRQ3 and SRQ4 recommendations can be made on how to improve the dialogue between science and society on climate issues:

SRQ1. To what extent do the participants in the debate appeal to (scientific) facts, experience and values, and what is achieved with that in terms of claiming or rejecting particular rights and responsibilities for oneself or others?

SRQ2. Do these knowledge claims contribute to constructing or undermining certain identities of oneself or others, and if so, how?

SRQ3. Does the discussion among climate activists differ from the discussion among citizens in terms of knowledge and identity claims, and if so, how?

SRQ4. How can we use these insights to facilitate the dialogue between scientists and non-scientists about climate issues?

1.4 Overview of this thesis

The next chapter provides the theoretical framework underlying this study, building upon the theory introduces in the first chapter. First, two ways that currently affect the quality of the science-society dialogue are identified and will be elaborated upon below: the continuous re-invention of the deficit model, and the focus on the fact-value hierarchy. After that, the need for a discursive psychological perspective on climate discussions will be described. This part of the theoretical framework starts with an elaboration on the starting points of Discursive Psychology (discourse as action-oriented, constructed and situated), followed by a focus on two important concepts within this perspective:

identity construction and *knowledge claims*, as well as the link between them. This builds the framework for later analysis of the construction of particular identities through making knowledge claims. Chapter 3 describes the methods and materials used for this research. The two data sources, a face-to-face debate among climate activists and experts based on Naomi Klein's book – This changes everything: Capitalism vs. the Climate – and an online discussion among citizens based on 'the Climate case' that was initiated by Urgenda, are introduced. Next, the analytical procedure, including the analytical principles used in this study (sequential and rhetorical analysis) and the steps taken in data selection and analysis are elaborated on. Chapter 4 shows the actual analysis of both data sources. Finally, the fifth chapter first puts the present study into perspective by discussing the strengths and limitations and recommendations for future research. After that, the three main conclusions of this study are presented and the observations made in both discussions are compared, followed by recommendations on how to incorporate the revealed interactional concerns in the debate aimed at an improved dialogue between scientists and non-scientists on climate issues.

2. Theoretical framework

2.1 Re-inventing the deficit model

Despite increasing two-way communication initiatives of involving the public into the decision-making process in science and technology one-way communication models, or deficit models, are continuously re-invented (Wynne, 2006). According to this line of reasoning, also referred to as the *deficit approach*, the public simply does not understand science, and science is the leading authority in informing and educating the public. When the public understands science this will take away their concerns, leading to informed judgements and growing acceptance of the science or the new technology (Sturgis & Allum, 2004). This implies that scientists think that when the public would understand risks the same way as scientists do, they would better accept scientific and technological developments.

The deficit approach is highly criticised and disproved over the years. For instance, the debate on GMO's has shown that concerns expressed about the technology is not based on incorrect or insufficient knowledge and could therefore not be addressed by mere education (Marris, 2001). Moreover, when people become more knowledgeable it makes them even more sceptical or polarized about the technology (Marris, 2001), implying that people get less positive attitudes towards science and technology when they learn more. Indeed, the deficit approach does not consider the possibility that more knowledge may lead to more criticism and concerns (Irwin, 2006). Also, increasing the knowledge will leave more fundamental questions of the public unanswered and therefore the controversies people experience will be unlikely to decrease (Marris, 2001).

Wynne (2006) shows that in risk communication often a dichotomy is made between 'objective risk' (i.e. 'real' risk described by science) and 'subjective risk' (i.e. as perceived by the public). In this regard science knows the actual risk of a new technology, and the public acts on emotions and exaggerate the real risk because of their misperception and misunderstanding of scientific knowledge. Scientists therefore deny legitimate public concerns. Typically, the public does not focus on the scientifically described risks, but much more on unpredicted consequences of emerging technologies (Wynne, 2006). Therefore, next to questions about the effects on human health, safety and the environment, people ask more fundamental questions concerning these unpredicted consequences. Examples of such questions are: why do we need this technology, and who needs it? Who will benefit from it? Who decided that they should be developed and how? Who is controlling them? Who is accountable in cases of unforeseen harm (Marris, 2001; Macnaghten et al., 2005)? Thus, additional questions, for instance about human purposes, ownership, control, and responsibility should be addressed since the dialogue would otherwise remain from a low quality (Macnaghten et al., 2005; Wynne, 2006).

Wynne (2006) also describes that science generally lacks open institutional self-reflection since scientists put the problem of non-acceptance and ignorance on the public, because of their misunderstanding and distrust in science, while not criticising their own work (Wynne, 2006). So, besides the need for increasing trust in science by the public institutions should also change their own behaviour by engaging in self-reflective questioning, instead of only pressing their own ideas and views to the public (Wynne, 2006; Irwin, 2006). While the public may not be able to take part in the knowledge production or primarily evaluate scientific findings produced by scientists in isolation, they have a reflexive capacity to critically evaluate expert knowledge and to what extent experts and institutions are trustworthy (Lidskog, 2008; Wynne, 1996).

Thus, despite increasing public engagement initiatives and the recognized value of including non-scientists, the deficit approach or 'deficit thinking' remains apparent within the scientific community (Wynne, 2006; Irwin, 2001 & 2006; Kurath & Gisler, 2009). Kurath and Gisler (2009) also argue that the old deficit model of providing information and educating the public to enhance public understanding and trust in science is continuously re-invented. Illustrated by six public engagement projects on nanotechnologies, they argue that in current science communication practice the emphasis on the expert-lay divide remains hard to overcome. In this regard, scientists and non-scientists are seen as two separate entities opposing each other, restricting mutual learning and reflective exchange, which are the prerequisites of a more democratic involvement (Kurath & Gisler, 2009). This shows that the science-society dialogue stays on a low quality level.

2.2 The fact-value hierarchy

The continuous re-invention of deficit models in science-society dialogues involving science and technology maintains the traditional expert-lay divide. This obstructs fruitful science-society dialogue and keeps it on a low quality level. Moreover, although the importance of engaging the public in debates on scientific and technological developments at an early stage of the development is increasingly recognized (Irwin, 2008), scientists are often sceptical about it. Prominent points of critique are for instance that engaging the public likely impedes the decision-making process, probably threatens the credibility of scientists, or is just too risky since non-scientists lack knowledge of the possible risks and its consequences (Lidskog, 2008; Burchell et al., 2009). Moreover, researchers often perceive public responses to new technologies as an alarmist over-reaction to risks and therefore not worthwhile to consider when the risks are remote (Irwin, 2006). Thus, despite the notable shift towards more public engagement there are still some concerns expressed by scientists obstructing the engagement in an open dialogue with the public (Burchell et al., 2009). However, even when the public is involved, other issues show to be at play.

For instance Felt et al. (2009) conducted a study where both scientists and non-scientists were invited to discuss ethical and social dimensions connected to genome research. The findings of their research show that such discussions are narrowed down to questions on risk and safety, and other fundamental and ethical question like ''do we need such an innovation?'' are often forgotten. Veen et al. (2012) also argue that when innovators include publics in the dialogue, issues that are relevant to the public should be addressed early in the innovation process, and not when decisions already have been made. However, from the innovators' point of view, at an early stage there is not enough information available and there are still too many uncertainties (Veen et al., 2012). Public involvement should therefore postpone to a later moment ''when more facts are available'' (Felt et al., 2009, p. 16). Scientist often do not come back to these issues and these topics get removed from the agenda (Felt et al., 2009).

Another interesting observation in the study of Felt et al. (2009) was that despite issues that usually account for maintaining lay-expert hierarchies, a second hierarchy was at work: the hierarchy between facts and values (Felt et al. 2009). When an initial value-based argument introduced by a layperson was built on the wrong facts (as noticed by the scientist involved in the debate) the discussion was stopped. Moreover, when an ethical problem was framed or reframed as a problem based on scientific facts, there was no need or no possibility to challenge these views and closing the discussion became possible. This shows that (scientific) facts are often considered superior to values. Thus, the need for letting the 'right facts' decide in discussions counts for both scientists and non-

scientists. However, in practice scientists have the authority to build factual statements, while non-scientists are entitled to talk about feelings, emotions and values (Felt et al., 2009). The latter are often overlooked or not taken seriously in public debates (Swierstra & Te Molder, 2012). So, 'expert views' automatically outdo 'lay views' because scientific expertise is privileged over experiential expertise (Kerr et al., 2007; Felt et al., 2009), affecting the quality of the interaction itself.

2.3 Towards a discursive psychological perspective on climate discussions

Since this study aims to reveal the interactional concerns of climate activists and citizens in climate discussions, taking an interactional perspective for analysing participants' talk is considered necessary. While other perspectives only gather retrospective materials, use experiments or look at cognitive-individual motives and intentions, Discursive Psychology analysis *natural* interactions enabling a researcher to examine what people *do* with their talk (Te Molder & Potter, 2005). An actual analysis of the interaction among experts and non-scientists widens the perspective on utterances enabling to uncover participant's underlying interactional concerns, for instance the importance of establishing a certain identity for the speaker. Taking a discursive psychological perspective on climate discussions thus may shed a new light on the discussion, and may provide new insights for improving the science-society dialogue on climate issues whereby both scientists' and non-scientists' concerns are incorporated in the debate.

This part of the theoretical framework starts with an elaboration on the starting points of Discursive Psychology, followed by a focus on two concepts within this perspective: *identity construction* and *knowledge claims*. As argued earlier, knowledge assertions are not 'simply' claims to knowledge but are also drawn upon to establish a certain identity, and vice versa. For example, somebody may construct the identity of an expert in order to get entitlement to speak and the other way around. So, making claims to certain knowledge and offering facts in interaction always goes together with certain interactional concerns. Therefore, the link between these concepts will also be elaborated on.

2.3.1 Starting points of discursive psychology

The interest depicted in this study is not so much on the *literal content* of what is being said by the participants in the debate, but rather on the *interactional business* performed in and through their talk or writing. Thereby, whether the statements expressed by the participants are true or not, and notions about people's mental states is left aside (Te Molder, 2008). In other words, discursive psychologists do not make any assumptions about the underlying cognition, feelings or attitudes of the participants in the conversation (Potter, 1996a), but rather focuses on how these mental states are invoked and managed in talk-in-interaction (Edwards, 1997; Te Molder & Potter, 2005). Yet, the focus lies on what is actually being done in interaction and what is achieved with the deployed statements. Moreover, people's actions in interaction are given meaning to and are interpreted in a certain way by the conversation partner(s).

This can be illustrated with an example: a mother walks into the kitchen and tells her daughter ''there is a whole pile of dirty dishes there'' and the girl responds with ''Well, I have been too busy to wash them up''. The expression of the mother is not only taken up as simply a statement of fact but also as an accusation of lazy behaviour, since it is treated as such by the daughter (Te Molder, 2012). So, the focus of analysis lies on the way in which the participants in interaction interpret utterances. In other words, how a particular expression is taken up or *treated* by the participant(s) *themselves* in the conversation. This is known as the *participant proof procedure* (Te Molder, 2008; 2014). This

example also shows that the meaning of a single utterance can never demonstrate what people *do* with language (e.g. assigning responsibility, building up expertise), but the interactional context has to be taken into consideration, and thus involves analysis of a whole series of turns for people to make sense of each other's actions (Te Molder, 2012; 2014).

These interactional dynamics in turn and sequences in talk form the main input for understanding the course of the interaction, to the participants in the conversation but also to the researcher (Te Molder, 2012). The above explained theoretical principles form the central focus of analysis in this study and the starting point of discursive psychology (Edwards, 1997; Te Molder & Potter, 2005). Hence, this study adopts the research perspective of *Discursive Psychology* for analysing debates among climate activists and involved citizens about climate issues.

2.3.1.1 Discourse as action-oriented, constructed, and situated

Discursive Psychology departs from three fundamental notions on talk or discourse (Potter, 1996a). First of all discourse is *action-oriented*, referring to the notion that people *do* things with their talk. In other words, Discursive Psychology has its analytical focus on how direct and indirect appeals to mental states *do* things in interaction, such as accusing, defending, complaining, and building expertise (Te Molder, 2008). This depicts language and discourse as a strategic device used by people for achieving interactional goals (Edwards & Potter, 1992). Discursive psychologist therefore focus on identifying the *interactional strategies* people perform through their language and interaction in talk or written text and what is achieved by that (Edwards, 1997; Te Molder & Potter, 2005). Two important actions that people perform in interaction are for instance dealing with the dilemma of stake (everything a person says or does can be discounted as a product of stake or interest) and dealing with issues of responsibility (in how far do people construct themselves as accountable for their utterances?) (Te Molder, 2014).

Second, discourse is *constructed*. Since people are unable to fully describe the inner and outer world, we are selective in our descriptions of reality depending on what we want to do with it, consciously or not (Te Molder, 2014). However, different constructions lead to different versions of reality (Potter, 1996b), making language appear to be far from neutral (Te Molder, 2014). Construction is one of the essences of Discursive Psychology and has its function on two level: 1) the way our talk is build up from words into actual sentences, and 2) talk presenting a particular version of reality by selectively empathizing one thing and undermining others, making talk both constructed and constructive (Edwards & Potter, 1992, Wiggins & Potter, 2003).

Third, discourse is *situated*, meaning that it is always part of an interactional context influencing the interaction. The context can be interpreted as the actual setting or location where the conversation takes place, and how talk is embedded in the sequential context, meaning that people use the turn-by-turn basis to make sense of each other's actions which subsequently affects the course of the interaction (Te Molder, 2014).

Discursive psychologists prefer close empirical investigation *of naturally occurring data* (Te Molder, 2008), to reveal the discursive strategies used and what is achieved with them. This means that they study talk that would occur regardless of the involvement of a researcher. In that way the emphasis is not on data that is produced for the purpose of the study, as is the case in more controlled research settings, like laboratory experiments (Lamerichs & Te molder, 2003). This study therefore looks at conversations in a natural setting: a face-to-face group discussion among climate activists,

and an online discussion among citizens. These methods for data collection will be elaborated upon in the next chapter.

2.3.2 Identity construction

In interaction people continuously and often implicitly construct and manage particular identities in and through their talk. In doing so, they claim credibility for their utterances. On the other hand, people also use identities to undermine the credibility of other people's talk (Te Molder, 2014). While people's interactional work is not necessarily restricted to identity issues, it is being recognized as an important interactional strategy to achieve particular interactional goals (Antaki et al., 1996; 1998; Lammerichs & Te Molder, 2003; Sneijder & Te Molder, 2009; Veen et al., 2011).

