Reframing climate change communication in the Norwegian west coast media

What are the framing patterns in the "oil rich" west coast, how do they affect the readers, and what can we learn from the journalists

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Abstract

Climate change has been framed in terms of disaster, cost, uncertainty, and sacrifice for decades. Many researchers have argued that we have to talk about climate change in a different way. My aim in this thesis has been to look into how the media in the west coast of Norway framed climate change in the period between 01.06.15 – 01.06.16. There are relatively few thorough studies of the discussion of the climate shift in the media that have their basis in the oil-rich Norwegian west coast. My questions were: What are the main characteristics of the Norwegian west coast media coverage of climate shift? How does their coverage of climate problems differ from national or international framing?

I identified the existing framing patterns in *Bergens Tidende*, *Sysla* and *Energi og Klima*, and found that there was an overwhelming focus on the green shift and technological solutions. In order to understand how the regional and specialist framing patterns influenced the public's perceptions of climate change, I interviewed some of the readers of my chosen media. Just as the west coast media, my informants defined climate change as a crisis happening in other countries or affecting future generations. My informants repeated many of the arguments put forward by *Bergens Tidende*, *Sysla* and *Energi og Klima*. However, other aspects of their life such as their personal beliefs and workplace also influenced their perceptions of climate change.

Another objective in my thesis was to explore ways to better frame climate change. I therefore interviewed journalists working in my chosen media. The journalists from *Bergens Tidende* and *Sysla* were concerned with journalistic norms such as being objective, while the journalists from *Energi og Klima* had an agenda they wished to convey, and actively worked on reframing the debate. Even though I conclude that the reframing of the climate change debate has started in the west coast media, their framing patterns are still very provincial. In the studied period, climate change was portrayed as a catastrophe happening outside Norway. The fact that Norway might be affected by international affairs, such as wars and migration, was not included in the discussion of climate change. Nor was there any visionary framing showing what a climate friendly future looks like. Instead, the existing framing patterns - focusing on technology and the green shift – did little to mobilize Norwegian readers to participate in the solutions to the climate crisis.

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I dedicate this thesis to my dad. Watching you fight for your life this last year has truly reminded me of what is important in life.

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1. Introduction

1.1 Thesis objectives

My intention with this thesis is to study the framing of climate change within Norwegian mainstream and specialist media situated at the west coast of Norway. We have a lot of information about climate change, however, apart from a lack of necessary action towards forging a sustainable future, there are relatively few thorough studies of the discussion of the climate shift in the Norwegian west coast media. Local media coverage can give different insights than national coverage (Sandbrand-Nisipeanu 2016, 71). Research has shown that the different ways in which we frame climate change have a substantial impact on how the climate dilemma is perceived by the public (Spence and Pidgeon 2010, 662). Studies conducted in sociology and political communication during the last two decades, have demonstrated that media portrayals (in interaction with cultural forces) have shaped the public view of complex policy debates like climate change (Nisbet 2009, 16).

I plan on conducting an analysis of three different newspaper/sites situated on the west coast of Norway, specifically *Bergens Tidende*, *Sysla* and *Energi og Klima*. Many changes have occurred in the media industry during the last years, e.g. a separation between traditional and new media. My chosen media represents both types of media. However, they are also representatives of objectivity driven and agenda driven journalism, where *Bergens Tidende* and *Sysla* can be placed in the first category and *Energi og Klima* in the latter. They also have different target groups, and together they reach all groups of society, such as the general public, the industry and the elite. I wish to understand how all these roles affect their framing. I also wished to study a media in Norway that has not been subject to much other research. Most recent media analysis conducted in Norway have analyzed media situated in the eastern parts of Norway, such as *VG*, *Aftenposten* and *Dagens Næringsliv* (see for example Krogh 2009, Duarte 2010, Brattjord 2015, and Midttun et al. 2015). Framing studies and media analysis is a huge scientific field. I therefore wish explore my chosen Norwegian media against international backdrop trend in climate change communication.

All of my chosen media are based in Bergen, which is situated on the oil dependent west coast. As my thesis will show, the oil and gas industry affects the framing of these media in different ways. *Bergens Tidende* mostly focus on news from the west coast, but they also write about national and international news. *Sysla* focus on the industry, they therefore write a lot about the industry situated on the west coast, but also relevant national news from this industry. *Sysla* is also a collaboration between *Bergens Tidende* and *Stavanger Aftenblad*, the two biggest newspapers in this region, and their administration is based both in Bergen and Stavanger. *Energi og Klima* is the one of my chosen media who write the least about regional news. They focus on climate change related news, and therefore write about both national and international news. However, it is stated in their articles of association that the seat of the foundation and the seat of the board shall be in the municipality of Bergen. Considering that mass media is the main source of information about climate change for the general public, my aim is therefore to look into how mass media, specifically newspapers and newssites, frame climate change in the Norwegian west coast (Busch 2015, 2).

My first objective is to identify and define the existing framing patterns in *Bergens Tidende, Sysla* and *Energi og Klima. Bergens Tidende* is a regional newspaper and the fourth biggest newspaper in Norway, and the biggest outside Oslo (Bergens Tidende 2016). *Sysla* is a digital newspaper that started in March 2014. Their goal is to write about industry related to oil and energy, the fishing industry, and shipping and maritime operations (Sysla 2016). They launched *Sysla Grønn* (Sysla Green) in August 2015, covering renewable energy, energy efficiency, climate and sustainable industry (Hirth 2015). I find it interesting that they write about both the fossil industry and renewable energy, and therefore wish to compare articles from both sections. *Energi og Klima* is an opinion-carrying digital magazine run by *Norsk Klimastiftelse* (Norwegian Climate Foundation). Their goal is to be the most important Norwegian source for debate, analysis and background information about climate, renewable energy and clean tech (Energi og Klima 2016). Since neither *Sysla* nor *Energi og Klima* publish their articles on paper, I will refer to them as "news sites", while I will refer to *Bergens Tidende* as "newspaper".

I have given a great deal of thought to how I best can characterize my chosen media. The Oxford dictionary define mainstream media as "traditional forms of mass

communication, such as newspapers, television, and radio (as opposed to the Internet) regarded collectively" (Oxford University Press 2017). According to this definition, *Bergens Tidende* is a mainstream media, while *Sysla* and *Energi og Klima* that only distribute their news online, can be defined as non-mainstream media. However, *Sysla* and *Energi og Klima* can also be characterized as specialist media. I will therefore define *Bergens Tidende* as mainstream media, and the two latter as specialist media.

Frames reflect a specific worldview, and when you do an analysis of how a story is framed, you look into both the story's content and how the reporter connects the topic to the archetypal stories that already exist in people's minds. When identifying the frames the reporters use, one can determine some of the underlying messages that the media are inadvertently sending (Gould 2004, 6). Climate change has been framed as disaster, destruction, cost, uncertainty, and sacrifice for decades, and a lot of research has been carried out on the media's role in this portrayal. For example, a broad examination of media reports from six countries showed that *Disaster* and *Uncertainty* were the two dominant frames. People tend to avoid the topic when such negative frames are being used (Stoknes 2015, 113). This way of communicating has created more distance towards climate change, instead of more concern and increased priority. Being told that the future will consist of disasters, damage, and doom is both uncomfortable to live with, but also tells us that we are a part of the problem. One psychological solution to this discomfort is to deprioritize this issue, and instead worry about closer concerns (Stoknes 2015, 17-18). My second objective is therefore to understand how the framing patterns in the west coast media are influencing the public's perceptions of climate change. I will therefore interview readers of the newspaper/sites I have chosen to analyze, and compare their answers to other research conducted on this topic.

More and more researchers argue that we have to start talking about climate in a different way (see for example Lakoff 2010, Spence and Pidgeon 2010, Ring 2015 and Stoknes 2015). I want to build upon this research and look at it from the journalists' perspective, in order to understand why they use the framing patterns they do and whether it is possible to reframe climate change. My third objective is therefore to explore ways to better frame climate change in the Norwegian west coast media. I will do this by interviewing journalists behind the news articles I have chosen to analyze. A

lot of research has already been conducted on framing, but what is often missing is an understanding of what and why newspapers and journalists frame topics the way they do (Painter 2013, 8). My research can benefit environmental research since it will build upon research that has been written on this subject and provide new knowledge about the journalists' role in reframing climate change.

1.1.1. Research questions

In this thesis, my primary aim is to understand how Norwegian climate change communication can be reframed. In order to do so I intend to look at the framing of climate change communication at different levels. First, I plan to uncover existing framing patterns in the Norwegian west coast media. My first research question is therefore: What are the current framing patterns in communicating climate change in the Norwegian media? The next step will be to understand how these current framing patterns are influencing the Norwegian readers. There is an abundance of existing research on this topic in other countries, but if I am going to discuss how communication in Norway can be reframed, I first have to uncover whether the existing framing actually is a problem. My second research question is therefore: How do the current framing patterns influence the readers' perceptions of climate change? Finally, I plan to look at the framing of climate change communication in the Norwegian media from the journalists' perspective. I wish to understand why they frame climate change the way they do and whether or not they are able to reframe this communication. My third research question is therefore: How can Norwegian journalists reframe the debate on climate change?

1.1.2. Outline of chapter 1

Before I start diving into my research questions, I will provide some background information about the media in Norway today. I will look at the specific role of the Norwegian media, where I intend to uncover the characteristics of the Norwegian media and its readers, and discuss the influence of the different types of newspapers in Norway. I also wish to briefly provide some background information about the transition from paper to digital media and the new media. It is important to be aware of this development since it has changed the way people use the media. I will also give a

brief overview of how the media has been discussing climate change so far. Next, I will move on to the theory. In this thesis, I will use the research and theories from two distinguished researchers and two academic fields. I will first discuss Jerome Bruner's narrative construction of reality, where I will use the insights from two of his books (Bruner 1986, Bruner 1990). From there I will move on to John S. Dryzek's environmental discourse, and give a short introduction to his different environmental discourses. I will also talk about Agenda setting theory, before I move on to framing, the main theory used in this thesis. At the end of the introductory chapter, I will present the methodology.

1.2 General Background Information About the Media Under Scrutiny

1.2.1. The role of mass media in Norway today

Even though the mass extinction of newspapers long has been predicted, the pattern within the Norwegian newspaper industry has been relatively stable during the last fifteen years. What usually happens is that a couple of new local newspapers start up each year, while another couple shut down. At the end of 2015, there were 228 newspapers in Norway, published in 187 different places. This decentralized structure is a distinctive feature of the Norwegian newspaper industry (Høst 2016, 5). In other words, there are a lot of local newspapers in Norway, and they are essential for political diversity, since it's easier for marginal political parties to have their say in these newspapers (Sjøvaag 2016). In Norway, newspapers can be categorized into four different groups: the national papers such as *VG and Dagbladet*; regional papers, like *Bergens Tidende* and *Stavanger Aftenblad*; local newspapers, like *Hordaland* and *Os og Fusaposten*; and opinion-carrying/specialist newspapers, like *Morgenbladet* and *Dagens Næringsliv* (Moe and Kleiven 2016, 22-26) . What separates these newspapers is the fact that the national newspapers have readers throughout the country and are not subscription-based, while most of the regional newspapers are subscription-based and mostly cover news from the region they are situated in, e.g. *Bergens Tidende* covers the west coast of Norway. Opinion-carrying newspapers are also often subscription-based, but can have readers throughout the whole country and their articles are written in terms

of a specific ideology or theme. Local newspapers on the other hand can be very small, with perhaps only a thousand subscriptions and cover a specific local community (Moe and Kleiven 2016, 22-26).

Presumably, one would think that national newspapers are the most influential among these categories, but does this relate to all topics, including climate change? The newspapers that have experienced the largest fall in circulation on paper are after all the national newspapers *VG* and *Dagbladet*. They experienced a 20 % fall in circulation from 2014 to 2015, and have been going on a downward spiral for the last ten years (Høst 2016, 6). The fact is that, in terms of the printed newspaper, regional newspapers have more readers than their national counterparts (Moe and Kleiven 2016, 24). However, national newspapers of course have the advantage that people throughout all of Norway read their news, while regional newspapers mostly have readers from that specific region. Also, on the top 20 list of most visited Norwegian websites in 2015, *VG* and *Dagbladet* is in the top 5, while *Bergens Tidende* is number 12 (comScore and TNSGallup 2016, 19). Moreover, two out of three young Norwegians read the free national digital newspapers, which makes this the most popular newspaper among young people (Moe and Kleiven 2016, 64). However, this does not mean that those papers are the most influential in terms of how Norwegians perceive climate change, because the increased competition among the newspapers has led to a prioritization of tabloid news over hard news (Moe and Kleiven 2016, 2). There has also been a trend towards free articles on the digital newspapers usually being entertainment- and consumer news, while one must pay for hard news, meaning that young people are not exposed to much news about climate change (Moe and Kleiven 2016, 72-73). Another thing to consider is that 94 % of hyperlinking in Norway happens between the newspapers that are owned by the same companies. This sharing is more influenced by economic factors than journalistic perspectives (Sjøvaag 2016), meaning that even though regional newspapers are mostly read by readers from that specific region, their articles might be spread around the country anyhow. *Aftenposten* and *Bergens Tidende,* both owned by Shibsted for example, shares many of the same articles on their websites every day. In conclusion, the national newspapers have more readers online, but that does not mean that they are more influential in terms of how Norwegians perceive climate change, because these newspapers are more known for writing tabloid news, as opposed to in-depth features on climate change.

Norwegians have for a long time been among the top news-reading people in the world, but since the end of the 1990s, there has also been a decline in news reading in Norway. As in the rest of Europe, the Norwegian youth and young adults read far less newspapers than the older generations (Moe and Kleiven 2016, 4). The trend now is that we devote more time to media in general, but what we expose ourselves to is more varied and influenced by our own motivation. I.e. we have so many different forms of news and sources to choose from that we don't spend time on much deep reading and as a consequence only read the news that interest us the most. There is a declining interest in traditional news and some even stop following traditional platforms altogether (Moe and Kleiven 2016, 3-4). However, newspapers still have an important position in the Norwegian society today, and Norwegians read 2.3 newspapers each week on average (Moe and Kleiven 2016, xix). This number increases with both age and level of education, and men read more newspapers than women (Moe and Kleiven 2016, 35). There is also a difference in what kind of news people follow. Around half of the Norwegian population is interested in hard news, i.e. politics, economy and climate, while 10 % avoid these kinds of topics (Moe and Kleiven 2016, 10-11). Again there is a connection between both age and level of education and the level of interest for in-depth news (Moe and Kleiven 2016, 12-13). People with higher education also read more opinion-carrying newspapers (Moe and Kleiven 2016, 33).

1.2.2. The transition from paper to digital and on to the new media

Both internationally and in Norway, television news and online news are the most frequently accessed, while the readership of print newspapers is steadily declining (Newman et al. 2016, 8). 80 % of the Norwegian newspapers now publish their news online (Høst 2016, 30), and the Norwegian Internet users visit 1.7 online newspapers on average (comScore and TNSGallup 2016, 24). The fall in print revenues is due to the fact that most news is available free online. The media industry tries to compensate for this by charging for some of their online content. As previously mentioned, this is typically applicable to hard news that is more resource demanding to produce (Moe and Kleiven 2016, 35-36). National newspaper – *VG* – is a good example of the development that has occurred during the last decade. Today only 17 % of their readers read the print edition, while the rest read news online. The consequence of this is that

they have many readers that create low revenue from marketing and have simultaneously big competition from Facebook, Google and other websites. In other words, they are losing more money than they make. Even though revenue from digital papers is growing, it is not enough to cover the loss from falling revenue from print editions (Høst 2016, 34).

With the growth of the Internet we didn't only gain a new mass medium, but also a new communication platform, i.e. social media, which has turned most established media structures upside-down (Moe and Kleiven 2016, 2). The number of channels in mass media has gone from few to many, from being time-specific and a one-way communication to a two-way interactive exchange (Chaffee and Metzger 2001, 372). More and more of the traditional news media's content is being shared on social media, either by the readers or by the newspapers themselves. Social media is continuing to become a large part of the news reading-arena in Norway - 83 % of Norwegians use social media at least once every day (Moe and Kleiven 2016, 30), and for young people under the age of 25, 90 % think social media is their most important news channel (Moe and Kleiven 2016, 63). Social media is also the most important channel for those who do not follow traditional news. Most of these people also claim that they follow hard news through this channel (Moe and Kleiven 2016, 57). Many critical voices claim that people today spend too much time on entertainment in social media, time that could have been spent on hard news. Other studies however, show that young people use social media simultaneously as they watch TV or listen to the radio. In this way, the old and the new media are being used at the same time (Moe and Kleiven 2016, 71). With the Internet, every individual gets the opportunity to make his or her voice heard. Takeshita (1997, 27) asked whether this meant that the significance of the roles of professional journalism was declining. His discussion around this subject is still valid today, arguing that the Internet contains a lot of varied information, making it not always easy to know what is true or false, therefore "…independent and reliable professional news media would be expected to serve as a reference point for ordinary citizens' understanding of what the world is like and for their evaluations of what the sources really mean". The new media also gives room for topics that do not always stay on traditional media's agenda, e.g. climate change. Research has shown that this topic got much more attention on blogs than in the traditional media in 2009. However, one

could question whether this led to increased awareness about climate change, or just led to more "noise" (Boykoff 2011, 169-170).