Social psychologists treat identities as being fixed mental states 'inside' people (Antaki et al., 1996). The Discursive Psychology approach on the other hand moves away from the emphasis on cognition, and rather focuses on the actions people perform in and through talk and what is achieved with this in certain moments in interaction (Te Molder & Potter, 2005). In that sense, identities are actively constructed by the participants *themselves* for particular occasions. Moreover, identities work to define situations, since utterances are part of an interactional context in which social actions can be understood (Lammerichs, 2003). Several studies are done that illustrate this.

For example, a study on interactions on online discussion forums on veganism show that people construct and manage their identities as context-specific features performing particular interactional business (Sneijder & Te Molder, 2009). In particular, people use specific descriptions that contributes to the construction of an alternative identity, like 'ordinariness', in order to resist negative comments about a seemingly complicated vegan lifestyle (Sneijer & Te Molder, 2009). Thus, as this study illustrates, people may construct a particular identity when they make particular food choices, and simultaneously to account for their actions, like their eating behaviour.

Lamerichs and Te Molder (2003) studied online discussions on depression that reveal interesting insights on identity issues used in talk-in-interaction. Participants in the discussion built and rebuilt identities in order to manage a great deal of mostly subtle interactional work (Lamerichs & Te Molder, 2003). In particular, as the analysis of the online discussion revealed, the participants moved back and forth between, on the one hand showing to be a competent member of society, while on the other hand also displaying a (temporary) lack of competence. Participants thus attended to a double normative orientation (Lamerichs & Te Molder, 2003). One way in which the participants managed this dilemma was by ''formulating the revelation of problems as a moral obligation to others, rather than a voluntary choice'' (p. 468). This shows that people continuously negotiate their identity in interaction and that identities are flexible devices that can be deployed in particular moments in interaction for particular social purposes.

2.3.2.1 identity: a hard to pin down concern

Identity issues also likely play a role when it comes to emerging technologies, in the sense that they may affect the public acceptance of scientific and technological innovations. New technologies likely affect people's everyday lives, and people reactions to new technologies go beyond matters about the actual science or technology (Veen et al., 2011). A study by Veen et al. (2011) about interactions between experts and celiac disease patients illustrates this. The example shows a discussion between a scientific expert and a celiac disease patient on an online discussion forum, in which the expert introduces a newly developed gluten pill that would enable celiac disease patients to eat a normal

diet. The expert says: ''I am doing some research on developing potential new therapies for celiac disease and am wondering, how much would you be willing to pay each day if you could take a pill that would let you eat a normal diet? How much would you pay per year?''

 The patients responds with: ''I wouldn't give one red cent for a pill. I have taken pills all of my life because of this disease. I would just keep on with the diet as it is. I feel better than ever and have more energy than most 60 year olds should have. Pills? Thanks any way.''

The newly developed pill is introduced by the researcher as *already accepted* and as an *easy solution* to celiac disease. The contribution of the patient could be seen as a rejection of the pill, but can also be seen differently. It is probably not that she rejects the pill itself, but the researcher's assumption that the patient obviously would use it. In her reaction she constructs herself as a healthy individual to counter the accusation of being a passive patient (Veen et al., 2011). Her identity is at stake here, and the patient rejects the researcher's claim of having first access to her life (Swierstra & Te Molder, 2012).

However, this identity concern cannot be found in the literal content of the utterances that are put forward, but emerges as an interactional concern. Identity concerns ''often *emerge from* rather than stand out in discussions'' (Swiersta & Te Molder, 2012 p. 1055). That is, identity constructions cannot be found directly in the content of the arguments that are put forward, but rather manifest themselves as interactional concerns. This type of concerns is made available in the interactional goals – consciously or not – of what people say (Swierstra & Te Molder, 2012). The example also shows that people may not necessarily reject the technology or the science itself, but *the way* it is presented to them and the implicit assumptions made therein, which is often overlooked in the debate (Veen et al., 2011).

2.3.2.2 identity as an achievement and as a tool
The construction of identity can have two roles in everyday talk. First, it may be used as a tool to perform other interactional goals (Antaki & Widdicombe, 1998), for instance to account for certain behaviour (Sneijder & Te Molder, 2009), to build up certain entitlements to speak and/or to display knowledge. Since identities are constructed by participants themselves for particular occasions, they serve to perform many different social actions, and people even could use different and sometimes conflicting identities at the same time (Sneijder & Te Molder, 2006). Secondly, identities in talk could serve as a goal in itself (Antaki & Widdicombe, 1998), for instance people protecting their sense of achievement and autonomy, underlying their rejection of an innovation (Swiersta & Te Molder, 2012).

2.3.3 Knowledge claims
As the previous sections shows, identities are not fixed but discourse practices in their own right, thus established in interaction. Identities are made relevant in interaction by constructing or ascribing membership to social categories that are associated with particular behaviours and features, also called *category-bound activities* (Sacks, 1992 in Sneijder & Te Molder, 2009). Furthermore, identities are associated with certain rights and responsibilities related to claiming knowledge and experience (Sneijder & Te Molder, 2009), i.e. the right to speak and responsibilities of the speaker (Heritage & Raymond, 2005). For example, a doctor is entitled to perform a diagnosis, and someone who works up the identity as a gourmet is expected to know what good and bad food is. Thus, having a certain identity or belonging to a certain category is associated with certain kinds of expertise. This refers to the idea of *category entitlement*; that is, ''the idea that certain categories of people, in

certain contexts, are treated as knowledgeable'' (Potter, 1996b p. 133). So, being a member of a certain category is treated as sufficient to account for your expertise in a certain domain (Potter, 1996b).

This shows that knowledge claims are linked to identity constructions, and can be used to perform interactional actions (Edwards & Potter, 1992; Potter, 1996b). People continuously make knowledge claims (about what they know or do not know) in their talk when making evaluations, and therefore implicitly position themselves towards the discussed topic and the other participant(s) in the conversation. As Heritage and Raymond (2005) show, knowledge claims can be used by people to manage their relative epistemic rights and authority when making evaluations about reality. That is, when making a knowledge claim, the speaker can implicitly suggest that he or she possesses superior or independent knowledge, allowing the speaker to have access to the conversation and the right to perform an evaluation about an object or an event (Heritage and Raymond, 2005). Sneijder and Te Molder (2006) showed in their analysis of interactions on an online food pleasure forum that a major action performed by the participants of the discussion was to demonstrate superior and/or independent knowledge of and experience with taste in order to construct and manage their identity as a 'gourmet'. By making objective evaluations participants suggest 'knowledge of good food' instead of only expressing subjective opinions, allowing participants to make judgements and claim ownership of taste, which is often seen as a highly subjective and negotiable area (Sneijder & Te Molder, 2006).

The latter refers to an important distinction that can be made with regard to knowledge claims as identified by Wiggins and Potter (2003) in their analysis on mealtime food evaluations: the difference between subjective and objective knowledge claims (Wiggins & Potter, 2003). They both can be used to achieve different interactional goals. Constructing subjective evaluations (i.e. ''I like cheese'') can be used to account for a particular behaviour, or expressing a point of view, reducing the need for listeners to respond to or agree with the claim (Wiggins & Potter, 2003). On the other hand, objective evaluations (i.e. ''the cheese is lovely'') avoid the caution that may be incorporated in subjective evaluations, and is therefore used in persuasive talk, particularly when countering a subjective evaluation (Wiggins & Potter, 2003).

Note that categories, category-bound activities, and expertise, are just as identities not fixed but are rather build up in interaction and put into practice instead of just being there (Sneijder & Te Molder, 2009). Myers (2004) also argues that expertise is not a fixed characteristic of a certain person, but rather needs to be seen as an 'entitlement to speak' that is continuously negotiated and worked up in interaction. In this light, non-scientists also claim the right to speak in certain moments in interaction by calling in (scientific) knowledge claims, showing that not only scientist have superior access to scientific knowledge.

Summary

This chapter started with explaining two perspectives currently affecting the quality of the dialogue between scientists and non-scientists: the continuous re-invention of the deficit model and the fact-value hierarchy. As explained, herewith a focus on the expert-lay division is maintained and public concerns will not be part of discussions about scientific and technological innovation, obstructing a fruitful science-society dialogue. The second part of this chapter described the research perspective adopted in this study: Discursive Psychology. This perspective was introduced and the starting points

were described (discourse as action-oriented, constructed and situated). After that, two concepts within this research perspective were explained: *identity construction* and *knowledge claims*. Identities can be constructed and managed in interaction for particular interactional purposes, and showed to be flexible devices that are not fixed but build up in interaction. Identity construction can be used both as an achievement and as a tool in people's everyday talk. Furthermore, different ways on how making knowledge claims can build up certain knowledge rights and responsibilities were explained. Also, the link between making a knowledge claim and constructing a certain identity has been elaborated on, which serves as a framework for later analysis.

This theoretical framework serves as the starting point of the current study. The following chapter will introduce the methods and materials used for this study and explain how data was selected and analysed.

3. Methods and materials

In this chapter the method and materials used for this thesis will be explained. First, I explain why both audio data gathered in a face-to-face debate among climate activists and online data gathered from an online discussion forum are used to address the aim of this thesis. In Section 3.2 the organisational context of the face-to-face debate among climate activists is described, including information about the participants and data transcription. In Section 3.3 the context in which the online discussion took place will be elaborated on. Section 3.4 of this chapter covers the analytical procedure, including the analytical principles used in this study and the steps taken in data selection and analysis.

3.1 Case selection

In order to analyse how people *themselves* make claims to certain knowledge, thereby constructing a certain identity for oneself or others, the data needs to consist of everyday talk that is naturally occurring (i.e. taking place in the most naturalistic setting as possible, like phone calls and conversations taking place at the supermarket). As Silverman (2013) argues, data are always contaminated in some way. However analysing everyday talk is preferred to avoid influence on the everyday context as much as possible. This means that there is no interference by a researcher in the conversation as there for example is in interviews (Silverman, 2013).

To analyse people's everyday talk on climate issues a face-to-face debate that took place among climate activist and an online discussion, including a broader range of people (i.e. citizens not directly involved in climate activism), are chosen as data collection methods for this study. Analysing discussion among both groups was done to examine how climate activists and experts and involved citizens account for their knowledge on climate issues, and what they achieve in the interaction in terms of the knowledge claims they make and what knowledge rights and identities they ascribe to oneself or others. Comparing these may shed new light on the discussion, and may provide new insight for improving the science-society dialogue on climate issues whereby both expert and lay concerns are taken into account.

A face-to-face debate among climate activists and experts that took place at Wageningen University, based on the book by Naomi Klein – This changes everything: Capitalism vs. the Climate – was analysed for this study. As described in the introduction, Naomi Klein introduces a new approach on climate activism in her book, captured under the term 'Blockadia'. Because of the 'newness' of this approach it provided input for a discussion. Although an organised debate cannot be seen as a natural setting, since a facilitator influences the debate and statements are used that might steer people into a certain direction, an informal atmosphere is created in which participants are relatively free to react upon a topic. The debate that took place at the Wageningen University was the most accessible naturalistic setting at which recordings could be made to support the analysis of this thesis.

Furthermore, an online discussion based on 'the Climate case' that was initiated by the Dutch environmental organization Urgenda was used for this study. Using a legal approach is a fairly new tactic used in the environmental movement. This particular case received much national and international media attention, and therefore provided an entry point for discussion. Online discussions can be considered as naturally occurring talk since people can freely react to each other without the researcher interfering in the conversation, and could therefore be used for this thesis.

Since this study uses both face-to-face interaction and an online discussion as data collection methods it is important to note the differences. A noticeable difference is that in online conversations the production of comments is not visible, as it is with face-to-face conversations. The participants can write comments at any point in time. Therefore, it is often hard to detect when people take a turn in the conversation (i.e. directly respond to somebody), and to whom the response is directed. Furthermore, face-to-face phenomena such as interruption, overlap, silence, and non-verbal communication are absent or different in an online conversation (Veen et al., 2010). Therefore, participants in online discussions use several mechanisms in order to ''preserve a sense of sequentiality'' (Veen et al., 2010, p. 27). Examples of such mechanisms are 'quoting', that involves the selective inclusion of text from the immediately preceding message (Reed, 2001) , and 'addressivity' which is starting a response by naming the recipient (Veen et al., 2010).

Also accountability issues are at play in online interaction which are different from face-to-face conversations. For instance, accountability issues concern response and non-response (see also Lamerichs & Te molder, 2003). In face-to-face interaction subsequent talk is normatively organized, in the sense that talk occurs in *adjacency pairs* (Schegloff & Sacks, 1973). Hereby a current action (a 'first pair part', such as a question or greeting) requires the production of a reciprocal action (or 'second pair part') (Goodwin & Heritage, 1990). In online interaction a non-production in the adjacent turn (such as a question being unanswered) could be explained by the anonymous audience and technical features of the medium, and is therefore a potentially different matter in terms of accountability than in oral interaction (Veen et al, 2010). On the other hand, responding to a message on an online discussion forum (which is an anonymous and self-selecting environment) may also generate accountability for the responding participant (Veen et al, 2010).

The comparison between face-to-face and online interaction is not the primarily analytical focus of this study. Nevertheless, how the participants of the debates exploit the features of the medium in order to make their utterances 'safe' in interactional terms (i.e. to account for their knowledge on climate issues and claim access to the debate in an 'interactionally appropriate' way) could be of potential interest for this study (cf. Veen et al, 2010).

From a more practical point of view, the limited time and scope of this thesis did not allow to organise and record another group discussion among citizens. Using this online discussion in addition to the face-to-face debate enabled the researcher to include a broader range of people in this study (involved versus 'not-directly-involved' citizens). Therefore, the two debates could be compared and more comprehensive conclusions and recommendations for improving the debate between scientists and non-scientist could be formulated.

Both data collection methods (the face-to-face debate and the online debate) will be elaborated on, one by one, in the next two sections.

3.2 Face-to-face debate as data collection method

3.2.1 Organisational context face-to-face debate 'This changes everything: Blockadia'
On the 15th of June, 2015 a public debate was being organised by stichting RUW (Rural Wageningen foundation), in collaboration with the LAW chair group (Law and governance chair group at Wageningen University), Boerengroep, Fossil Free Wageningen, Aktief Slip and GreenOffice. Stichting RUW aims to give students the chance to broaden or deepen their knowledge of themes that are

being discussed at the WUR (Wageningen University and Research centre). Moreover, Stichting RUW aims to provide knowledge and forms a platform for students to discuss societal issues relevant to the WUR's themes, including agriculture, food production and consumption, green space, waste management, water, urban-rural relations, resource management, energy, and more (Stichting RUW, 2015). The other organising parties represent respectively, a chair group at Wageningen University, a farmers foundation in Wageningen, a local environmental movement aiming to make Wageningen fossil free, a study association of Environmental Sciences, Urban Environmental Management, and Climate Studies at Wageningen University, and a student organisation coordinating sustainability related initiatives at Wageningen University.