1.2.3. Media discourses about climate change

Early records of media discussions about climate usually referred to the weather (Boykoff 2011, 42). There was some reporting on climate change with the first scientific reports and meetings in the 1960s and 1970s, but the media's attention increased substantially in Western Europe and North America with the release of the Brundtland Report in 1987 (Boykoff 2011, 48-49). After this, there was a long period of passivity between the establishment of scientific consensus on human induced climate change in the early 1990s, until the early 2000s, when the impacts of climate change became more documented (Doyle 2011, 28). But it was mostly during special events, such as the COP-meeting, that climate change got the most attention (Bang 2003, 203), i.e. when climate change became a newsworthy topic. For example, the media's attention was at its highest in 2009 because of the anticipated climate talks in Copenhagen, Denmark (COP15), as well as because of the hacked emails from scientists from the University of East Anglia, Climate Research Unit – Climategate (Boykoff 2011, 24). Even today, when the awareness of climate change has never been higher, coverage of sports, celebrities, politics, crime, and the economy still dwarfs that of climate change (Shanahan 2007, 1). This is interesting because through the quantity of coverage, the media is indicating whether or not this is an important subject for the public (Busch 2015, 4). Therefore, it is disturbing that in 2009 for example, the US coverage of climate change represented only 1.5 %, compared to other topics. Those who typically have the least access to information about climate change, due to low media coverage, also reside in regions where people are at most risk from climate impacts, such as South America and Africa (Boykoff 2011, 24).

Climate change is a difficult topic to cover because of its complex nature. Economic developments, i.e. cutbacks, in the media industry have not been helping this case. Journalists are expected to produce more in a shorter amount of time, making it difficult to satisfactorily portray the complexities of climate change when they at the same time have so many other demands. Journalists have to cover more general topics, meaning that they often rely uncritically on experts for specialized things (Boykoff

2011, 81). There are also journalistic norms that influence how the media talks about climate change. Making the story personal, for example, leads to a focus on individuals instead of the systemic processes that are really causing the problem. Another factor is the need for drama, which then leads to a focus on the immediate and spectacular, not the ongoing slow impacts of climate change. There is also the aspect of novelty - the story needs a hook, something new to report about it. Therefore stories about climate change often get eclipsed by other more "pressing" news (Boykoff 2011, 100-105). Climate change has been framed as a scientific problem, not an environmental challenge. This means that it is explained in scientific terms, not as a result of social or political choices, and with no reference to human interaction with nature. The media has also talked about the technological "fixes" in terms of solutions, and has rarely linked climate change to extreme weather, mass consumerism, health, pollution, natural disasters, or any ethical issues (Howard-Williams 2009, 30). Scientific disagreements and uncertainties have been emphasized (Howard-Williams 2009, 29), and the discourse of "alarmism" has been one of the most popular (Hulme 2009b, 199, Doyle 2011, 28).

Looking more closely at the media in the west coast of Norway, the fact that the oil and gas industry are an important industry in this area, have to be taken into account when discussing how the media talks about climate change. Every fifth workplace in Hordaland County, where both *Bergens Tidende*, *Sysla* and *Energi og Klima* are based, are indirectly or directly linked to the oil and gas industry. This represents approximately 28.000 jobs. These jobs indirectly and directly account for 34 % of the goods and services produced in Hordaland (Ludvigsen and Tvedt 2015, 5). This is interesting because the media rarely discusses the oil industry and climate change simultaneously. In fact, many papers have conflicting opinions about this matter. They might argue that we have to do something about climate change, while also arguing that the oil and gas industry are important for the economy (Naper 2014, 233). The discussion in chapter 2 will show how the oil industry affects the framing in the news articles, while the discussion in chapter 3 and chapter 4 will look at how this affects the readers and the journalists. For now, however, I will go on to introduce the theories used in this thesis.

1.3 Theory

1.3.1. Bruner's narrative construction of reality

Theoretically, this study has been inspired by the ideas of Jerome Bruner, an American psychologist known for his contribution to educational psychology (New York University School of Law 2016). In 1972 Bruner "began arguing that cognitive psychology should be broadened to include narrative construction and culture, which also shape the strategies people use to make sense of the world" (Carey 2016). This is why Bruner's theories are relevant for this thesis, especially his two books "*Actual Minds, Possible Worlds*" (Bruner 1986) and "*Acts of Meaning*" (Bruner 1990). In these books Bruner talks about how human beings understand the world, more specifically how we for example interpret meaning in a text, relate to one another, how narrative influences our nature, and how culture influences our behavior. Further on in this thesis I will discuss how current framing patterns influence our perceptions of climate change. Bruner's ideas about how meaning is extracted from a text from a psychological perspective will thus be useful in the course of this thesis. Here I will give a short introduction to what Bruner's narrative construction of reality is all about.

In his book - "*Actual Minds, Possible Worlds*", Bruner talks about a second step in literary analysis, which is according to him, rarely taken. A text can be characterized in terms of its structure, historical context, genre, multiple levels of meaning and so on, but one still might want to discover how and in what ways the text affects the reader, and what produces the effect that the reader experiences. He wonders whether a "psychology" of literature can answer these questions (Bruner 1986, 4). As Bruner argues, the reader "can read and interpret texts in various ways," often simultaneously. The reader actually has to do this if any "literary" meaning is going to be extracted from a text. However, there is little knowledge about how the reader actually does this, how this is carried out as a psychological process (Bruner 1986, 5). According to Bruner, narratives influence our culture, because "we account for our own actions and for the human events that occur around us principally in terms of narrative, story, drama, it is conceivable that our sensitive to narrative provides the major link between our sense of self and our sense of others in the social world around us" (Bruner 1986, 69). Bruner (1986, 121) discusses the language of education, and in doing so he claims that

language can never be neutral, because it imposes a point of view not only about the world to which it refers to, but toward the use of mind with respect to this world. In fact, he argues, all our encounters are "assigned for interpretation to ideas about cause and consequence, and the world that emerges for us is a conceptual world." Even when we don't fully understand one of our encounters, we look at the world around us to "renegotiate its meaning in a manner that is concordant with what those around us believe" (Bruner 1986, 22).

We learn this already as children, since children learn how to feel and react to their environment through their parents and from the subtle cues in the society around them (Bruner 1986, 115-116). In his other book "*Acts of Meaning*", Bruner argues that it is this culture that we learn, and the quest for meaning within it, that are the proper causes of human action (Bruner 1990, 20). Bruner also discusses human perception, saying that there is a limit to how much information the human mind can take in at once. According to Bruner, people usually see what they are looking for, no matter what else is out there (Bruner 1986, 46-47). Another interesting aspect of the human mind that Bruner discusses is how we relate to other people. According to Bruner, "we always assume that what others have said must make *some* sense," and that "we usually assign the right level of ignorance and cleverness to our interlocutors" (Bruner 1986, 57). Bruner also argues that we know the world in different ways that we see it from different perspectives, and that each of these ways produces different "realities". As we grow up, we learn to see the world from multiple perspectives, viewing them as alternative possible worlds. Each of these worlds has its own prescription as to what is "acceptable" as input (Bruner 1986, 109-110).

In his book, *"Acts of Meaning"*, Bruner talks more about the relationships between action and word. He claims that there is an agreed upon relationship between the meaning of what we say and what we do in a given circumstance - this relationship controls how we conduct our lives with one another (Bruner 1990, 19). In this book, Bruner also delves further into the role of narratives in culture. All cultures have a set of norms and they derive their meaning from narrative interpretation. Every story obtains its meaning by explaining deviations from the ordinary in a comprehensible form (Bruner 1986, 47).

1.3.2. Dryzek's environmental discourse

Another inspiration in this thesis is the work of John S. Dryzek, best known for his contributions in the field of democratic theory and practice, as well as environmental politics (Institute for Governance & Policy Analysis 2016). In 1997 he published the book - "*The Politics of the Earth*", about environmental discourse, in which he takes a closer look at how people use language related to environmental issues (Dryzek 2005). According to Dryzek, there are four main categories of environmental discourses: *environmental problem solving, limits and survival, sustainability,* and *green radicalism,* which can be divided into several discourses (Dryzek 2005, 15, 2013, 15). As I see it, there would not be any framing of climate change if there were not any discourse surrounding it. Dryzek's environmental discourses are therefore relevant in the newspaper analysis in this thesis because the different framing patterns used by Norwegian journalists can be classified within these discourses and thereby seen in a larger context. In this section, however, I will look more into how Dryzek defines discourse and then try to sum up his main arguments concerning the various environmental discourses.

Dryzek defines discourse as a "shared way of apprehending the world". According to him, discourses are embedded in our language, and make those who subscribe to them interpret pieces of information and put them together into a coherent story. In this manner, discourse constructs meaning and relationships by helping to define common sense and legitimate knowledge (Dryzek 2005, 9). Each discourse has its own way of seeing the world - some discourses for example recognize the existence of ecosystems, while others have no concept of natural systems at all (Dryzek 2005, 17). *Environmental problem solving* is one of the discourses that recognizes ecological problems, but treats them as something that could easily be dealt with within the basic framework of the political economy of industrial society. The followers of this discourse realize that human interaction with the environment creates a range of problems and that human problem-solving devices can be used to solve them. The different discourses within this main category each have their own solutions, one trough bureaucracy, another through democracy, and the third through market mechanisms (Dryzek 2005, 73). None of them, however, want to change the status quo (Dryzek 2005, 15). The first concept within Dryzek's other main category - *limits and survival,*

point to more radical views of ecological problems (Dryzek 2013, 15). According to this discourse, the Earth is subject to limits set by the stock of natural resources - the ecosystems' ability to support human agriculture and industrial activity; this limit will be met with continued economic and population growth, (Dryzek 2005, 15), which will lead to misery, starvation, and death (Dryzek 2005, 28). The second discursive group within this category, the *Prometheans* discourse, on the other hand, has unlimited faith in the ability of humans and their technologies to overcome any problems (Dryzek 2005, 51). In this discourse, economic growth is seen as a good thing and it is never put in the same box as environmental problems (Dryzek 2005, 52).

The next main category distinguished by Dryzek, one that refers to *sustainability*, includes the discourses covering *sustainable development* and *ecological modernization*, and is present in the Norwegian culture. This discourse can after all be traced back to the Brundtland Report, *Our Common Future*, which was led by the previous Norwegian Prime Minister, Gro Harlem Brundtland. The *sustainable development* discourse does not feature the "limit of growth" projection as the cluster *limits and survival* does. Rather, it posits that the developing world needs economic growth in order to step out of poverty. This growth should be guided so it is both sustainable and socially just, while industrial countries take responsibility for their actions (Dryzek 2005, 153). This discourse respects nature, but also adopt an economistic approach by seeing nature as something that provides a useful service to humans (Dryzek 2005, 156). *Ecological modernization* is quite similar to *sustainable development*, but has a more specific view on what needs to be done within the capitalist political economy in order for economic development and environmental protection to go hand-in-hand and reinforce each other (Dryzek 2005, 169). The Norwegian government acts largely in line with the *ecological modernization* discourse. Politicians acknowledge nature and speak of how important it is to preserve it, but economic growth is still the main focus, as the government proposes to solve environmental problems with new technology. However, there are forces in Norway that have a view of nature, which is more in line with the *Prometheans*, especially within the influential oil and gas industry. According to the *Prometheans*, nature itself does not exist, or at least is nothing more than a store of matter and energy (Dryzek 2013, 59). "Natural" resources are indeed just something created by humans transforming matter and can be transformed infinitely given enough energy (Dryzek

2005, 57). Judging from the above typology, it looks like different discourses are at play simultaneously in the Norwegian culture. McCombs and Ghanem (2010, 75) argue that several framing references are often used simultaneously in one article and one could therefore question whether this also is the case for environmental discourses.

The last main category within environmental discourse is *green radicalism*, which Dryzek divides into *green consciousness* and *green politics* (Dryzek 2005, 181). The first discourse, *green consciousness*, contends that the key to change is to steer people's consciousness in an appropriate direction. Remaining elements such as politics, social structures, institutions, and economic systems will then fall into place (Dryzek 2005, 181). The followers of this discourse believe that every human being can be an agent for change and should do their part in order to make the world a better place. The individuals are in focus, collective actors like governments and corporations are ignored or perceived as the big bad wolf (Dryzek 2005, 195). *Green politics*, on the other hand, examines more directly the social, economic, and political structures and attempts to change them (Dryzek 2005, 181). The followers of this discourse believe that the social and ecological crises the world is facing can only be resolved through political action and structural change (Dryzek 2005, 215-216). The connection between Dryzek's environmental discourses and framing patterns will be discussed more in chapter 2. For now, I will move on to another theory that will be useful in my thesis.

1.3.3. Agenda Setting theory

Agenda setting research started with a simple hypothesis stating that "news coverage influences our personal perceptions of what the most important problems of the day are". Since then this research has developed into a second level of agenda setting (McCombs 1994, 173). The first level looked at the transfer of object salience from the media to the public agenda, while the second level looked more into attributes that describe the object. They developed two major hypotheses about attribute salience: 1. the way an issue or object is covered in the media affects the way the public thinks about that object. 2. The way an issue or object is covered in the media affects the salience of that object in the public agenda (Ghanem 1997, 4). Many researchers label these attributes emphasized by the media as frames, and claim that no "discussion of the second level of agenda setting is complete without an extensive examination of media

frames". It might seem like the researchers working with agenda setting and the researchers that are working with framing are talking about the same frames, but there is a difference between them. Agenda setting researchers examine the impact of news frames on the public agenda, while those working with framing theory usually focus solely on the frames themselves (Ghanem 1997, 6). This is why agenda setting theory is relevant for my thesis. In chapter 2, I am going to focus on what kind of framing patterns there are, while in chapter 3 I will examine how these framing patterns influence the readers. Agenda setting theory might be relevant here.

Agenda setting theory can be traced back to Walter Lippmann, who wrote the book "*Public Opinion*" in 1922, where he claimed that news media functions as a bridge between the world outside and the pictures in our heads. These pictures shape our opinion and behavior, according to Lippmann, not the outside world. But the theory of agenda setting was not introduced until many years later, when McCombs and Shaw built upon Lippmann's ideas and used his observations as the basis of the seminal Chapel Hill study in 1972 (McCombs and Shaw 1972). The core idea in agenda setting theory is that prominent elements in the media become the prominent elements for the audience, i.e. the media's agenda sets the public agenda (McCombs and Ghanem 2010, 67). Since then, there have been hundreds of studies documenting the effect of agenda setting theory (McCombs 2015, 351). According to agenda setting research, editors and news directors influence our perception of what the most important issues of the day are by their day-to-day selection and display of news (McCombs 1994, 181). However, the media has changed a great deal today. With new media, people to a certain degree choose their own news and it is not a given that everyone is exposed to the same kinds of news topics in all locations. Therefore it might be more difficult to conduct agenda setting research since the available sources of news has expanded (Chaffee and Metzger 2001, 374). Supporters of agenda setting theory, on the other hand, claim that the greater importance of the new media and the lesser role of the traditional media has had little impact on the research so far (McCombs 2015, 352).

Some researchers claim that framing is the natural evolution of agenda setting theory (McCombs 1994, 173). Others are more critical towards this because of the two theories' different backgrounds: "Agenda-setting began with valuable approaches to measurement, but lacked theoretical depth. By contrast, framing began with roots deep

in cognitive psychology, but it has proved to be an elusive concept to measure" (Maher 2010, 84). Another critique is that scholars within the two fields are using the term differently, and that they use different sources when studying the frames (Maher 2010, 88). The framing theorists usually look at how the journalist (communicators) frame subjects, while agenda setting researchers examine the transference of framing salience between the text, as it is interpreted by the researcher and the public (Maher 2010, 89). However, some argue that the two fields have begun to take cues from each other, with agenda setting studies starting to acknowledge the controversy within individual issues and measuring the effects of the media's role in framing, while framing research has started to adopt the greater empirical sophistication of agenda setting research, i.e. the influence of the frames (Maher 2010, 90)

1.3.4. Framing

Framing theory used in my thesis can be traced back to the anthropologist Erving Goffman (Nisbet 2009, 15). He borrowed the word "frame" from Gregory Bateson and was also influenced by William James who discussed reality and how we make up different "worlds" in 1869 (Goffman 1974, 7). In 1974 Goffman published his influential book "*Frame Analysis*" where his aim was to "try to isolate some of the basic frameworks of understanding available in our society for making sense out of events and to analyze the special vulnerabilities to which these frames of reference are subject". He further defined frame as "definitions of a situation built up in accordance with principles of organization which govern events – at least social one – and our subjective involvement in them" (Goffman 1974, 10). Framing has evolved a lot since then and has become a popular research field.