The public debate consisted of an afternoon debate and an evening debate. In the afternoon debate several experts discussed how global CO_2 emissions could be reduced. The evening debate took place among several climate activists and focused on the book written by Naomi Klein ''This changes everything: Capitalism vs. the Climate''. Blockadia, as introduced in the book, is a newly invented term by Naomi Klein, which comprises the environmental movement that has to become broader and more diverse to create the impact we need. The combination of the afternoon and the evening the debate aimed to shed light on 'what we need to do' and 'what we are already doing' to tackle the climate change problem. However, the afternoon debate is not included in this study, since only the evening debate is considered useful for this thesis' aim.

For this evening debate several representatives of different (environmental) organizations that fit Blockadia's description were invited to come to Wageningen to discuss their ambitions and achievements. These six representatives took place in an expert panel. Furthermore, everybody who is active in climate activism or was interested in the topic could participate in the audience and join this debate. Participants were recruited by Stichting RUW and its co-organizers who announced this event in the agenda provided on their websites, as well as announcements on social media (e.g. a Facebook event).

3.2.2 Set up of the discussion

The event took place on Monday the 15th of June, 2015 at the main building on the Wageningen University campus (Forum building). It started at 19h30 and lasted until 23h30. There was an expert panel including six representatives of (environmental) organisations, and approximately fifty other participants sitting in the audience. At the start of the event the facilitator shortly introduced the programme, followed by a short presentation by one of the climate activists included in the expert panel about the need to take action against climate change. Next, the expert panel was shortly introduced by the facilitator after which the experts introduced themselves and the organisation they represent, their ambitions, actions and, achievements. After that a member of the LAW chair group explained the outcomes of the afternoon debate. After summarizing the afternoon debate and a small break the event continued with an approximately one hour debate between the expert panel and the members of the audience. This debate was facilitated in order to let everybody speak who wanted to say something. The debate was initiated with several quotes from Naomi Klein's book – this changes everything: Capitalsim vs. the Climate – to get the discussion going. In the end the facilitator summarized the outcome of the debate. The following quotes from the book were used to initiate the debate:

- There is no more potent weapon in the battle against fossil fuels than the creation of real alternatives.

- Blockadia is driven by a desire for a deeper form of democracy, one that provides communities with real control over those resources that are most critical to collective survival.
- The goal becomes not to build the few gigantic green solutions, but infinitely multiplies smaller ones.

After the facilitator announced one of these statements the expert panel was first invited to respond, but as the facilitator explained at the start of the debate everybody could respond either to the statement itself or to what the member of the expert panel said. A schematic representation of the discussion setting and a participant list is shown in Appendix C.

3.2.3 Recordings and transcription

The interaction was recorded and videotaped. The former was done as to be able to literally transcribe what was being said, and the latter to see who said what. Transcribing the conversation enables the researcher to make an accurate analysis of the actions performed in interaction by referring to specific elements of the conversation, instead of only making global observations. The transcription of the talk was done by using a simplified form of the Jefferson transcription method (Jefferson, 2004). The transcription elements are described in Appendix B.

Permission was given by Stichting RUW to record the debate. The participants of the event were informed at the start that the evening would be videotaped and used for this research. The researcher therefore had laid out small notes on the tables in the room before all the participants arrived (see Appendix A). This letter explained that the recordings would only serve to support the analysis for this thesis, and for no other purposes. Moreover, the participants were informed that data would be treated anonymously. The participants could inform the researcher if they had any objections and/or could ask questions about the research when interested. No objections were expressed and no further question were asked. The camera was placed in the corner of the room on the balcony behind the audience. In that way the participants were distracted by the camera as less as possible in order to ensure natural occurring talk. The researcher was also sitting on the balcony near the camera taking some notes in order to not get involved in the discussion, therefore staying independent.

3.3 Online forum discussion as data collection method

Next to a face-to-face debate among climate activists an online forum discussion among citizens who are not directly involved in climate activism was included in the study. An online discussion about the Climate case that was initiated by Urgenda took place among citizens on the internet forum Nujij.nl, and was chosen for further analysis. Permission to use the data from this forum discussion was given by the editorial board of Nujij.nl (see Appendix A).

The website Nu.nl is popular in the Netherlands to get a quick overview of the most important news items at the moment, nationally and internationally. Nujij.nl is the internet forum linked to this website enabling people to respond to these news items. A news item that initiated a discussion chosen for further analysis contained only one sentence: ''Klimaatorganisatie Urgenda wil de Nederlandse Staat aanklagen en dwingen het klimaatbeleid aan te passen'' (translated from Dutch: Climate organisation Urgenda wants to accuse the Dutch government and force them to adjust the climate policy). This short news item received 330 reactions in only two days. This online discussion was held a few days before the actual Climate case took place on the 14th of April 2015 in a court room in the Hague.

Using this online discussion in addition to the face-to-face debate enables to include a broader range of people in this study (involved versus 'not-directly-involved' citizens), by using the most naturalistic data set as possible. Therefore, more comprehensive conclusions and recommendations for improving the debate between scientists and non-scientist could be made.

3.4 Analytical procedure

3.4.1 Analytical principles

This study aims to uncover and understand the interactional dynamics of laying claims to different sources of knowledge and experience in climate discussions and what identity participants build up with that. Thereby the hidden interactional concerns could be revealed in order to improve the dialogue and create a fruitful discussion between science and society. Since actions people perform in interaction are most often implicit it is important to take a discursive psychological analytical perspective for revealing such actions and interactional goals. There are two main analytical principles that can be used as rules of thumb for a researcher, in order to make sense of what is happening in the interaction (Bouwman et al., 2009; Te Molder, 2014).

The first analytical principle is the *participant's uptake* of the utterances. This can reveal the implicit actions performed by people in interaction since they are given meaning to and are interpreted in a certain way by the conversation partner(s). The interpretation can be determined by the way in which the conversation partner(s) respond to, or treat, something that is said in the interaction. This is known as the *participant proof procedure*, and is already illustrated in Section 2.3.1 by the mother expressing an observation of a pile of dishes which is treated by the daughter as an accusation of her laziness. The advantage of using this sequential analysis is that it enables the researcher to observe the interpretations done by the participants in the interaction, and avoids imposing his or her own interpretations of what is being said.

The second analytical principle is related to the concept of *rhetoric*. Discursive psychology emphasizes that people always describe a certain version of reality that automatically resists or undermines potential alternative – or counter versions. In other words, the meaning of what people say depends on what is not being said. This rhetorical analysis helps the researcher to understand why the current version is there and what it achieves. The researcher could therefore replace a specific utterance by its counter version, to reveal what the interactional effect is of using this specific version.

3.4.2 Data selection

Of the face-to-face debate, in total four hour video recordings were made. First, the recordings were transcribed at word level accuracy. After that the author read and reread the whole data corpus to get familiar with the data. Since members of the expert panel also gave a presentation and lengthy introductions and monologues were pronounced not everything was interesting to include in the results. Only the introduction of the expert panel, the (start of the) individual introductions and the approximately one hour debate based on three statements from the book were included in this study. This was done because the limited time and scope of this thesis did not allow the researcher to include all the recordings. Moreover, these parts of the discussion promised to be most interesting for analysis. When people introduce themselves, it is expected that they often refer to a certain identity or a membership of a certain category. Since knowledge claims and identity construction are linked (see Section 2.4.3) it is expected that knowledge claims are made as to help establish a certain

identity. The one-hour debate was focused on interaction between the participants, which made it possible to analyse how participants treat *each other's utterances*, and is therefore interesting to include in this study.

The data collected from the online forum discussion comprises 330 posts. This is too extensive for analysis and therefore a selection had to be made. First, all the comments were read and reread to get familiar with the data. Since moments of real interaction are interesting for this thesis' aim unanswered comments were left aside which already shrank down the data corpus to a more reasonable size of 225 comments in total.

After selecting parts of the conversations and get familiarized with both data corpuses, the discussions were further analysed one at a time. This main analysis was done in two phases. The first phase considered identifying certain patterns, in this case recurring knowledge claims. Therefore, the data was scanned to identify noticeable and recurring themes in participant's' arguments to account for their knowledge on climate issues. This phase focused on answering SQR1: To what extent do the participants in the debate appeal to (scientific) facts, experience and values, and what is achieved with that in terms of claiming or rejecting particular rights and responsibilities for oneself or others?

The second phase concentrated on what participants achieve with making certain types of knowledge claims in terms of identity work. Therefore, those fragments that were of particular interest (as identified in the previous phase) were further analysed by using the previously described analytical principles of discursive psychology (sequential and rhetorical analysis). This phase thereby focused on answering SRQ2: Do these knowledge claims contribute to constructing or undermining certain identities of oneself or others, and if so, how?

When potential patterns were identified this main analysis was repeated more often, each time with a better focus on what to look for. Thereby, dominant patterns could be identified since some patterns showed to indeed occur more often, while others did not.

When reading this thesis one should keep in mind that a discursive analysis does not stress the importance of the *quantity* of examples for a pattern, but the *quality* of certain phenomena (Silverman, 2013). Therefore, this thesis – and qualitative research in general – does not strive for representativeness of the data. Rather, the focus lies on advancing theory construction until theoretical saturation is reached (Potter & Wiggins, 2008). Herewith a researcher aims to understand the nature of the phenomena and the variation therein.

Some illustrative fragments were chosen in order to explain the recurring patterns identified in both discussions. The selected fragments from the face-to face debate were transcribed in detail by using a simplified version of the Jefferson transcription method (See Appendix B). Working with this method enables the researcher to identify those features from the interaction that are important for proper discursive analysis, such as interruption, overlap and silence. The exemplifying fragments from both discussions are presented and described in detail in the next chapter, thereby giving an overview of the observations made during analysis.

After analysis, the names of the participants from both discussions where changed to ensure anonymity.

4. Results

In the following chapter the main results of this study are presented. First, the results from an analysis of a face-to-face discussion among climate activists – 'This changes everything: Blockadia' - will be discussed, followed by an analysis of an online debate among citizens about 'the Climate case'. The analysis of the whole data corpus was led by the general research question and the first two sub research questions. The general research question of this thesis is:

(How) do climate activists and citizens claim or negotiate knowledge rights and responsibilities in public discussions, and what is achieved with that in the interaction?

When answering the first two sub research questions (SRQ1 and SRQ2) the focus lies on what kind of knowledge claims participants make (the extend participants appeal to facts, experience and values) and the effect(s) of making such claims as well as their identity work. Thereby, the hidden interactional concerns the participants consciously or unconsciously put forward in the debate could be revealed.

The remaining two sub research questions (SRQ3 and SRQ4) will be answered in the conclusion and discussion chapter after the main results have been analysed. These questions focus on whether the discussion among climate activists and the discussion among citizens differ in terms of knowledge and identity claims, and how we can use these insights to facilitate the dialogue between scientists and non-scientists on climate issues. This allows the formulation of relevant recommendations providing guidance to create a fruitful discussion on climate issues.

4.1 Face-to-face debate: 'This changes everything: Blockadia'

First, the results from the analysis of the face-to-face debate – that took place among climate activists focused on the book of Naomi Klein: 'This changes everything: Capitalism vs. the Climate' – will be presented (for an elaborated explanation about the organisational context and set-up of the debate see Section 3.2.2). The set-up of the debate is schematically shown in Appendix C.

To answer the research questions the interaction between the participants of the debate was transcribed, analysed, and recurring patterns were identified. In total four hour video recordings were made during the evening. As already explained in Section 3.4.2, only the introduction of the expert panel, the individual introductions and the approximately one-hour debate based on three statements from the book were included in this study.

The following statements from the book were used to initiate the debate (where relevant in the analysis, they will be mentioned again):

- There is no more potent weapon in the battle against fossil fuels than the creation of real alternatives.
- Blockadia is driven by a desire for a deeper form of democracy, one that provides communities with real control over those resources that are most critical to collective survival.
- The goal becomes not to build the few gigantic green solutions, but infinitely multiplies smaller ones.

During the analysis of the data, which was led by the first two sub research questions, the following three significant patterns were identified in the face-to-face debate among climate activists:

(1) Crossing the boundaries of ideology and science: doing being an 'inspired' expert

(2) Claiming access to real democracy: doing being a 'real' activist

(3) Claiming access to good citizenship: doing being the better citizen

In the following sections fragments are shown and analysed in terms of the kind of knowledge claims the participants make and which identities are constructed. As argued in Section 2.4.3 knowledge claims and identity construction are linked, leading to the expectation that knowledge claims are made as to help establish a certain identity. In the description of the results, the patterns are therefore characterized in terms of this connection between knowledge and identity work, answering the first to SRQs at the same time. The fragments[2] below serve as examples to illustrate these three patterns. Some lines are omitted for the purpose of the analysis. The entire fragments are shown in Appendix D.

4.1.1 Crossing the boundaries of ideology and science: doing being an 'inspired' expert

During the debate it could be observed that the participants construct the identity of 'an inspired expert'. Two observations were made about how the participants build up this identity:

(1) By presenting ideology and scientific expertise as a logical combination.
(2) By creating a link between scientific knowledge and normativity (how things should be done).

In performing these two actions the participants show that they cannot be just set aside as idealists and actually do possess the relevant knowledge that gives them the right to tell us what should be done. Below, two fragments are shown and analysed as examples to explain this recurring pattern. In the first fragment the facilitator briefly introduces Expert 6 (not included in the transcription), who represents the organisation Fossil Free. After the introduction by the facilitator Expert 6 introduces herself. Fragment 1 shows the start of her introduction. Both of the above mentioned actions are performed to build up the identity as an inspired expert. The following analysis will show how she actually did that.

Fragment 1: Expert 6 (Introduction)

1		((2 lines omitted))
2		e::h (.) so: (.) my name is ((name)) e:h and I grew up in a little village in Limburg in the
3		South of the Netherlands (0.5) and when I started studying e:hm (.) I-I went to
4		Utrecht and I started eh to study (.) e:h milieu=en maatschappij wetenschappen
5		(0.4) so: society and environmental studies (.) and I thought I was gonna learn about
6		society (0.4) like ↑how does this work (.) I was really interested in this
7	⟶	interdisciplinary study about (.) eh ho:w does society ↑work and I had <u>no</u> clue that
8	⟶	there was something ↓wrong(h) <u>until</u> I started ↑study(h)ing (0.6) e:h and then I was
9	⟶	actually (.) really <u>shocked</u> about a::ll all the information that I got from all the
10		graphics all the exponential population growth deforestation pollution (.) e::h (0.5)

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[2] Important to note here is that the language of the debate was English. However, for the majority of the participants Dutch is not the mother tongue. Due to this some language mistakes may be made in participants' talk. As argued, the interaction has been transcribed in its original form.

11	——▶	and I was really amazed like <u>wo:w</u> it is really going the wrong direction this is
12	——▶	what I learn in ↑University <u>what</u> (.) can we do about it

At the first three arrows is shown how Expert 6 draws a link between ideology and scientific expertise. She shows that the knowledge she developed during her study actually surprised her. She took the effort to start studying since she was really interested (line 6), but *only* because she started studying she came to realize that something was wrong (line 8). Note that the laughter within her talk enhances the surprise factor; she did not see this coming as well. Furthermore, this point is strengthened in the following lines where she puts emphasis on words like 'shocked' (line 9) and 'wow' (line 11) providing access to her subjective world. The knowledge she developed during her study at the university is presented as a whim and as her inspiration for taking action as an environmentalist. While ideology and science is not a logical combination one would think of at first since these concepts are opposed to each other, here they are presented as going well together thereby crossing the boundaries of the standard definitions. This works to show that she is not just an idealist, thereby constructing the identity of an inspired expert.

Second, Expert 6 creates a link between scientific knowledge and normativity by saying ''this is what I learn in ↑university <u>what</u> (.)can we do about it'' (lines 12-13). She constructs scientific knowledge obtained in university as automatically providing the right to tell us what should be done. By ascribing this right to herself she builds up the right to speak on the topic discussed and establishes expertise. At the same time, Expert 6 constructs a group of ignorant people who do not have the relevant knowledge and therefore not the right to tell us how we should live. She distances herself from this group of ignorant people, that is further strengthened by appealing to her experience as a student in university (where she developed the relevant scientific knowledge). This works to further establish her identity as an inspired expert.

The next fragment in which the identity construction of 'doing being an inspired expert' occurred is also part of the expert panel introduction. In the following fragment the facilitator introduces Expert 5, who is a scientist. Only the start of the introduction is shown for the purpose of the analysis. In this fragment both actions that help in building up this identity are performed as well. However, as will be shown, the facilitator ascribes knowledge rights to Expert 5.

Fragment 2 : Expert 5 (introduction)

F = Facilitator, Ex5 = Expert 5

1		((6 lines omitted))
2	F:	Expert 5 he's (0.6)not only (.) a professor in
3		science and advocacy (.) but he also works in the Netherlands institute of ecology
4	——▶	here in Wageningen I think↓ (0.6) but the fact that he is (.) professor in science and
5	——▶	advocacy (0.8) he can give a little=bit <u>ins:ight</u> (0.7) in how we should do things (0.7)
6		((9 lines omitted))
7	Ex5:	I wanna say (0.9) it's a great honour that eh to be here with the five young people
8		next to me= I think they all deserve a hand (0.6) I'm certainly gonna ask for their
9	——▶	mail=addresses after this because I think (.) it's (0.4) inspiring as a senior scientist=
10	——▶	I'm an old guy I'm 57 years old (.) and I'm more <u>ra</u>dical and anarchistic than ever
11	——▶	((audience laughing)) (0.6) a:nd (.) I spend my PhD in the mid-90s in Liverpool in the

| 12 | UK= I studied ecology (.) I-I was briefly an editor of nature later on the journal (0.6) |
| 13 | and now I'm a professor in science and advocacy in Amsterdam |

When introducing Expert 5 the facilitator stresses that he belongs to the 'professor' category and therefore has the right to tell us how we should do things, by saying ''but the fact that he is (.) professor in science and advocacy (0.8) he can give a little=bit <u>ins:ight</u> (0.7) in how we should do things (0.7)'' (lines 4-5). The facilitator hereby creates a link between science and normativity; she ascribes the right of telling us what needs to be done to Expert 5 since he possesses the relevant scientific knowledge. In his response Expert 5 makes this utterance of the facilitator relevant by describing what he did in the past before he became a professor in science and advocacy (did a PhD, studied ecology, briefly an editor of Nature, lines 11-12), thereby appealing to his experience. This works to show that he indeed possesses the knowledge and therefore has the right to tell us what needs to be done. At the same time Expert 5 creates a group of ignorant people who do not have this knowledge and distances himself from this group.

Moreover, in his response Expert 5 presents ideology and scientific expertise as a logical combination. He confirms that he belongs to the category 'scientist' (senior scientist, line 13) but at the same time stresses that he is inspired by others (line 13) and that he is 'more <u>rad</u>ical and anarchistic than ever' (line 14). Note that after this utterance the audience starts laughing showing that the combination 'being a scientist' and 'having ideological values' is perceived as odd. However, Expert 5 presents the link between ideology and scientific expertise as if these concepts work well together. He could therefore not just be set aside as an idealist, but rather builds up the identity of an inspired expert.

Summary

The above fragments show that participants of the debate build up the identity of an inspired expert by crossing the boundaries of ideology and science. They achieve this by presenting ideology and scientific expertise as a logical combination. Despite that a combination of these normally opposed concepts may seem odd, the participants present them as if they go hand in hand. Thereby they resist being set aside as just an idealist without relevant knowledge, and thus build the identity of an inspired expert. Moreover, participants construct a link between scientific knowledge and normativity, thereby stating that their scientific expertise automatically provides them access to tell us how things should be done. This is strengthened by an appeal to their experience; they took the effort to get the relevant knowledge and therefore claim the right to tell us how we can or should live. Herewith a group of ignorant people, who do not possess the relevant knowledge is created and the participants distance themselves from this group.

4.1.2 Claiming access to real democracy: doing being a 'real' activist
The identity construction 'doing being a real activist' was also identified when analysing the debate. Participants build up this identity by (1) claiming access to the definition of 'real democracy'. They claim access to this value by putting democracy on the same line with sustainability. Moreover, (2) participants create a class of others who don't do enough in heading towards democracy. They (as climate activists) however do, namely, by striving for sustainability and therefore automatically for democracy. Below two fragments (both in reaction to another opening statement) are shown and analysed. They serve as examples to explain this recurring pattern.

In the following fragment the facilitator introduces the second statement from the book which is: *Blockadia is driven by a desire for a deeper form of democracy, one that provides communities with real control over those resources that are most critical to collective survival.*

Fragment 3: Facilitator

1		((3 lines omitted))
2		well (1.7) I can't imagine that you >would=disagree< but perhaps you have your own
3		views about it (3.3) maybe you can think even about your own organisation whether
4	⟶	(1.1) there is a deeper form of democracy in your own organisation (.) and how you
5	⟶	((laughter in expert panel)) contribute to that (2.1) ((1 line omitted))

The facilitator introduces the second statement from the book (omitted lines) and provides her own view. After that the facilitator says ''maybe you can think even about your own organisation whether (1.1) there is a deeper form of democracy in your own organisation (.) and how you ((laughter in expert panel)) contribute to that (2.1)'' (lines 3-5). Note that the facilitator links the value 'deeper form of democracy' to the professional roles of the members of the expert panel; whether there is a deeper form of democracy in *their own* organisation how they *themselves* contribute to this. This utterance creates a kind of discomfort within the expert panel as shown by the laughter.

Fragment 4 shows a reply by Expert 1 to the facilitator's introduction of the second statement. Here, she constructs the identity of a real activist.

Fragment 4: Expert 1 (reaction to the facilitator)

1		hm so (0.9) the statement looks like (0.5) you can't really (.) disagree with it so I'm
2		(0.7) not really disagreeing with it↑ but I do have an issue with (.) the- the phrasing
3	⟶	of <u>deeper</u> form of democracy=cause it's somehow (.) kind of↑ <u>seems</u> to insinuate
4	⟶	like we already have some (.)sort of democracy ((laughter)) hh so hh th(h)at is still
5		think misleading and something that we come across a lot also (.) recently somebody
6		wrote about my movie and=e:hm there was a: title above it like to be <u>more</u>
7	⟶	sustainable↑ (.)and-and eh I see this a lot like >wait wait< we're not sustainable at all
8		right now we are on a crash course °we will° we just wanna be sustainable
9		sustainable is enough (.) don't put the <u>more</u> or the <u>deeper</u> in front of it cause it still
10		seems ah to create a fa:lse point of ehm reference point where we're coming from (.)
11		and so: yeah that would just be the one thing I could (.) note about this statement↓

In her statement Expert 1 builds up the identity of a 'real' activist which is achieved by putting democracy on the same line with sustainability, thereby claiming access to real democracy. Moreover, she creates a class of non-involved people who don't do enough, thereby insinuating that they as climate activist do know what to do to get to democracy.

At the start Expert 1 clearly states that she has an issue with the phrasing 'deeper form of democracy' in the statement from the book because she states that we do not have any form of democracy yet (lines 2-4). However, later she puts democracy on the same line with sustainability (line 7) and therefore puts these two concepts on the same page as if they have equal meaning. She thereby claims access to the definition of real democracy. Furthermore, she argues that *others* don't do enough in striving for democracy. Thereby a class of people 'who don't do enough' is created which simultaneously says something about them as climate activists; they do know what enough is,

because they strive for sustainability and thereby automatically for democracy. Her statement is presented as a solution to a dilemma: how can you be sustainable if people do not want that? Expert 1 presents this as if this is not a problem since sustainability = democratic.

This same pattern could be observed in another fragment. First, Kai, who is a member of the audience, expresses his view on the second statement of the book that was earlier introduced by the facilitator in Fragment 3. After, Expert 7 replies to Kai in which he builds up the identity of a real activist.

Fragment 5: Kai

1	((7 lines omitted))
2	and we will (0.8) if=are (.) the <u>way</u> that-that the energy transition is portrayed
3	⟶ often↑ (.) is not (0.7) compatible with real democracy in the global South (1.0) I think
4	(.) so that's a provocation maybe somebody wants to respond to that↓

In this fragment Kai says that ''the <u>way</u> that-that the energy transition is portrayed often↑ [by the environmental movement] (.) is not (0.7) compatible with real democracy in the global South'' (lines 2-3). The fact that the environmental movement does this (according to Kai) could be derived from the omitted lines (see Appendix D for the entire fragments). In the remaining lines he asks the other participants for a response. The next fragment shows a reaction to Kai from Expert 7 in which he builds up the identity of a real activist in a similar way as we saw in the previous fragment.

Fragment 6: Expert 7 (reaction to Kai)

1	no it's (0.8) to respond to that e:hm I think (.) the hilarious- the most hilarious thing
2	⟶ about renewables (0.8) is e:h =actually the fact that it is democrat(h)ic (.) and it's
3	f-funny quite shocking
4	((18 lines omitted))
5	oil companies still don't understand it they still say you know i-if you read the eh
6	comment that they put in the newspapers we're an oil company (.) eh oil
7	consumption is going to increase and we deliver e-e-energy to the poor
8	⟶ people and it's our task and you just shut up (0.6) but they still don't <u>realize</u>
9	⟶ that (0.5) t-the funny thing is that actually the t-t-technology development
10	⟶ triggers (.) democracy because-because of this new technology
11	everybody=because <u>modular</u> (.) everybody can small scale produce its own
12	energy every (0.6)community can do it
13	((8 lines omitted))

Expert 7 starts off by saying ''no it's (0.8) to respond to that e:hm I think (.) the hilarious- the most hilarious thing about renewables (0.8) is e:h =actually the fact that it is democrat(h)ic (.) and it's f-funny quite shocking (lines 1-3). Here Expert 7 puts renewable energy and democracy on the same line, thereby claiming access to the definition of real democracy. Note that he constructs it as something unexpected or surprising by stressing that renewables being democratic is hilarious, funny, and shocking. By adding the surprise factor he enhances the factuality of his utterance, thereby making it hard to undermine by others.

Furthermore, Expert 7 says ''they still don't <u>realize</u> that (0.5) t-the funny thing is that actually the t-t-technology development triggers (.) democracy because-because of this new technology'' (lines 8-10).

Here again he puts democracy and renewable energy on the same line, thereby claiming access to the definition of real democracy. At the same time he argues that *others* don't understand this and therefore do not enough in heading towards democracy. He thereby insinuates that he does know what needs to be done, namely striving for renewable energy and therefore naturally also for democracy. This works to establish the identity of a real activist. Note that Expert 7 also answers the following question: how can you be sustainable when others do not want to? This is answered by stating that this is not a problem, because sustainability = democratic.

Summary

In sum, the fragments above show how participants manage the following dilemma in their talk: how can we be sustainable if other people do not want that? They do this in reaction to an opening statement in which the role of environmentalists in heading towards democracy is being contested (or at least treated like that by the recipients). In their responses participant put democracy on the same line with sustainability or renewable energy, thereby claiming access to the value 'real democracy'. Furthermore, participants argue that others don't do enough in striving for democracy. Thereby, a class of non-involved others is created. This at the same time says something about themselves, namely that climate activist on the other hand do enough by striving for sustainability and therefore automatically for democracy. This works to build up the identity of a real activist. Eventually, the dilemma is solved: it is not a problem if people do not want sustainability because sustainability = democratic.

4.1.3 Claiming access to good citizenship: doing being the better citizen

The pattern 'doing being the better citizen' could also be identified when analysing the data. The way the participants build up this identity is (1) by claiming access to go 'good citizenship', and (2) thereby creating them, as environmentalists, as the better class of citizens. The participants show that citizens think they act in a good way, but only small actions are useless to solve the climate change problem. They thereby claim to know themselves what 'good citizenship' is. The participants herewith create a class of non-involved citizens who don't do enough, which says something about themselves: climate activists are presented as the better class of citizens. In this paragraph two fragments are analysed and serve as examples to explain this pattern.

At the start of the debate the first statement from the book of Naomi Klein was introduced by the facilitator, which is: *There is no more potent weapon in the battle against fossil fuels than the creation of real alternatives.* After several reactions to this statement the facilitator shortly summarizes the different points of view that have been expressed so far by different participants (not included in the transcription). She then directly ask one of the panel members what she wants to say to that. The following fragment shows the response by Expert 2 in which she constructs the identity of the better citizen by claiming access to good citizenship and presenting climate activists as the better class of citizens.