Many different researchers have been prominent in this field. Robert Entman is one of them. He argued that framing is a way to describe the power of a communicative text and by analyzing frames; you can illuminate the way the information is transferred from the communicator to the receiver. According to Entman, to frame is to "*select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem, definition, causal interpretation, moral evaluation, and/or treatment recommendation* for the item described" (Entman 1993, 51-52, original italic). Entman claimed that frames determine how most people

notice, understand and remember a problem, and how they act upon this problem afterwards. Therefore, frames play an important role in the exertion of political power because they give attention to some elements of an issue while neglecting others, influencing audience reactions towards an issue (Entman 1993, 54-55). This is why I plan to use framing in my thesis. I want to understand how climate change information is transferred from news articles to readers, and how the way journalists formulate and frame this topic influences this transference.

According to another researcher, George Lakoff, who has studied framing in American politics, frames "are mental structures that shape the way we see the world". They influence our actions, and how we perceive these actions. The frames are a part of our unconsciousness and the more a frame is activated, i.e. used, the stronger it gets. Therefore, arguing against someone, but using their language and their frames, equates to activating their frame and undermining one's own view (Lakoff 2014, xi-xii). Frames are everywhere and you cannot avoid them (Lakoff 2010, 72). The readers of a news article rely on frames to make sense of and discuss an issue, while the journalist uses frames to craft interesting and appealing news reports (Nisbet 2009, 15). In other words, the frame is "the angle", which is often developed before the journalist starts working on the article (Pavlik 2010, 312).

Many researchers argue that frames are very influential, that they affect the audience's perception of reality (Pavlik 2010, 313). However, the text alone does not determine meaning, but interacts with the audience's memory and existing perceptions (Reese 2010, 9). In other words, the frame must already be established in the readers' unconsciousness in order to be very influential. According to Bruner, framing is a way to construct the world, to organize it (Bruner 1990, 56). It is a way to put everyday events into a larger structure, and to provide an interpretive context for the components they encompass (Bruner 1990, 64). If we weren't able to do so, "we would be lost in a murk of chaotic experience and probably would not have survived as a species in any case" (Bruner 1990, 56) .

Framing analysis is, as already mentioned, a very popular research method. However, some argue that this has turned the field away from the rigid conceptualization that framing once was, towards one that captures a wide range of media effects. This has resulted in many new framing studies within the communication

field each year, studies that don't actually have much to do with the original concept of framing (Cacciatore, Scheufele, and Iyengar 2016, 8-9). Maher (2010, 89) argues that framing scholars have not clarified which source of frames they are discussing, which has led to misunderstandings within this field. He also argues that framing in itself is such a wide concept that it lacks focus, predictive value, and testability. He compares his critique of framing to the critique of sociological grand theory. The grand theorists were criticized for having incomprehensible writing and being unwilling to test their abstract ideas. "Anyone who has waded through the discursive, rambling writings of Bateson and Goffman will acknowledge a similar weakness in these early formulations of framing theory" (Maher 2010, 90). Another critique towards framing is that it only provides a partial explanation for the wider interactions that comprise climate change communication; that history has been very influential in terms of how we communicate today and that framing therefore leads to a decontextualization of this communication (Boykoff 2011, 10). I agree with this critique and believe that framing should be put in a larger context. That being said, I still believe framing can be a useful tool in answering my research questions. The way we communicate about climate change today has led to fear and feelings of hopelessness and despair, making people turn the other cheek and concentrate on other pressing matters which in many cases feels more relevant to them (Ring 2015, 411). Framing can be used to get under the surface of news coverage and expose the hidden assumptions (Tankard 2010, 96). It can tell us something about the patterns in our climate change communication today, and hopefully how we can change those for the better in the near future.

To sum up, this is how the combination of narrative analysis, discourse, agenda setting and framing will contribute to my study of the climate crisis as reflected in the mainstream and specialist media on the west coast of Norway. For the newspaper analysis in chapter 2 both Dryzek's environmental discourse, Bruner's narrative construction and framing will be relevant. Dryzek developed four main categories of environmental discourse after researching how people use language on environmental issues (Dryzek 2005, 15). These discourses can be seen as an umbrella for the different frames used by the Norwegian journalists and can be a way to place the frames into a larger context. Framing will be the main theory used in this thesis, and in chapter 2, I intend to use this theory to analyze and discover the framing patterns used by the Norwegian journalists. I also wish to discuss what stories the journalists are telling, and

Bruner will be useful then. Framing and Bruner's narrative constructions will also be relevant in chapter 4 where I wish to discuss whether or not Norwegian journalists should reframe climate change as many researchers argue they should (see for example Spence and Pidgeon 2010, Lakoff 2010, Ring 2015 and Stoknes 2015). In chapter 3, however, I want to look more into how current framing patterns influence Norwegians perceptions of climate change; agenda setting theory will be useful here. The difference between agenda setting and framing is that framing usually solely focuses on how an issue is framed, while agenda setting examines the impact of the frames on the public agenda (Ghanem 1997, 6). Bruner's perspective on how we interpret meaning from a text and how we come to understanding the world, will also be useful in chapter 3, since, according to Bruner, all cultures have a set of norms and they derive their meaning from narrative interpretation (Bruner 1986, 47).

1.4 Methodology

1.4.1. Sources

This master thesis will be written from a social science perspective. The aim is not to define *the* reality, but rather *a* reality. The results from this study are therefore not generalizable, but instead give an insight into how climate change is framed by journalists located on the west coast of Norway. In order to achieve this, I used a triangulation of methods, such as literature review, text analysis and interviews. Triangulation is a way to strengthen the credibility of research findings by comparing the results of different approaches (Rothbauer 2008, 893). Different kinds of sources were relevant in the thesis. Primary sources, the "raw data" used to test the hypothesis and then as evidence to support the claim, are the newspaper analysis and interviews in chapter 2-4. I also used secondary sources, i.e. research reports that have used primary data to solve their research problems, (Booth, Colomb, and Williams 2008, 69) when discussing my arguments in chapter 2-4, and for the background information in chapter 1. Secondary sources were found via searches in Oria, the main search engine at the University of Oslo, and from the reference list in articles and books about the subject. In the following, I will provide a more detailed description of the methods used for the primary sources.

1.4.2. Newspaper analysis

I used framing analysis as a methodological tool in the newspaper analysis, as well as backing this up with some discourse analysis. As previously mentioned, I collected articles from three different newspaper/sites: *Bergens Tidende*, *Sysla* and *Energi og Klima*. The period of analysis is 01.06.2015 to 01.06.2016, before and after the climate conference in Paris between 30.11 and 12.12.2015, since research has shown that the media write more about climate change during special events (Bang 2003, 203). The articles were collected in ATEKST. ATEKST is Norway's leading search text archive, but still has its problems, e.g. all the articles do not show up in the database, and it has therefore been criticized for not providing the full picture of how the newspapers present themselves to their readers (Srebrowska 2005, 43-45). However, I wanted a selection of news articles about climate change during my set time period, and wouldn't collect more than 150 - 200 articles anyway, since this is the amount a media analysis - typically consists of (Gould 2004, 4). I ended up collecting 150 articles, 50 from each media. I used the search word *klima** (climate*). By using the asterisk symbol the search engine automatically searches for all words starting with climate, e.g. *klimaendringer* (climate change) and *klimautslipp* (climate emissions). I tried using different search words, and the table below (table 1) shows that *klima** was the search word that provided the most relevant results.

Table 1: Search words used in ATEKST

Search word	*Bergens Tidende*	*Sysla*	*Energi og Klima*
Bærekraft (sustainability)	39	29	8
Fornybar* (renewable*)	156	430	82
Global oppvarming (global warming)	53	31	24
Grønt skifte (green shift)	38	52	9
Klima* (climate*)	951	544	134
Klimaendring* (climate change)	170	95	41
Klimakrise (climate crisis)	6	0	2

Miljø* (environment*)	1987[1]	607	67
Parisavtalen (Paris agreement)	9	16	0
Solcelle (Solar panel)	48	17	3
Vindmølle (windmill)	35	19	2
All words mentioned above with OR between	2545	1161	140

After I collected the articles, I scanned through them all and selected those that were most relevant for my thesis, excluding articles that mentioned climate change once as a reference. I also wanted the same amount of articles from each paper, so the paper with the least amount of relevant articles became the guide for this, i.e. *Energi og Klima*. I only collected articles from the paper edition of *Bergens Tidende*, as this made it possible to see what section of the paper the articles were first published in. Because *Sysla* and *Energi og Klima* only publish their articles online, this provided the opportunity to compare the traditional and the new media. After selecting the articles, I imported them into a coding program, NVivo 11, which makes it easier to see patterns and is more effective than manual coding.