Fragment 7: Expert 2 (reaction to the first statement)

F = Facilitator, Ex2 = Expert 2

1	Ex2:	oh I like to: throw in ↑another interpretation
2	F:	hmhm
3	Ex2:	((laughing)) no because e:hm I'm-I'm a bit allergic to the word alternatives because

4		what you <u>see:</u> (.) at the moment is tha:t (.) we have all these gree:n projects (1.6)
5		eh=the government funded and (.) if-if you take your garbage and you put your
6	⟶	plastics here and your (.) eh cans over there and then you're you're a good citizen
7	⟶	and stuff=so <u>yes</u> (you) have this greenwashing thing (.)
8		((2 lines omitted))
9		bu:t at the moment you see that a lot of people don't get into action because they
11	⟶	feel like well if (.) within my life I do this I don't buy that much plastic I sign a petition
12	⟶	(.) or something ↑>then I'm a good citizen< and things will fix out because >then at
13		the moment< no (0.5) things ↑will-will change and (0.4) we are <way way> too far
14		<u>al</u>ready for just some simple actions(.) that-that w-stop the whole global climate
15		change (0.6) disaster (.) thing happening
16		((8 lines omitted))

In this fragment Expert 2 provides her own view on the first statement from the book and says ''if-if you take your garbage and you put your plastics here and your (.) eh cans over there and then you're you're a good citizen and stuff=so <u>yes</u> (you) have this greenwashing thing (.)'' (lines 5-7). Current citizen behaviour is put in a negative daylight (this greenwashing thing). Expert 2 puts it in a way that citizens think they act sustainable, but actually this is not the case. She hereby claims to know herself what a 'good citizen' is. Note that she uses an *if-then* construction which is known as a general scripting device (Sneijder & Te Molder, 2005). Scripting helps to construct a version of reality as 'the logical thing' to believe or do, thereby attributing accountability to the recipient in doing so (Sneijder & Te Molder, 2005). At the same time this construction helps here to protect Expert 2 from being (treated as) directly and personally accountable for her version of events (Sneijder & Te Molder, 2005). A similar knowledge claims is made later in the fragment, by saying ''if (.) within my life I do this I don't buy that much plastic I sign a petition (.) or something ↑>then I'm a good citizen<'' (lines 11-12). Here an *if-then* construction is made as well. The factuality of this version is even strengthened by quoting these citizens, to show that these are not her own words but from others. She again builds the contrast that citizen think they are doing a good job but this is not true since things are not changing because of this (line 13), and that 'just some simple actions' (line 14) are not good enough to solve the global climate change problem. Thereby she again claims to know herself what good citizenship is. Simultaneously Expert 2 presents these citizens as non-involved, implying that climate activists are the better class of citizens who do know what needs to be done. This helps in building up her own identity as the better citizen.

The same pattern was found in a reaction to the third statement. The third statement from the book that serves to initiate a debate is: *the goal becomes not to build the few gigantic green solutions, but infinitely multiplies smaller ones*. in Fragment 8 Lisa, who is a member of the audience, constructs the identity of 'the better citizen'.

Fragment 8: Lisa (reaction to the third statement)

1		((2 lines omitted))
2		I'm af<u>raid</u> when you you have a lot of very sm↑a::ll (0.6) movements that you will get
3	⟶	the greenwashing problem=that people think <u>oh</u> I-I'm ↑sup<u>por</u>ting this e:h shale gas
4	⟶	fre:e thing and then you still e:h drive around with your car and >go flying all the
5		time< <u>stop</u> like that it's just eh it's just a small concern I get (.) when I: see <u>this</u>

Here Lisa makes the claim that with a lot of very small movements you will get the greenwashing problem (lines 2-3). Note however that she uses a subjective knowledge claim to establish the right to speak, in contradiction to the previous fragment. She says ''that people think <u>oh</u> I-I'm ↑sup<u>por</u>ting this e:h shale gas fre:e thing and then you still e:h drive around with your car and >go flying all the time<'' (lines 3-5). People think they act in a good way by supporting 'this shale gas free thing'. However, they do a lot of bad things as well (still drive around with a car and fly all the time). She constructs people's behaviour as not enough in an attempt to solve the climate change problem and thereby claims access to knowing what good citizenship is herself. Lisa portrays these people as not involved enough, thereby automatically producing climate activists as the 'better class'.

Summary

In sum, the analysis above shows that participants build up the identity of the better citizen by claiming access to good citizenship. They show that only small actions are useless in an attempt to solve the climate change problem. They thereby create a class of non-involved citizens who don't do enough, which reflexively says something about their own endeavour: climate activists are presented as the better class of citizens.

4.2 Online discussion: 'the Climate case'

In this paragraph the findings of the online discussion are presented. This discussion took place on the internet forum Nujij.nl and was held among citizens who are not directly involved in climate activism. The discussion focused around a news item about the Climate case that was initiated by Urgenda. This news item contained the following message: ''Klimaatorganisatie Urgenda wil de Nederlandse Staat aanklagen en dwingen het klimaatbeleid aan te passen'' (translated from Dutch: Climate organisation Urgenda want to accuse the Dutch government and force to adjust the climate policy). This online discussion was held a few days before the actual Climate case took place on the 14th of April 2015 in court. Including this discussion in the current study allows for including a broader range of people that are not directly involved in climate activism. Therefore, more in depth conclusions can be drawn for facilitating the dialogue between scientists and non-scientists about climate issues. Online data was chosen since the limited time and scope of this thesis did not allow to set up a face-to-face group discussion with citizens.

By analysing the data on the online forum two significant patterns were found:

(1) Can't you see that for yourself!?: doing being a watchful observer.
(2) I am not a fanatic: doing being relaxed, not naive.

The following fragments[3] serve as examples to explain these patterns. Some lines are omitted for the purpose of the analysis. The entire fragments are shown in Appendix D.

4.2.1 Can't you see that for yourself!?: doing being a watchful observer

During analysis it could be observed that the participants of the online debate construct the identity of a watchful observer, in reaction to opening statements made by (forum participants who present themselves as) climate deniers who show that the facts speak for themselves. Forum participants achieve this by claiming that the facts are obvious and self-evident: you will easily see this for

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[3] The discussion on the online form occurred in Dutch. The fragment have been kept in its original form since some expressions could not be literally translated from Dutch to English. In this way the original sense of the conversation has been kept as accurately as possible.

yourself when you take a better look at the visible evidence. They do this by pointing to the visible evidence, instead of questioning its content.

This pattern could for example be observed in reaction to one of the opening statements made by Martin on the discussion forum. In his statement Martin shows that he as a climate denier has the 'rock hard facts' and that the facts speak for themselves. Fragment 9 shows on of the opening statement made by Martin.

Fragment 9: Martin (opening statement)
Post #2
1   Ja hoor de klimaat terror begint weer. Het door menselijke CO2 stijgt de temperatuur op
2   Aarde waanzin verhaal. check de feiten. Het is 50 miljoen jaar kouder op de Aarde geworden.
3   Pas laatste 18.000 jaar een klein herstel. Dat zijn de snoeiharde feiten. Ophouden met deze
4   Co2 onzin! Ga voor echte duurzaamheid. ((link omitted))

This statement is expressed by Martin at the start of the forum discussion. He starts by accusing other people (under which the people of Urgenda) of constantly 'whining' about climate change being induced by humans. He says that the 'climate terror starts again' (line 1), marking it as something negative that keeps going on. The negative tone is further enhanced by portraying the story as 'madness' (line 2). However, he as a climate sceptic knows the 'rock hard facts' (line 3), thereby showing that he is not an irrational person. He marks the case as redundant to discuss any further. This is strengthened by saying ''Ophouden met deze CO2 onzin!'' (lines 3-4). He ends by providing a link to an article about climate change, including a graphic. The graphic shows the temperature level of planet Earth throughout the geological past (ranging from 500 million years before present until the year 1990). He uses this graphic to support the claims he made and to show that the facts speak for themselves.

The next fragment shows a reply by Derek to Martin's opening statement. He portrays Martin as handling the facts too easily, and in contrast constructs his own identity as a watchful observer by claiming that Martin would easily see the facts for himself when he takes a closer look at his own evidence.

Fragment 10: Derek (reaction to Martin)
Post #29
1   Ziet u die loodrechte lijn op het eind niet? Daarmee spreekt u uw eigen onzin toch al
2   weer gauw tegen, nietwaar?

Martin (reaction to Derek)
Post #36
4   Welke loodrechte lijn in welke tijdspanne?

Derek (reaction to Martin)
post #56
5   Die rode stippen - die de rest wel ziet. Het valt bijna niet op he? Ongelovelijk toch?
6   ((2 lines omitted))

Derek builds up the identity of a watchful observer by claiming that the facts are obvious and self-evident, which you can easily see for yourself when you take a better look at the visible evidence.

Derek directly starts to comment on the graphic that Martin referred to by saying ''Ziet u die loodrechte lijn op het eind niet? Daarmee spreekt u uw eigen onzin toch al weer gauw tegen, nietwaar?'' (lines 1-2). He could have simply rejected Martin's claim by stating it as wrong, but he instead focuses on the visible evidence. He states that Martin needs to take a better look at his own evidence and he then does not need to look far because the facts are too obvious. In the following lines Martin asks a question to Derek (line 4) by which a kind of match is created about who is the most accurate person. In his reply Derek again directly refers to the visible evidence. By adding ''die de rest wel ziet'' (line 5) he states that Martin is too stupid to not see this for himself since everybody else can see it. Note that the evidence in itself is not questioned but the claim is made that you only need to take a better look at the data. Then you can easily see it for yourself. With these claims Derek portrays Martin as being too easy-going in his judgement and he instead does pay attention to the visible data, thereby establishing the identity of a watchful observer.

The following fragment shows a reply given by Sarah, who keeps her statement rather short. Her reaction is comparable to the previous fragment.

Fragment 11: Sarah(reaction to Martin)
Post #97
1   Kan jij die extreme piek aan de uiterst rechtse kan van de grafiek dan even verklaren?

In her statement Sarah builds up the identity of a watchful observer. She achieves this by claiming that you can see the obvious facts for yourself: you only need to take a better look at the data. In her reaction to Martin, Sarah also concentrates on the visible evidence in a way as we saw in the previous fragment. By pointing her question directly to Martin she states that he needs to take a better look at his own evidence. He then will easily see the ''extreme piek aan de uiterst rechtse kan van de grafiek'' (line 1), and therefore the facts, for himself. Note that again the evidence in itself is not being questioned here, but you only need to take a better look at it. Sarah hereby portrays Martin as too easy-going on the facts which says something about herself: she, on the other hand, has an eye for the data. This works to establish her identity as a watchful observer.

Fragment 12 also shows a reply to Martin. The reply is given by Maria, in which she builds up the identity of a watchful observer. Note however that she does not directly refer to the graphic that Martin cited, but instead to the evidence that is *out there*.

Fragment 12: Maria (reaction to Martin)
Post #121
1   Er zijn anders genoeg bewijzen dat de invloed van de mens de opwarming veroorzaakt. Maar
2   zelfs wobbo Ockels (overtuigd klimaatalarmist) die tuint er in volgens jou. En het knmi, en Al
3   Gore en 97 procent van de wetenschappers, zoals ((name)) al terecht opmerkt, zitten er
4   naast. De Gletchers smelten omdat het knmi er snachts zout op strooit denk je zeker?

In her reaction Maria draws a contrast with the statement Martin made by saying '' Er zijn anders genoeg bewijzen dat de invloed van de mens de opwarming veroorzaakt'' (line 1). Note that she formulates it as an objective knowledge claim to establish the right to speak, which is different as we saw in the previous two fragments. After saying this she could have continued by showing the evidence that supports her claim (i.e. why or how global warming is induced by humans). However, she instead points towards Martin by saying that *even* very knowledgeable people on this topic (Wobbo Ockels, Al gore, 97% of the scientists) are wrong, according to *him* (lines 2-4). Maria thereby

portrays Martin as a person who is too stupid to see the right facts for himself, which are already shown by experts. Maria ends her statement by saying ''De Gletchers smelten omdat het knmi er snachts zout op strooit denk je zeker?'' (line 4). Formulating it as a question directly asked to Martin implies that he is too easy-going in his judgement and needs to take a closer look at the evidence. The facts are obvious and when you take a better look at the evidence you can easily see that for yourself. Note that Maria does not point directly to the graphic that Martin referred to in his opening statement as other participants did, but does refer to the evidence that is *out there*. She therefore shows that she does pay attention to the visible evidence, that works to establish her identity as a watchful observer.

Summary

The above analysis shows that participants claim the right to speak in reaction to opening statements made by climate deniers who present the facts as if they speak for themselves. Participants construct the identity of a watchful observer in their reactions. They build up this identity by claiming that the facts are obvious and self-evident, which you will easily see for yourself when you take a better look at the visible evidence. In their reactions they directly point towards that visible evidence (either the data supporting the claims of the initiator or the visible evidence that is *out there* set out by other experts) and show that the initiator needs to take a better look at that. The evidence itself is not questioned, you only need to take a better look at it. Then you will easily see the facts for yourself, since they are not hard to miss. This shows that the objections against the opening statement are only procedural (i.e. the way how the initiator builds up his claims) and are not aimed at the content of the evidence. The initiator is portrayed as too easy-going on the facts which also says something about the respondents: they, on the other hand have an eye for the real evidence. This works to build the identity of a watchful observer.

4.2.2 I am not a fanatic: doing being relaxed, not naive

Another pattern that could be identified when analysing the online data is 'doing being relaxed, not naive'. This pattern is shown when participants display a relaxed attitude about the climate change problem and focus on 'weighing the evidence'; we have nothing to worry about and the problem will solve itself. Furthermore, others are portrayed as fanatic when they want to take action in solving the problem. In reaction to this, forum participants reformulate this relaxed attitude as a dangerously naive attitude, thereby portraying the initiator as the problem and not them as possibly being fanatic. Moreover, the respondents show that they 'possess' the truth by educating the other. This implies that they have the expertise, which has nothing to do with being fanatic or not. They do not explicitly say anything about being or not being fanatic, but precisely avoid making such a claim.

In order to explain this pattern 3 fragments are shown and analysed below: one opening statement in which a relaxed attitude is displayed and others are portrayed as being fanatic, followed by two reactions to this opening statement. First, Fragment 13 shows one of the opening statements by Patrick on the discussion forum in which he shows to be very relaxed about the urgency of the climate change problem and portrays others as fanatics.

Fragment 13: Patrick (opening statement)
Post #70

1   ((6 lines omitted))
2   Daarnaast kun je je afvragen of het nou zo erg is als de temperatuur stijgt. Ja, de zeespiegel

3   reist met een millimeter per jaar, nou dan verhogen we her en der ter wereld wat dijken, big
4   deal. Aan de andere kant worden weer heel veel gebieden wat groener en leefbaarder. Het
5   klimaat verandert, de inwoners van de aarde veranderen wel mee. Bovendien lost het
6   probleem zich vanzelf weer op als over een jaar of 100 of 200 de fossiele brandstoffen op zijn.
7   Geen reden om nu miljarden mensen de ontwikkeling en levensstandaard te ontzeggen
8   waarvan wij nu ook kunnen genieten.

In his opening statement Patrick displays a very relaxed attitude by questioning the impact of global warming and stating that easy solutions to sea level rise can be found. He even notes positive sides of global warming, namely that many areas will become more green and more liveable (line 4) undermining the need to worry. Patrick again presents an easy solution to climate change, namely that people will just adapt (line 5). He then says that the problem will solve itself when we are out of fossil fuels. Patrick herewith implies that we do not need to worry, and we do not need to do anything; the problem will solve itself. Patrick focuses on 'weighting the evidence' and shows that we should not be too difficult about it. He concludes by saying ''Geen reden om nu miljarden mensen de ontwikkeling en levensstandaard te ontzeggen waarvan wij nu ook kunnen genieten'' (line 7-8). He thereby portrays others as being fanatic.