There is little guidance within framing theory when it comes to specific methods for analysis (Olausson 2009, 425). Quantitative methods are very common, in which researchers determine what frames they are looking for in their newspaper analysis, and then make a coding sheet used to find the frames (see for example Shehata and Hoppman 2012, Painter 2013). Before I started my framing analysis, I read many existing framing studies conducted on the topic of climate change communication, in order to find out which frames had been used by the media so far. However, instead of looking for specific frames in my chosen media, I wanted to keep an open mind in terms of what frames they might have started using. I therefore chose to do a qualitative framing study. When I read the news articles, I paid especially attention to the headlines, pull quotes, picture captions and the opening of the article. I labelled the

[1] Taking a closer look at this result revealed many irrelevant articles concerned with e.g. environment at workplaces and articles about the environment in general, but not climate change.

relevant pieces, coded them and created categories for them. After I finished analyzing all the articles, I went through the codes and categories, and narrowed them down into four main categories. For example, I grouped together the sub-categories "small actions" and "technological fix" under *Green shift*, because these frames were used in the context of the green shift.

For the discourse analysis, I looked for key words or phrases that characterized each discourse to determine the main discourse used in each article. For example, if the article mentioned that we might reach a point of no return if we continue to increase our greenhouse gas emissions, this suggested *limit and survival* discourse. After determining a discourse for each article, I counted which discourse was the most common within each section of the newspaper/sites.

1.4.3. Qualitative interviews

In this thesis, I used semi-structured interviews, which is often used in qualitative research. Qualitative interviews are especially good for gaining insights into the informants own experiences, thoughts and emotions (Dalen 2001, 13). Semi-structured interviews are organized around different themes that the researcher wants to explore during the interview, and consist of open-ended questions that allow the informant to elaborate their answers (Dalen 2001, 26). I made an interview guide and conducted a test interview before carrying through the interviews. The interview guides can be found in appendix G and H. My informants, especially the journalists, were talkative and reflective people, so I ended up asking follow up questions that I had not prepared in my original project design. The interview guide therefore was not always closely followed, however, the journalists ended up answering most of the questions in the discussion on their own. I sent in an application to NSD (Norwegian Centre for Research Data) since I gathered some sensitive information about the informants. However, the informants are anonymized in this thesis. All the interviews were transcribed and coded in NVivo 11.

I interviewed two journalists from *Sysla* and two *Energi og Klima*, and one from *Bergens Tidende*, individually. After I selected the news articles for the analysis, I organized the articles by author in order to see which journalist wrote the most pieces about climate change within each paper in the selected time period, and then contacted these journalists. I therefore ended up only interviewing one journalist from *Bergens*

Tidende because this journalist can be considered being the one who is unofficially responsible for *Bergens Tidende*'s climate change coverage (Ben, BT, 02.0317). The results from these interviews were used in chapter 4. I also interviewed 16 readers in total, six from *Bergens Tidende*, six from *Sysla* and four from *Energi og Klima*. I found the readers through social media, the comment section in the newspaper/sites, and tips from the journalists, friends and family. However, finding the readers was the most challenging part of this thesis. I spent two months contacting readers, and it was especially difficult finding readers from *Energi og Klima*, since most of those I contacted thought they did not read *Energi og Klima* often enough to contribute. Still, I did manage to interview four readers from *Energi og Klima*, and considering that they have a small readership with only 10-12.000 readers a month, I am pleased with this result.

Originally, my plan was to conduct interview with three focus groups with six readers from each newspaper/sites. However, finding a time and place suitable for everyone turned out to be a challenge. I therefore ended up interviewing the readers from *Bergens Tidende* in pairs, having one individual interview and one focus group with the readers from *Sysla*, and interviewing the readers from *Energi og Klima* individually. There were different methodological challenges related to these interview forms. The interviews conducted in pairs were successful and the interviewees stayed on topic. However, they tended to agree with each other and look to the other for acknowledgment. The focus group interview was also successful. The challenge with focus groups is that some of the informants may have trouble opening up, and other informants might dominate the conversation. However, my informants all knew each other, and politely answered in turn. The individual interviews were also successful, although the informants tended to stray off topic. On the other hand, because of this, they provided more detailed information that was useful in my analysis.

1.4.4. Limitations

As with all research, this thesis has its limitations. As already mentioned, the results are not generalizable. The results might also have turned out slightly different if I had interviewed other journalists and readers, or analyzed news articles from the national newspapers or a different time period. There was also a time difference between the

news articles and the interviews. The news articles I analyzed were published between 01.06.15 – 01.06.16, while the interviews occurred during the spring of 2017. It is therefore possible that my chosen media have developed their framing patterns in this period, the readers might therefore have been exposed to different framing patterns than the ones I found in my analysis. The aim of the media analysis was to study how climate change is being framed in the information that is most available to the public in the west coast of Norway. However, the newspaper/sites I chose to analyze do not have the highest reading numbers in Norway. I still find it interesting to compare the articles from these newspapers since they all have different target groups - *Bergens Tidende* is targeted towards the general population on the west coast of Norway, *Sysla* towards the industry in this area and *Energi og Klima* towards those who are already interested in climate change and the environment. When analyzing the frames in the Norwegian west coast media I have built upon existing framing research, but there still is a possibility that there are frames that I was unable to discover. All of the news articles I analyzed were written in Norwegian and the interviews were conducted in Norwegian. This might lead to some meaning being lost in translation, especially since some dialect terms and phrases were difficult to translate. However, this is a problem that has to be solved through rigorous work.

1.4.5. Outline of the thesis

In chapter 2, the aim is to uncover the existing framing patterns regarding climate change in the mainstream and specialist media on the west coast of Norway. This will be achieved by conducting a newspaper analysis of three newspaper/sites over a one-year period. In chapter 3, I move on to discussing how these framing patterns influence the readers' perceptions of climate change. I will figure this out by interviewing some of the readers. In chapter 4, I wish to discuss how Norwegian journalists can reframe their reporting on climate change. Many researchers argue that we have to start talking about climate change in a way that inspires people and gives them hope, instead of leading to denial and despair (see for example Spence and Pidgeon 2010, Lakoff 2010, Ring 2015 and Stoknes 2015). My aim is to figure out whether it is possible for journalists to write in such a manner, by interviewing some of the journalists who write frequently about climate change. In chapter 5, the conclusion, I wish to sum up my findings and discuss the way forward.

2. Framing Patterns in Communicating Climate Change in the Norwegian West Coast Media

The objective for this chapter is to identify the existing framing patterns in *Bergens Tidende, Sysla* and *Energi og Klima* in the period between 01.06.15 – 01.06.16. When identifying the frames the reporters use, one can determine some of the underlying messages that the media are inadvertently and purposefully sending (Gould 2004, 6). By analyzing the framing patterns in *Bergens Tidende, Sysla* and *Energi og Klima*, one get knowledge of the story that the media situated in the west coast of Norway is telling. The oil and gas industry is very important in this region, and it will therefore be interesting to see how this sector has influenced the media. The specific media analyzed for this thesis was also chosen because of their different guidelines and target groups. Combined, this media speaks to all groups of society, such as the general public, the industry and the elite. What I found is that the framing patterns in this media differs from the *Disaster* and *Uncertainty* framing that has characterized the international media. Instead, there was an overwhelming focus on the green shift and technological solutions. However, climate change was framed as a disaster happening to future generations and other countries. This framing is therefore distancing climate change further for the readers, and does not mobilize or inspire them to take action. In this chapter, I will present my analysis of climate framing in *Bergens Tidende, Sysla,* and *Energi og Klima*. I intend to introduce the main frames used in each newspaper/sites and explain how they differ from each other in the different sections of my chosen media. I also wish to discuss how the main frames used in the media differ from the dominant framing in international press, and compare the framing patterns found in *Bergens Tidende, Sysla* and *Energi og Klima*. First, however, I will give a brief overview of some of the existing research conducted on this subject.

2.1 Literature review

My intention in writing this thesis is based on the research stating that climate change was largely framed in terms of disaster, destruction, cost, uncertainty, and sacrifice for decades, and how this has had a negative effect on people's perception of climate change (Stoknes 2015, 113). In his content analysis of three newspapers in six countries, Painter (2013, 70) found that the *Disaster* frame was the most common frame used in those papers. Norway was among these countries, and *Disaster* framing was used when reporting about the IPCC reports (Painter 2013, 112). According to Painter (2013, 46) several other studies reveal the same - the *Disaster* frame is often dominant. This frame emphasizes the consequences or impacts of climate change such as extreme weather or catastrophes like food shortage or health problems. Some researchers code this catastrophic language separately as *Alarmism*, *Catastrophe* or *Fear*. One of the studies Painter referred to is a discourse analysis of 150 articles in the UK quality press from 1997-2007, which found that "*potential catastrophe*" was the most common discourse used in the UK press (Doulton and Brown 2009, 197). Another UK study from 2006 identified *Alarmism* and *Small actions* as the two main frames used by the media, government and green groups (Shanahan 2007, 2). Boykoff (2008, 561) found in his analysis of four main UK daily tabloid newspaper from 2000-2006, that headlines with tones of fear, misery and doom dominated the coverage. His data also showed that climate change was framed through weather events, charismatic megafauna, e.g. the polar bear, and the movements of political actors and their rhetoric. Few of these stories focused on climate justice and risk (Boykoff 2008, 557). A study of three popular US news websites from 2007-2009 has the same conclusion: *Environmental catastrophe* was among the most common frames used in the body of the text in the articles analyzed. Two of the other most common frames were *Strategy/Conflict* and *Scientific/Technical (un)certainty* (Boenker 2012, 18-20).

Uncertainty was the second most common frame in Painter's study (Painter 2013, 70). This frame claims that "existing research is inconclusive" (Shehata and Hopmann 2012, 180), and was common in the Norwegian reporting as well (Painter 2013, 112-113). Shehata and Hopmann (2012, 180), on the other hand, did not find this frame in their study of news coverage of climate change in two Swedish and two American national newspapers, which was not consistent with past research on this

subject. They refer to the design of their study when explaining their results. According to the authors, contextual factors influence the framing of climate change in the news media. They studied news coverage of climate summits where the frames have been clearly institutionally defined. Counter frames are therefore less likely to gain prominence in the news (Shehata and Hopmann 2012, 189). Olausson (2009, 403) reached a similar conclusion in her study. She referred to Zehr's study of US popular press from 1986 to 1995 which showed that scientific uncertainty is a highly salient theme in the articles (Zehr 2000, 98). Olausson, on the other hand, found that an unquestioned, taken-for-granted frame of certainty was more common in the Swedish press (Olausson 2009, 430). Olausson (2009, 433) argues that the same results can be found in other studies of European media.

According to Boykoff (2011, 108) balance which is a common norm used in journalism, has influenced how the reporters write about climate change. Through this norm, the journalists presents all sides of a matter equally. In terms of climate change, 97 % of climate scientists agree that climate change is anthropogenic. However, when the journalists used balance in articles about climate change, both the views of climate sceptics and climate believers were represented equally. The readers were then left with the impression that researchers disagree more about climate change than they actually do. The use of balance has therefore led to a bias in climate change reporting. Boykoff and Boykoff's study from 2004 showed that over half of their articles analyzed used *Balance* framing (Boykoff and Boykoff 2004, 129). Newer studies, however, state that this kind of use of *Balance* framing is not that common anymore. Both Boykoff (2007, 479) and Duarte (2010, 87) came to this conclusion regarding the media in the US and Norway. Duarte, for example, wrote in her thesis that 73 % of the articles she analyzed supported the IPCC's conclusions on anthropogenic climate change, while only 8 % were skeptical (Duarte 2010, 89).

According to Stoknes (2015, 113) *Distance* framing and *Loss* framing has also been common in the media. The *Distance* frame portrays climate change as an issue happening far away and in the future (Stoknes 2015, 49), and the *Loss* frame displays all the things we are going to lose because of climate change, such as butterflies and snow (Stoknes 2015, 113). Another, much referred to, Norwegian study from 2006 found that *Conflict* framing was very common in the Norwegian media. This frame focuses on

conflicts between individuals, groups or institutions as a way to catch the audience's attention. There was, however, no mention of adaption or technical solutions to climate change (Ryghaug 2006, 211). Eide and Ytterstad (2011, 54), on the other hand, found that Norway was being portrayed as global leaders during the Bali Summit in 2007 by the Norwegian national press. Even though these newspapers also pointed out Norway's double role as an oil nation.

To sum up, the most common frames found in other framing studies are *Disaster*, *Uncertainty* and *Balance*. Other studies explain how Norway is being portrayed as a national hero in the climate debate (Eide and Ytterstad 2011, 43), and the *Conflict* frame was a common frame in Norwegian newspapers (Ryghaug 2006, 211). Other frames like *Loss* and *Distance* have also been used (Stoknes 2015, 49, 113). Researchers argue that we have to reframe the debate on climate change by introducing more positive stories and frames focusing on, for example, solutions (Lakoff 2010, Spence and Pidgeon 2010, Ring 2015 and Stoknes 2015). However, none of the existing studies I have read so far indicates that such a reframing has started.

Many frames appeared during my analysis; however, in order to simplify the results, these were categorized into four main groups – *Business as usual*, *Disaster*, *Green shift*, and *Natural science*. In my study, I used several designations for framing devices, some of them deriving from existing literature, some invented by myself for the purpose of this thesis. What I call *Business as usual* and *Natural science* were framings coined by myself. These frames refer, respectively, to a "continuous use of fossil fuels", and "focusing on the natural science findings about climate change, with no emphasis on the social consequences or systemic causes". *Disaster* and *Green shift*, on the other hand, are framings borrowed from existing literature. These frames can be defined, respectively, as "an emphasis on general or specific adverse consequences or impacts from climate change" (Painter 2013, 46), and "an unstoppable, continuing process of change that embraces everything that gives greater resource productivity and lower emissions" (Mossin 2015). The sub-frames influence how the main frames were used, as the further discussion will show.

There are several attachments relevant to this chapter in the appendix: Appendix A-D shows an overview of all the frames and discourses used in the newspaper/sites.

An overview of the translated media quotes used in the analysis appears in Appendix E, while definitions of all the frames can be found in Appendix F.

2.2 Newspaper Analysis

As Table 1 in the methodology shows, I used different search words when collecting articles for the newspaper analysis. Some of these phrases were "global warming", "climate change", and "climate crisis". None of these phrases produced enough results to use them in the collection, so I ended up using climate*. However, I still wanted to do a word count of these three phrases in the articles analyzed for this thesis. The goal was to understand how climate in itself is defined in *Bergens Tidende*, *Sysla* and *Energi og Klima*. These phrases might indicate different perceptions of climate change, i.e. the phrase "climate change" would perhaps mean that there is just a shift or a change in climate, while "global warming" might be framed as a nice thing for Norway, and "climate crisis" could mean more dramatic consequences. The table below shows the results from the word count.

Table 2: Word count for "climate change", "global warming" and "climate crisis" in articles from Bergens Tidende, Sysla and Energi og Klima.

Newspaper/site	Climate change	Global warming	Climate crisis
Bergens Tidende	78	9	2 (26) Synonyms[2]: Climate battle 4 Climate catastrophe 1 Climate challenge 10 Climate destruction 1 Climate harmful 1 Climate problem 4 Climate threat 3
Sysla	31	0	1 (8) Synonyms: Climate challenge 4 Climate danger 1 Climate problem 2
Energi og Klima	55	9	0 (5) Synonyms: Climate battle 3 Climate damage 1 Climate dangerous 1
Sum	168	18	3 (39)

[2] Original synonym: Klimakamp; Klimakatastrofe; Klimatrussel; Klimautfordring; Klimaødeleggelse; Klimaskadelig; Klimaproblem; Klimafarlig; Klimaskader

As Table 2 shows, "climate change" was the most used phrase in the articles. This phrase was used nine times more than "global warming", and 56 times more than "climate crisis". However, taking the synonyms[3] of "climate crisis" into account, "climate change" has only been used 4.3 times more. This might indicate that climate change in the Norwegian west coast press was largely framed as a *shift* – a change that is happening to climate. However, the fact that this is a battle, a challenge and problem that may be catastrophic and dangerous, was signaled through the implicit synonyms used for "climate crisis", such as "climate battle" or "climate problem". An example of this s the article "Climate change hits the world's poorest hardest", which discussed how the people who have contributed the least to climate change will suffer most from the consequences (BT 10.11.15). This article illustrates that climate change was framed as dangerous for the world "out there", but not in Norway. I.e. climate change was defined as a climatic shift happening in Norway, and a threat, problem and catastrophe happening to future generations and other countries. There is in other words a distance between Norway and climate change, which was emphasized by the media's framing. The problem with this story is that it is not mobilizing the public, it is not interesting and does not make climate change feel relevant. Neither does this story explain how Norway might be affected by the changes happening in the world, such as migration or wars.