        In reaction to Patrick participants avoid to be seen as fanatics. They do this by rephrasing Patrick's relax attitude as 'dangerously naive', showing that Patrick is the problem and not them. Furthermore, participant show that they have the truth inside them and therefore have a say in the matter, which has nothing to do with being fanatic or not. Fragment 14 is a reply to Patrick by Emma.

Fragment 14 : Emma (reaction to Patrick)
Post #76

1   Gevaarlijke naïeve houding 'zal wel meevallen'. Bijvoorbeeld, wat gebeurt er als zuid
2   europa een woestijn wordt (Sahara is dichtbij), of de intensiteitstoename van stormen en de
3   bijbehorende schade? Op een gegeven moment wordt het als maatschappij dweilen met de
4   kraan open en dan houdt het op.

Emma starts her statement by saying: ''gevaarlijke naïeve houding 'zal wel meevallen''' (line 1). She rephrases the relaxed attitude of Patrick presented in his opening statement as dangerously naive, and thereby shows that he is the danger instead of her being 'fanatic'. Furthermore, she shows that she has the truth by pointing to the facts in the following lines. Emma describes possible effects of the rising temperature next to sea level rise (lines 1-3). She starts this utterance with 'for example', implying that these are just examples and there are much more effects she could name, showing her extended knowledge on the matter. Also note that she formulates her claims as questions in the form of 'what would happen if...?', instead of just stating objective facts. This implies that she is educating the other forum participants (including Patrick) about the facts, thereby showing that she knows the truth. Emma also does not refer to any scientific article or book, but rather shows that the facts are inside her. In her response Emma does not say anything about being or not being fanatic. She instead reformulates Patrick's relaxed attitude as 'dangerously naive' implying that he is the problem, not her. Moreover, she shows that she possesses the truth about the climate change problem and therefore has a say in the matter. Thereby, Emma does not say anything about being or not being fanatic, but precisely avoids making an explicit claim about this.

The following fragment shows a reply by Derek, one of the forum participants we saw before. He has a similar reaction as Emma.

Fragment 15: Derek (reaction to Patrick)
Post #78

1	((2 lines omitted))
2	Nee. Meer dan 3 mm tegenwoordig. En dat is al het dubbele van de stijging van de vorige
3	eeuw. Deze eeuw kunt u een metertje verwachten. Wist u dat er alleen al in Azië 100
4	miljoenen mensen binnen 1 hoogte meter van de zee leven. Bijkomende probleem is bv ook
5	verzilting van rijstvelden, de voedselvoorziening voor velen. F$%&ing big deal ja.

Derek clearly shows that he disagrees with Patrick and rather states that the problem is much bigger than Patrick thinks (lines 2-3), thereby portraying him as naive. Note that Derek makes an objective knowledge claim to claim the right to speak and establish expertise. His claim is further enhanced by his rather extreme comment at the end of the fragment (line 5) which makes clear that Derek portrays Patrick as a dangerously naive person. Therefore, Patrick is the 'danger' and not him as a possible fanatic person. Furthermore, Derek shows that he has the right facts by saying ''Wist u dat er alleen al in Azië 100 miljoenen mensen binnen 1 hoogte meter van de zee leven'' (lines 2-3). He formulates this claim as a question directed to Patrick, thereby educating him. Note that he does not cite any scientific evidence or any other source where he got the knowledge from, showing that the facts are inside him. In the following lines (lines 4-5), where Derek describes more facts, note that he says 'bv' (the Dutch abbreviation for 'for example') to show that this is just an example, so more problems may occur due to global warming. He thereby shows that he even has extended knowledge on the matter. This has nothing to do with being fanatic or not: he just has the expertise and therefore the right to have a say in the matter. Derek precisely avoids making an explicit statement about fanaticism.

Summary

In sum, the fragments analysed above show the importance of a particular kind of identity work for the participants on the online discussion forum: presenting oneself as relaxed but not naive, thereby avoiding to be seen as a fanatic. In their opening statements participants display a relaxed attitude about the climate change problem and 'weigh the evidence': we have nothing to worry about and should not be too difficult about it. In contrast, others who do (want to) take action are portrayed as fanatic. In reaction to such a statement participants reformulate this relaxed attitude as a dangerously naive attitude, thereby portraying the initiator as the problem and not them. Moreover, the respondents show that they 'possess' the truth by educating the other. This implies that they have the expertise, which has nothing to do with being fanatic or not. They do not explicitly say anything about being or not being fanatic, but precisely avoid making such a claim.

5. Conclusions and discussion

The climate debate shows a lot of controversy about the robustness of the climate science, and the communication between and among scientists and non-scientists seems difficult. Discussions on climate issues seems to be limited to discussing facts, such as scientific evidence. However, making claims to certain knowledge and offering facts in the interaction could serve to – consciously or unconsciously – establish or undermine certain identities. In this study the research perspective of Discursive Psychology is adopted enabling to broaden the perspective and reveal such interactional concerns, that now often stay obscured. This analytical perspective does not so much focus on the *literal content* of what is being said, but rather on the *interactional business* performed; the knowledge claims deployed by the participants and how this contributes to identity construction. Bringing up these interactional concerns to the surface might provide guidance on how to improve the dialogue between science and society on climate issues. This thesis therefore aims to *provide guidance on how to create a fruitful discussion about climate issues by identifying the hidden interactional concerns of climate activists and citizens in climate discussions.* In order to reach this objective this study answers the following research question:

(How) do climate activists and citizens claim or negotiate knowledge rights and responsibilities in public discussions, and what is achieved with that in the interaction?

To answer this general research question two debates were analysed; one face-to-face debate among climate activists and one debate on an online forum among citizens who are not directly involved in climate activism. The analysis of the data mainly focused on answering the first two sub research questions: (SRQ1) To what extent do the participants in the debate appeal to (scientific) facts, experience and values, and what is achieved with that in terms of claiming or rejecting particular rights and responsibilities for oneself or others?, and (SRQ2) Do these knowledge claims contribute to constructing or undermining certain identities of oneself or others, and if so, how? The remaining two research questions will be covered in this chapter in order to give recommendations for a fruitful discussion on climate issues: (SRQ3) Does the discussion among climate activists differ from the discussion among citizens in terms of knowledge and identity claims, and if so, how?, and (SRQ4) How can we use these insight to facilitate the dialogue between scientists and non-scientists about climate issues?

This chapter will first put the present research into perspective by discussing the strengths and limitations of the research approach and the methods and materials used for this study. Also some recommendations for future research are given. Section 5.2 presents the main conclusions of this study and compares them with findings from other studies. Based on this, recommendations are given on how to create a fruitful discussion about climate issues between scientists and non-scientists.

5.1 Strengths and limitations: placing the present research into perspective

In this thesis an interaction among climate activists and an interaction among involved citizens were analysed with a focus on the knowledge claims the participants make and what the effect(s) of making such claims are as well as the participant's identity work. Taking an *interactional approach* on climate discussions in these particular research settings has never been researched before, and is

considered a particularly strong aspect of this thesis. In general, Discursive Psychology shows to be a useful research perspective to find what is at stake in the interaction (Edwards & Potter, 1992). Taking this research perspective enables to dissociate expertise from traditional expert-lay roles and find what the effects are of deploying certain claims to knowledge and experience in the interaction (Te Molder, 2012), which is also the aim of this thesis. Moreover, several authors have argued that people's reactions to information on science and technology could best be understood by studying actual interactions in naturalistic settings, since then the hidden interactional concerns could be revealed (Veen et al, 2010; Swierstra & Te Molder, 2012; Te Molder, 2012). Likewise, a discursive analysis of climate discussions among climate activists and among involved citizens showed useful in this respect.

The methods and materials chosen for this study have several implications. First, some limitations could be mentioned about the use of online data for a discursive psychological analysis. The differences with face-to-face conversation have already been explained in Section 3.1. What could also be noted about the use of online data is that many comments may stay unanswered and no real dialogue emerges. This could also be observed in the online forum used for this study. The discussion was already closed after 2 days. Despite that 330 comments were posted in only this short amount of time, this also led to the fact that many comment were not reacted to or only received one or two responses. Since the limited time and scope of this thesis did not allow the researcher to also incorporate a face-to-face debate among involved citizens this online discussion forum was the most accessible and naturalistic data source available. Future research could use only face-to-face conversations to see whether the same, and maybe more, interactional concerns could be revealed.

Second, during the face-to-face debate some settings were of influence on the course of the debate, like the use of statements from the book of Naomi Klein that likely guided the debate in a particular direction. Also, the use of a facilitator has an influence on the nature of the conversation. It is almost impossible for a facilitator to stay entirely neutral, which also showed to be the case in this study. During the debate the facilitator also revealed her views and opinions on topics discussed. Therefore, the debate has been analysed 'as a whole', whereby the facilitator's utterances were included in the analysis. Furthermore, the use of a facilitator likely influenced the 'natural reactivity' of the participants. When participants wanted to say something they had to be appointed by the facilitator after which a microphone was handed to them. Other more 'spontaneous' talk could not be recorded and therefore not be included in the analysis. This could inspire future research incorporating a smaller group of participants to ensure that everything participants say could be recorded. Also, more naturalistic data could be used to study the interactional dynamics without the influence of a facilitator or an interviewer.

Another limitation of this study concern the use of a combination of face-to-face data and online data. As Guise et al. (2007) show in their study, in which they compared the construction of ME (Myalgische encefalomyelitis) in face-to-face interaction with that in internet communication, the same interactional devices and interactional concerns were revealed in the different media. In that study both conversations were held around the same topic and similar groups of participants took place in the debates. In the current study this is however not the case. The face-to-face debate was held among climate activists and experts around Naomi Klein's book 'This changes everything: Capitalism vs. the Climate', while the internet forum discussion on Nujij.nl was initiated by a news item about the 'the Climate case' and was held among citizens. However, as the results revealed the conversations mirror each other and can therefore be compared. On this basis future research could

compare debates around the same topic to see what interaction concerns could be revealed then. Moreover, another option is to analyse one (face-to-face) debate in which people with different roles are represented (climate activists, climate scientists, citizens) in order to study the interactional business performed in interaction *between* these participants.

Despite the limited time and scope of this thesis the interactional concerns revealed touch upon things that can constantly be seen in the climate discussions analysed. This implies that these findings might be seen in other discussions concerning climate issues as well. However, this thesis only looked at a small part of the climate debate by analysing two discussions (i.e. a face-to-face debate and an online discussion), making it hard to formulate general conclusions. Hence, the present study does not strive for representativeness and does not claim that the recommendations for a fruitful discussion on climate issues can be generalized to other situations.

Moreover, the findings show very subtle interactional work of the participants, that at the same time are stubborn things to easily change when aiming for an improved science-society dialogue. The results revealed the underlying tension among and between the participants of the debate causing a laborious dialogue, for which no straightforward solution can be found. Therefore, the scope of the conclusions and recommendations made in this research is limited (i.e. based on the two cases), and provides direction on *how* to conduct the conversation to get a real dialogue, instead of *what* needs to be the topic of discussion.

Overall, the present study provides an interactional perspective on climate discussions which shows that the participants do not only discuss the 'right and wrong' of the climate science, but goes further than that. The next Section formulates the main conclusions of this study, followed by recommendations on how to create a fruitful discussion about climate issues between scientists and non-scientists in Section 5.3.

5.2 Main conclusions

5.2.1 The participants of the face-to-face debate present their acceptable engagement in sustainability as justified and accounted for.

The first conclusion of this study is that in the face-to-face debate the participants present their acceptable engagement in sustainability as justified and accounted for. As the results show three patterns could be identified in the face-to-face debate among climate activists, namely: (1) Crossing the boundaries of ideology and science: doing being an 'inspired' expert (2) Claiming access to real democracy: doing being a 'real' activist, and (3) Claiming access to good citizenship: doing being the better citizen. In all three patterns it could be observed that the participants manage possible dilemmas as to justify that they as climate activists put an acceptable amount of effort in striving for sustainability and that they know how we should get there. The findings show how the participants exactly did that.

First, the results show that the participants in the face-to-face debate avoid to be set aside as just idealists by doing being an inspired expert. The participants achieve this by presenting their idealistic values and their scientific expertise as going well together. Moreover, they present that their experience (i.e. studying in University, being a PhD student etc.) automatically gives them the right to tell others how things should be done, since the participants create a link between science and normativity. At the same time participants hereby show that they distance themselves from the

group of ignorant people who does not possess the relevant knowledge. The participants of the debate justify and account for their knowledge on how we can achieve sustainability.

Second, participants find a solution for the dilemma how we can be sustainable if people do not want that, by showing that sustainability is democratic. They claim access to the definition of real democracy by putting the concepts democracy and sustainability on the same page. Moreover, they show that they as climate activists do enough in heading toward democracy, while other non-involved ones do not. They do this by striving for sustainability and therefore automatically also for democracy. Participants eventually construct the identity of a real activist.

The third pattern showed that climate activist present themselves as the better citizen who takes an acceptable amount of effort in an attempt to solve the climate change problem. The participants argue that other citizens think they act in a good way (e.g. by not using much plastic or signing petitions) but they only take small action or still do other bad things (e.g. driving a car, fly all the time) which is not enough in an attempt to solve the climate change problem. They thereby claim to know themselves what good citizenship is, and present themselves as 'the better citizen'.

Thus, the participants feel the need to justify and account for an acceptable engagement in sustainability. Thereby, not the fact that we need sustainability is the point of discussion but other things are at stake. These findings are different than one would expect. During the debate, the interactional business participants perform serve in combination with certain values and the they distinguish themselves with this. However, one would expect that the participants would do this in terms of their knowledge and expertise. For instance, findings from other studies also show that activists use scientific evidence and expertise to get access to the debate and mobilize change (cf. Epstein, 1995; McCormick, 2009).

No other discursive studies were found that resonate with these findings. However, another study resembles with the notion that certain 'moral behaviour' can be treated as an accountability issue. Komduur & Te Molder (2014) studied people's everyday talk about overweight, and focused on people's accounts for the relation between food, health and genes. The authors found that ''participants orient to a healthy lifestyle as *accountable*, i.e. it is dealt with in interaction as behaviour that is not self-evidently right but requires an explanation''(p.5).

Thus, this conclusion indicates that being engaged in sustainability or not is used as a 'blaming device', and groups of involved and non-involved people are indirectly created. In this regard, the participants of the face-to-face debate present themselves as an elite group who does enough, and knows what is enough to solve the climate change problem.

5.2.2 The participants of the online debate display themselves as independent from scientific reasoning.

The second conclusion that could be derived from analysing the results of this study is that the participants of the online debate display themselves as independent from scientific reasoning.

As was observed participants on the online discussion construct the identity of a watchful observer. They achieve this by arguing that one needs to take a better look at the visible evidence, then you can easily see the facts for yourself since they are obvious and not hard to miss. They bring forward the easygoingness of the other and present themselves as people who have an eye for the real data. What is noticeable is that the evidence itself is not questioned but rather the line of reasoning from

the other. To put it in other words, the cited evidence itself is not rejected but rather the way *how* it is presented to them, i.e. as if the facts speak for themselves. This shows that the participants of the debate are reluctant to present themselves as individuals who blindly relies on the expert's judgement and automatically accept the scientific reasoning of an expert. This might be explained by the fact that citizens want to display their autonomy in the discussion. Showing independence from expert statements provides them with the entitlement to speak in the discussion and the authority to make a judgement on the topic, independent from experts.

Furthermore, the results show that the participants of the online debate avoid to be seen as naive or fanatic. One action the participants performed to build up this identity was by educating the other, thereby showing that they 'possess' the truth. In presenting the truth the participants did not rely on any scientific resources, like referring to a book or article, thereby showing that the facts are 'inside' them. Herewith the participants deny to be dependent on expert advice, and show their independence from scientific reasoning.

Other discursive studies are in line with these results. They conclude that not the evidence or expert advice itself is rejected but rather the underlying assumption that people are expected to blindly trust the expert. An illustrative example is a study by Veen et al. (2011) who studies online interactions between experts and celiac disease patients. On an online discussion forum celiac disease patients were asked what they would pay for a pill allowing them to eat a diet containing gluten. In their reaction patients were rather negative towards the pill and seemed to reject it. However, analysing the interaction revealed that not the pill itself had been rejected, but the underlying assumptions of the researcher that the patient obviously would use such a pill. Therefore, not the scientific advise but rather the patient's identity is at stake (Veen et al., 2011; see also Swierstra & Te Molder, 2012).

Furthermore, Hobson-West (2007) studied organised resistance from parents to childhood vaccination campaigns in the UK. Their study revealed that parents constructed trust (or at least blind faith) in experts as a risk in itself since they themselves know what is best for their child. This shows that resistance towards the campaigns was not a result of parents questioning the vaccination itself, but rather the underlying assumption that the experts expected blind trust from the public (Hobson-West, 2007).

In sum, the present study shows that participants in the online debate present themselves as independent from scientific reasoning. They reject the need to blindly trust the authorities and question the underlying assumption that the facts speak for themselves as well. By displaying themselves as a watchful observer who has an eye on the real evidence or as someone who possesses the truth the participants also claim to have a say in the matter.

5.2.3 The participants of both debates seem to talk past each other.
The third conclusion of this study is that the participants of both debates (climate activists and involved citizens) seem to talk past each other. As could be observed in the online debate the participants show a very relaxed attitude and portray others as fanatics. They present it as if the problem will solve itself so we do not need to worry about it and we do not need to take drastic measures in solving the problem. This can be understood in the sense that participants present 'relaxedness' as an legitimate consideration to enter the debate and show that they themselves do not take things too far. In response to such an opening statement in which a relaxed attitude is

presented towards the climate change problem and others are portrayed as fanatic, people refute the possible accusation of being fanatic themselves. Respondents do this by reformulating the relaxed attitude as a dangerously naive attitude, thereby portraying the initiator as the problem and not them. Moreover, the respondents show that they 'possess' the truth by educating the other. This implies that they have the expertise, which has nothing to do with being fanatic or not. They do not explicitly say anything about being or not being fanatic, but precisely avoid making such a claim. This indicates that indeed 'being fanatic' is treated as 'not interactionally appropriated' in the discussion on climate issues but rather showing uncomplicatedness.

This finding can be compared with findings in other discursive studies indicating that people generally avoid to be seen as fanatic. In a study by Bouwman et al. (2009) about healthful eating practices consumers acknowledge the need to eat healthfully but avoid to be seen as individuals who are very concerned about their health by 1) presenting healthful eating as something that is self-evident, 2) presenting eating for health an pleasure as uncomplicated, and 3) by showing that unhealthful eating practices could easily be compensated for. This study therefore revealed that participants present a relaxed way in dealing with healthy eating, thereby avoiding to be seen as 'taking things too far' (Bouwman et al., 2009). Furthermore, a study by Sneijder and te Molder (2009) shows that on an online forum about veganism people underlie the 'ordinariness' of their vegan diet and thereby resist the notion that being a vegan is complicated. Finally, in another student thesis a similar conclusion was found. A discursive analysis to discussions about sustainable food consumption revealed that participants display a 'causal identity' towards sustainable food consumption to avoid to be seen as a consumer who takes things too far (Van der Stigt, 2015). This concern was further underlined by accusing people of idealism and therefore taking things too far when they displayed an ethically aware identity towards sustainable food consumption (Van der Stigt, 2015).

What is striking about these findings is that while participants of the online debate avoid to be seen as fanatic the participants of the face-to-face debate seem to do exactly the opposite. The results of the face-to-face debate among climate activists show that the participants present themselves as the 'doers' and other as 'non-doers'. By displaying oneself as an 'inspired expert', a 'real activist' and as 'the better citizen' an elite group of people who know, and have the right to tell what to do is repeatedly produced. Just some small actions are useless in an attempt to solve the climate change problem; we need to think big. This is taken up by citizens as fanatic behaviour.

Thus, these findings indicate that the two groups in both debates talk past each other and seem to be two different worlds. When climate activists present themselves as 'elites' it may be difficult for others to identify with them. As a result, non-fanatics might be excluded from the debate. Since 'relaxedness' is acknowledged by the participants on the online forum as a legitimate consideration to get access to the debate, such a reaction might therefore be evoked.

5.3 Recommendations for a fruitful science-society dialogue

This study aimed to *provide guidance on how to create a fruitful discussion about climate issues by identifying the hidden interactional concerns of climate activists and citizens in climate discussions.* Thus, in light of the interactional concerns that could be revealed in the climate discussions analysed in this study, several recommendations could be formulated to provide guidance on how to create a fruitful discussion between scientists and non-scientists about climate issues.

Climate scientists as well as climate activists increasingly express the urgency of the climate change problem and its severe risks and call for policy-makers, politicians and the general public to support climate mitigation and adaptation initiatives and potential technical solutions. This involves making people aware of environmental problems and raising environmental consciousness resulting in a stimulant towards pro-environmental behaviour. However, as shown in this study environmentalists and citizens seem to talk past each other, which is not promising in an attempt to tackle environmental risks. As such, the discussion should focus on other interactional concerns that people made relevant in the debates, in order to create a fruitful dialogue on climate issues aimed at genuine understanding between scientists and non-scientists.

The first approach concerns issues of accessibility. The participants of the face-to-face debate repeatedly presented themselves as an elite group and displayed others as ignorant and not-involved enough. However, it can be questioned whether such an approach is useful when aiming for a fruitful societal debate on climate change. In distancing themselves from others certain groups of people might be locked-out from the discussion (probably unintentionally). The ways in which these participants presented themselves, is taken up by citizens participating in the online debate as fanatic. As a result, non-fanatics can hardly identify themselves with environmentalists and are excluded from the discussion. In this way, certain reactions may be evoked, enabling people to enter the debate. For instance, people present a relaxed way in dealing with climate change issues as a legitimate consideration to have access to the debate.

Experts should not ignore such statements but explore them further. When these are open for discussion, evaluated and taken into account, experts could critically reflect upon how they present themselves in the debate on climate issues. This may lead to an increased understanding on why such reactions are generated.

The second approach for opening up the societal debate on climate change concerns issues of reasonability. As observed, climate activists construct classes of 'doers' and 'non-doers', and argue that others are not doing enough in tackling the climate change problem. This negative approach to people's current (unsustainable) behaviour may also be questioned: does it help to 'blame' people or held them accountable for not taking enough effort in tackling the climate change problem? As a mirror reaction citizens in the online debate generally avoid to be seen as fanatics who 'take things too far'. These concerns deserve to be discussed since it may leads to the question: when can one's actions then be seen as reasonable in an attempt to tackle the problem? When these concerns are taken into account the discussion may shift from 'blaming others' to a focus on what people are *already doing*.

The third approach for opening up the societal debate on climate change concerns issues of autonomy. As observed in the online debate the participants present themselves as reluctant to automatically accept the scientific reasoning of an expert. This shows that citizens claim a certain degree of autonomy in the discussion. They claim the entitlement to speak and the authority to judge the evidence for themselves, independent from experts. The autonomy of citizens should be treated as an important concern in the discussion on climate issues. This will enable citizens (i.e. non-scientists) to participate in the debate, who would otherwise be (unintentionally) locked-out from the discussion.

To conclude, as explained in the introduction scientists often think that the facts speak for themselves and that displaying them will end the debate. However, this study again shows that this is not the case because of the concerns people, consciously or unconsciously, put forward in the interaction. Scientists should therefore not immediately label a counter-argument as 'undermining science' but rather take these interactional concerns seriously and create a space for them on the agenda. Many (counter-)arguments put forward in climate discussions prove not to be irrational but certain issues underlie them serving certain interactional goals. When the interaction is only looked at in terms of discussing 'the facts' then we might not come very far; people might be steered in a certain direction that evokes certain reactions (e.g. just be relaxed!). Looking at the identities that underlie certain knowledge claims shows that the debate goes further than only questioning whether people may or may not be convinced about the climate science. This study provides guidance on how to facilitate and open up the debate between scientists and non-scientists on climate issues. Hopefully, herewith a fruitful science-society dialogue can be created in the future.

Acknowledgements

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Appendix A: Permission for the use of data

Online data

E-mail to ask permission from editorial board nujij.nl

From: via contact form on the website www.nujij.nl
To: info@nujij.nl
Date: 01-09-2015

Geachte heer/mevrouw,

Voor mijn master Applied Communication Science aan de Wageningen University doe ik een onderzoek naar discussies over klimaatverandering; specifiek naar hoe mensen het recht op kennis claimen of opbouwen in interacties, en wat hiermee wordt bereikt in termen van hun identiteit.

Op uw website heeft onlangs een interessante discussie plaatsgevonden over de klimaatzaak die Urgenda heeft geïnitieerd. Hierin staan vooral de (wetenschappelijke) feiten over klimaatverandering ter discussie. Dit is erg interessant voor mijn onderzoek. Daarom wil ik graag toestemming vragen voor het gebruik maken van de inhoud uit de volgende discussie: ((Link omitted))

De gebruikte inhoud wordt geanonimiseerd en uitsluitend gebruikt voor het onderzoek. Indien u nog vragen heeft, kunt u contact opnemen met mij of met mijn begeleider Prof. Dr. te Molder (hedwig.temolder@wur.nl).

Alvast bedankt en met vriendelijke groet,

Tjen van den Berg

Reply from editorial board Nujij.nl

From: socialnews.nu@gmail.com namens Redactie NUjij <info@nujij.nl>
To: tjen.vandenberg@wur.nl
Date: 02-09-2015
Subject: E-mail van Nujij.nl

Beste,

Met betrekking tot uw voorstel (gebruik van inhoud voor genoemde discussie, geanonimiseerd): dat is akkoord voor ons.

We lezen ter zijner tijd graag de uitkomst van uw onderzoek. Veel succes daarmee!

Mvg,
NUjij/IV

Face-to-face data

Letter to notify participants about the research and ask permission to record the debate and use the data to support the analysis

Dear participant,

During this event the debate between the expert panel and the public will be recorded with a video camera as data collection for a student master thesis. This thesis is about the interaction between climate activist and the public; what climate activists do and how the public responds. The recordings made at this event will only serve to support the analysis of the interaction for this thesis' aim, and for no other purposes. All data collected will be treated anonymously. With this note the researcher would like to ask your permission to make video recordings of the debate. If you have any objections or if you have any questions about the research you can contact the researcher after the event or by sending an e-mail to: tjen.vandenberg@wur.nl.

Supervisors of this thesis:
Prof. dr. Hedwig te Molder
Prof. dr. Rik Leemans

Appendix B: a simplified version of the Jefferson transcription method

(Based on Jefferson Transcription System; Jefferson, 2004)

[text]	Square brackets mark the beginning and end of overlapping speech
(x.x)	Pause of x.x seconds
(.)	Micropause, hearable but too short to measure (less than 0.2 seconds)
()	Inaudible speech
word	Vocal emphasis
WORD	Speaker is talking considerably louder (than the surrounding talk)
° text °	Speaker is talking softer (than the surrounding talk)
W(h)ord	Laughter within speech
Wo-	A cut-off or self-interruption
↑↓	Arrows indicate a noticeable rise or fall in intonation
wo:rd	Colons show that the speaker has stretched the immediately preceding sound
((text))	Transcriber's remarks to clarify information
=	No pause between words or turns
>text<	Fast speaking
<text >	Slower speaking

Appendix C: schematic representation of discussion setting & participants list
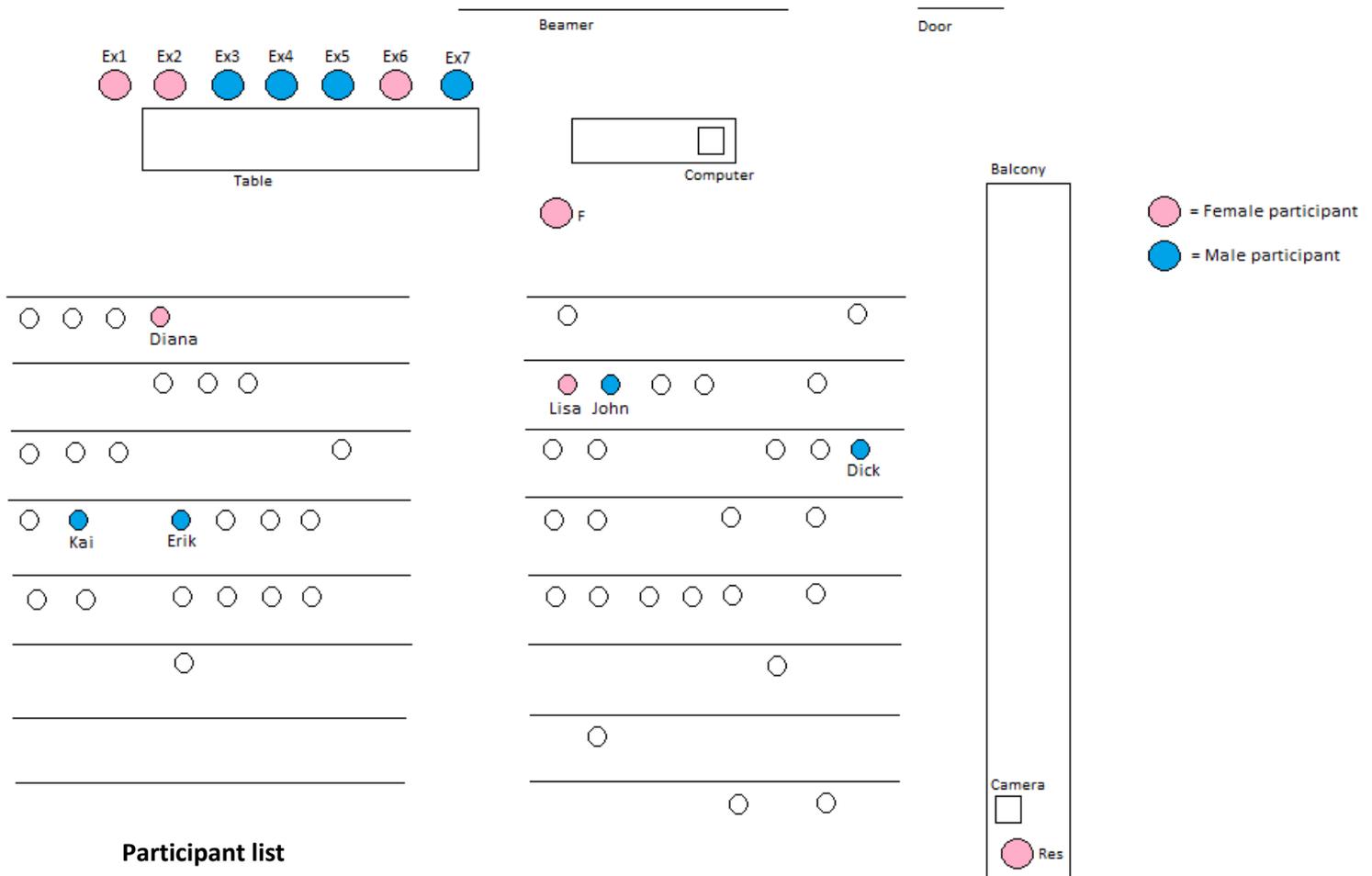
Participant list

Expert panel:
Ex1 = Expert 1 – Singer, moviemaker
Ex2 = Expert 2 – Groenfront
Ex3 = Expert 3 – Climate games
Ex4 = Expert 4 – Nieuwe Universiteit Amsterdam
Ex5 = Expert 5 – Fossielvrij NL
Ex6 = Expert 6 – Professor science and advocacy
Ex7 = Expert 7 - Greenpeace

Audience:
People that are marked are included in the analysis

Others:
F= Facilitator
Res = Researcher

Appendix D: Entire fragments

Face-to-face debate

Fragment 1: Expert 6 (introduction)

1   °thanks° (0.4) and thanks for signing the petition (0.6) ↑well done ha (.) e:h it's
2   <u>adp</u>fosielvrij.nl e::h (.) so: (.) my name is ((name)) e:h and I grew up in a little village in
3   Limburg in the South of the Netherlands (0.5) and when I started studying e:hm (.) I-I went to
4   Utrecht and I started eh to study (.) e:h milieu=en maatschappij wetenschappen (0.4) so:
5   society and environmental studies (.) and I thought I was gonna learn about society (0.4) like
6   ↑how does 6   this work (.) I was really interested in this interdisciplinary study about (.) eh
7   ho:w does society ↑work and I had <u>no</u> clue that there was something ↓wrong(h) <u>until</u> I
8   started ↑study(h)ing (0.6) e:h and then I was actually (.) really <u>shocked</u> about a::ll all the
9   information that I got from all the graphics all the exponential population growth
10   deforestation pollution (.) e::h (0.5) and I was really amazed like <u>wo:w</u> it is really going the
11   wrong direction this is what I learn in ↑University <u>what</u> (.)can we do about it

Fragment 2 : Expert 5 (introduction)

F = Facilitator, Ex5 = Expert 5

1   F: okay (1.4) I'm going now to <u>Expert 5</u> ((repeat name and last name)) (0.9) because this
2   <u>guy</u> (1.0) you wouldn't think so (.) but he's a professor (1.0)
3   Ex 4:   °Shocking he°
4   F: ye(h)ah (.) nowadays professors don't wear ties only (.)
5   Ex5:   we also have tattoos too ((audience laughing))
6   F: they have tattoos (inaudible) and eh Expert 5 he's (0.6)not only (.) a professor in
7   science and advocacy (.) but he also works in the Netherlands institute of ecology
8   here in Wageningen I think↓ (0.6) but the fact that he is (.) professor in science and
9   advocacy (0.8) he can give a little=bit <u>ins:ight</u> (0.7) in how we should do things (0.7)
10   so he has listened to all the others (0.8)he doesn't have to do an <u>exam</u> right now (.)
11   but he can give a little bit of 11 feedback (.) and (0.4) recommendations↓ (.)
12   will you do that Expert 5↑
13   Ex 4:   °<u>absolutely</u> °
14   F: =5 minutes
15   Ex5:   ° 5 minutes° ((audience laughing)) (1.1)
16   °I don't even actually think I need this thing I've got a loud (inaudible) Canadian voice°
17   (1.0)
18   F: I-I want you to use it
19   Ex5:   =>you want me to do it< okay I wanna say (0.9) it's a great honour that eh to be here
20   with the five young people next to me= I think they all deserve a hand (0.6) I'm
21   certainly gonna ask for their mail=addresses after this because I think (.) it's (0.4)
22   inspiring as a senior scientist= I'm an old guy I'm 57 years old (.) and I'm more <u>radical</u>
23   and anarchistic than ever ((audience laughing)) (0.6) a:nd (.) I spend my PhD in the
24   mid 90s in Liverpool in the UK= I studied ecology (.) I-I was briefly an editor of nature

25   later on the journal (0.6) and now I'm a professor in science and advocacy in
26   Amsterdam

Fragment 3: Facilitator

1   so we go to the second ah (0.8) second statement (1.2) listen carefully (1.2) Blockadia is
2   driven by a desire for a deeper form of democracy (0.6) one that provides communities with
3   <u>real</u> control over those resources that are most critical to collective survival (4.2) well (1.7) I
4   can't imagine that you >would=disagree< but perhaps you have your own views about it (3.3)
5   maybe you can think even about your own organisation whether (1.1) there is a deeper form
6   of democracy in your own organisation (.) and how you ((laughter in expert panel))
7   contribute to that (2.1) yea(h)h I think that (1.4) Expert 1 you want to start↑

Fragment 5: Kai

1   well I-I h-have something in mind= but I think I can °answer this one° (.) ehm (0.7) so I think
2   <u>one</u> implication for me for this °and I thinks it's kind of ah sort of (0.3)a dilemma that we° find
3   ourselves in (0.6) that this if we really follow through on this (.) I think it means that the <u>way</u>
4   tha:t a lot of the environmental movement portrays↑ the energy energy transition how it's
5   going to be (0.8) is not m (.) is <u>not</u> compatible with this (0.6) because we are envisini-
6   envisaging basically building a: global infrastructure of energy (0.5) ehm but we will use the
7   sand of the Sahara and all the metals that we need for our windmills and everything (.) and
8   we will (0.8) if=are (.) the <u>way</u> that-that the energy transition is portrayed often↑ (.) is not
9   (0.7) compatible with real democracy in the global South (1.0) I think (.) so that's a
10   provocation maybe somebody wants to respond to that↓

Fragment 6: Expert 7 (reaction to Kai)

1   Ex7:   no it's (0.8) to respond to that e:hm I think (.) the hilarious- the most thing about
2   renewables (0.8) is e:h =actually the fact that it is democrat(h)ic (.) and it's f-funny
3   quite shocking (.) to eh=I always when I started working for Greenpeace >I thought
4   that these big m-multinationals< they e:h spend so much millions of eh dollars they
5   must be rational (0.7) in their decisions(0.8) because (they've) much money involved
6   (0.5) but I think I learned very quickly is that they're not rational at ↑all (0.6) the the
7   rapid introduction of renewables in our ↑system eh there's only one scenario that
8   eh predicted how much solar energy we have at the moment already=that (0.6) the
9   Greenpeace scenario (the hippies) (0.4) eh (inaudible) the right prediction and
10   everybody underestimated it (0.6) cause everybody is stuck in the in the in the
11   <u>frame</u>work that energy is something of big multinationals and national government
12   they own energy and they deliver it to us (.) and then we can e::hm (0.8) we can e::h
13   we can just consume it (.) and what you see with >renewable energy< is-is (.)
14   everybody can be an energy eh producer which is something that (0.9) <u>now</u> starts to
15   F: [producer yeah]
16   Ex7:   come into the minds of the energy ↑companies that how they now realize shit we
17   have a problem they're eating up our markets (0.7) oil companies still don't
18   understand it they still say you know i-if you read the eh comment that they put in
19   the newspapers we're an oil company (.) eh oil consumption is going to increase and
20   we deliver e-e-energy to the poor people and it's our task and you just shut up (0.6)

21		but they still don't <u>real</u>ize that (0.5) t-the funny thing is that actually the t-t-
22		technology development triggers (.) democracy because-because of this new
23		technology everybody=because <u>modular</u> (.) everybody can small scale produce its
24		own energy every (0.6)community can do it
25	F:	so what does it mean for this second e::h statement (1.3)
26	Ex 7:	well the-the e:h blockadia is driven by a desire for a deeper form of democracy (.)
27		which is made possible by modern technology
28	F:	hmhm(.) because it's
29	Ex7:	[I think we're in an audition]
30	F:	it's in modules it's decentralized it can be done individually
31	Ex7:	[yes it-it's] like a: shock-shock innovation it's an innovation technological innovation
32		that kind of (.) transforms society in a kind of shocky way it's very=very funny to see

Fragment 7: Expert 2

F = Facilitator, Ex2 = Expert 2

1	Ex2:	oh I like to: throw in ↑another interpretation
2	F:	hmhm
3	Ex2:	((laughing)) no because e:hm I'm-I'm a bit allergic to the word alternatives because
4		what you <u>see:</u> (.) at the moment is tha:t (.) we have all these gree:n projects (1.6)
5		eh=the government funded and (.) if-if you take your garbage and you put your
6		plastics here and your (.) eh cans over there and then you're you're a good citizen
7		and stuff=so <u>yes</u> (you) have this greenwashing thing (.) because althou:gh I both (.)
8		interpretations that Expert 3 just mentioned I thi-I think they ah (1.0) they fit (.) and
9		we really=really need the alternatives bu:t at the moment you see that a lot of
10		people don't get into action because they feel like well if (.) within my life I do this I
11		don't buy that much plastic I sign a petition (.) or something ↑>then I'm a good
12		citizen< and things will fix out because >then at the moment< no (0.5) things ↑will-
13		will change and (0.4) we are <way way> too far <u>al</u>ready for just some simple actions(.)
14		that-that w-stop the whole global climate change (0.6) disaster (.) thing happening
15	F:	so business as usual
16	Ex2:	[e::hm]
17		yeah (0.4) the business as usual it's-it's (0.7) the this alternative thing is now used to
18		like <u>sus</u> the mind a:nd (0.9) although it's really necessary (0.4) we need it but (.)
19		maybe as a movement we: (1.4) could maybe try to take back the control of what is a
20		real alternative (0.5) is-is putting your garbage in different (1.1) eh bins ↑an
21		alternative or is investing in in in gre-real green energy ↓not grey energy ah a real
22		alternative (0.8) and-and see how that fits in the whole of the live

Fragment 8: Lisa

1		yea:h just just a ↓small one (.) I-I agree-gree with Expert 5=what Expert 5 said and I want to
2		make a little bridge to what he said ↑earlier that e::hm (.)
3		I'm af<u>raid</u> when you you have a lot of very sm↑a::ll (0.6) movements that you will get the
4		greenwashing problem=that people think <u>oh</u> I-I'm ↑sup<u>port</u>ing this e:h shale gas fre:e thing

5	and then you still e:h drive around with your car and >go flying all the time< <u>stop</u> like that it's
6	just eh it's just a small concern I get (.) when I: see <u>this</u>

Online debate

Fragment 10: Derek (reaction to Martin)
Post #29

1	@2 Ziet u die loodrechte lijn op het eind niet? Daarmee spreekt u uw eigen onzin toch al
2	weer gauw tegen, nietwaar?
3	36. Martin
4	@29. Welke loodrechte lijn in welke tijdspanne?
5	56. Derek
6	@36 Die rode stippen - die de rest wel ziet. Het valt bijna niet op he? Ongelovelijk toch?
7	Merk op dat de horizontale schaal telken malen verandert in je grafiek. Lees ook de rest van
8	het wiki artikel dat je aanhaalt: je zou er eens wat van kunnen leren!

Fragment 13: Patrick (opening statement)
Post #70

1	Halverwege het vorige decennium heeft het eilandje Vaneatu ook eens geprobeerd om de VS
2	te dagen voor het feit dat de zeespiegel zou rijzen als gevolg van klimaatverandering. In een
3	rechtzaal bleek dat verband niet juridisch steekhoudend te bewijzen, dus de zaak werd
4	geschikt. Hier het probleem: er zijn aanwijzingen dat global warming door CO_2 uitstoot
5	ontstaat, alleen geen harde bewijzen. Gevolg is dat rechtzaken hierover weinig tot geen kans
6	maken.
7	Daarnaast kun je je afvragen of het nou zo erg is als de temperatuur stijgt. Ja, de zeespiegel
8	reist met een millimeter per jaar, nou dan verhogen we her en der ter wereld wat dijken, big
9	deal. Aan de andere kant worden weer heel veel gebieden wat groener en leefbaarder. Het
10	klimaat verandert, de inwoners van de aarde veranderen wel mee. Bovendien lost het
11	probleem zich vanzelf weer op als over een jaar of 100 of 200 de fossiele brandstoffen op zijn.
12	Geen reden om nu miljarden mensen de ontwikkeling en levensstandaard te ontzeggen
13	waarvan wij nu ook kunnen genieten.

Fragment 15: Derek (reaction to Patrick)
Post #78

1	@70 " Ja, de zeespiegel reist met een millimeter per jaar, nou dan verhogen we her en der
2	ter wereld wat dijken, big deal."
3	Nee. Meer dan 3 mm tegenwoordig. En dat is al het dubbele van de stijging van de vorige
4	eeuw. Deze eeuw kunt u een metertje verwachten. Wist u dat er alleen al in Azië 100
5	miljoenen mensen binnen 1 hoogte meter van de zee leven. Bijkomende probleem is bv ook
6	verzilting van rijstvelden, de voedselvoorziening voor velen. F$%&ing big deal ja.