2.2.1. Bergens Tidende

Bergens Tidende was founded in 1868 and values itself as a freestanding, liberal and politically independent newspaper (Bergens Tidende 2017). It is considered the most important daily newspaper on the west coast of Norway, and has been the largest newspaper outside of Oslo since the 1920s (Pettersen 2016). According to the yearly media usage survey Forbruker & Media (Consumer & Media), *Bergens Tidende* had 138 000 average readers per day in 2016 (Medienorge 2017). The editorial management's task is to create a newspaper that gives the readers in urban and rural areas a factual and true orientation about what is happening locally, nationally and internationally (Bergens Tidende 2017). When writing about climate change, the paper

[3] "Crisis" is defined as "a time of great danger, difficulty or confusion when problems must be solved or important decisions must be made" (Hornby 2005). The synonyms were found through the use of this definition.

aspires to present the news in the way that makes the subject feel relevant to the reader, and does not require much background knowledge about it (Ben, BT, 02.03.17).

The three main frames used in *Bergens Tidende* between 01.06.15 – 01.06.16, were *Green shift*, *Disaster* and *Business as usual* (see Appendix A for all the details). *Green shift* was the main frame in the news section and the feature/comments/editorial section of *Bergens Tidende*, while *Disaster* was the main frame in the foreign affairs section. *Business as usual* was the second most common main frame in the news section. The news section and the foreign affairs section will therefore be discussed separately. The two most common discourses used in *Bergens Tidende* were *green consciousness*, and *limits and survival*. The first was the most common discourse in the news section, while the latter was the most common discourse in the foreign affairs section. The table below sums up my findings from *Bergens Tidende*.

Table 3: The main frames and discourses used in Bergens Tidende.

All of *Bergens Tidende*	**The news section**	**The foreign affairs section**	**Editorial, comments and feature section**
Frames			
Green shift 28 articles (56 %)	*Green shift* 12 articles (52.2 %)	*Disaster* 10 articles (58.8 %)	*Green shift* 10 articles (100 %)
Disaster 13 articles (26 %)	*Business as usual* 7 articles (30.4 %)	*Green shift* 6 articles (35.3 %)	
Business as usual 8 articles (16 %)	*Disaster* 3 articles (13 %)	*Business as usual* 1 article (5.9 %)	
Natural science 1 article (2 %)	*Natural science* 1 article (4.3 %)		
Discourses[4]			
Limits and survival 14 articles (28 %)	*Green consciousness* 7 articles (30.4 %)	*Limits and survival* 8 articles (47.1 %)	*Green consciousness* 5 articles (55.6 %)
Green consciousness 13 articles (26 %)			

The news section of *Bergens Tidende* told a story about individual people and the industry's efforts in reducing their emission as a part of the green shift. However, what was also discussed was how some governments wish to continue with oil and gas production, and how carbon capture and storage technology should be developed further. An example of *Green shift* framing appeared in the article "To Paris to save the climate", where the interviewee stated: "The terrorist attacks were frightening.

[4] I only included the most common discourses in the tables used in this chapter, since these are the discourses discussed in this chapter. Other discourses were also used in the articles, as shown in Appendix C and D.

However, if there is one cause that makes me to travel to Paris right now, then it is the fight for a good and fair climate agreement" (BT 30.11.15). [5] This quote shows how activists travelled to the Paris-meeting even though demonstrations were cancelled because of the recent terror attacks. They wanted to make a difference and do their part in order to save the environment, so they took the bus from Oslo to Paris to attend the meeting (Kristiansen 2015). However, one could also argue that if they went to Paris to save the world, flying and driving the bus, which this trip involved, together to Paris produces climate gas emissions. It would therefore be better to choose the most climate friendly travel method, which would be the train. On the other hand, taking the train all the way from for example the northern parts of Norway to Paris, would in some cases not be possible or at least be very time consuming. Therefore, travelling to Paris to pressure the politicians and governments could lead to systemic changes, which would make it easier to choose the most climate friendly transport method in the future. In this article the frame *Small actions*[6] was also used. This frame can be seen as a sub-frame of the *Green shift*, since this frame discussed how individual people can or have changed their lives, or are making great efforts to reduce the world's climate gas emissions. However, one could discuss whether putting the focus on individual people's efforts is the most efficient tactic. To change the system or for example a whole industry, would clearly lead to more reduction in emissions than for example some people eating less meat. It is understandable, however, that this section of *Bergens Tidende*, which aims to target the general public, is used to write about subjects that feel relevant to those readers. Focusing solely on industry or government might make the subject feel more distant to the readers. The readers might also perhaps feel that there is nothing left for them to do, so why bother.

Another way the news section of *Bergens Tidende* used *Green shift* framing was by discussing how new technology can reduce industry emissions. For example in the article "Asks for help with green smelters":

> "The Ilmenitic smelter has plans ready for a radical restructuring of the production process. In the future, the industrial pipes in the industrial area will release water vapour, not CO_2 as today" (BT 02.02.16).

[5] All quotes from the newsarticles are my translation, except otherwise stated. See Appendix H for the original Norwegian quotes.
[6] (Shanahan 2007) *Small actions* was used in 6 articles (26,1 %) in the news section.

This quote shows how there will be a restructuring process that will lead to reduced emissions, however, it will still be possible for the factory to have greater resource productivity. In other words, the factory does not need to shut down in order to reduce its emissions. Instead, new technology will solve the factory's problem related to greenhouse gas emissions.

Chapter 1 briefly mentioned how the media in the west coast of Norway might be affected by the oil and gas industry when writing about climate change. *Bergens Tidende* mostly wrote about this industry when they used the frame *Business as usual*. For example in the article "This is how we will reach the Paris-targets", the previous leader of the socialist party and now leader of the climate research institute CICERO, Kristin Halvorsen, was quoted saying: "Carbon capture and storage is the only solution to keep global warming below two degrees" (BT 09.03.16). In other words, Norway can continue with the oil and gas industry since new technology can solve the problems regarding emissions from the production. However, this article does not point to the fact that Norway has already spent considerable efforts and resources on trying to develop carbon capture and storage technology. The previous Prime Minister Jens Stoltenberg is known for his "Moon landing" project, which did not end well. This way of framing does in other words imply that technology will solve many of the problems related to climate change in Norway. However, research has shown that even though new technology makes products more energy efficient, this has not led to a reduction in greenhouse gases, because overall consumption has increased (Wilhite 2013, 65).

Green consciousness discourse was the most common discourse in the news section of *Bergens Tidende*. As previously discussed in chapter 1, the *green consciousness* discourse contends that the key to change is to steer people's consciousness in the direction of a climate friendly future. Once that happens remaining elements such as politics, social structures, institutions, and economic systems will then fall into place (Dryzek 2005, 181). This fits with the sub-frame *Small action* being used in the green shift discussion.

Characteristically, the main frame used in the foreign affairs section was *Disaster*. This is interesting because it shows how *Bergens Tidende* mainly reported about climate disasters in a "foreign context". However, this would be a good place to also report and discuss how the consequences of what happens in other countries might affect Norway.

For example, higher temperatures and ice melting will open up for a new trade route in the Barents Sea; however, it will also create more tension with Russia. Instead, *Bergens Tidende* focused on the dramatic aspects of climate change. For example "Four things you should know about the 2-degree Celsius target". The article states that: "Damaged ecosystems, more drought and flooded lands are some of the effects that may come" (BT 01.12.15). It has been argued that communicating through fear is a common way of communicating topics related to climate change, and the intention is to "scare" people into action (Ring 2015, 411). Hulme (2009b, 126) showed through his analysis that *Disaster* framing was overwhelmingly used in the UK media when reporting about the IPCC Fourth Assessment report, and talk about adaption was largely absent. In the articles using *Disaster* framing in *Bergens Tidende,* however, talk about how we should adapt or act now to limit global warming is often discussed in the same article. The focus on drama was therefore used to justify why we have to act now. However, the consequence of climate change being discussed in a foreign context is that it emphasized the distance between Norway and the disasters. Such as in the article "Burkina Faso addresses the fight against climate change": "The changing climate just south of the Sahara have generated terrorists from Mali and migration away from the area" (BT 30.11.15). This article discussed how the people who have contributed the least to climate change are paying the price. It is getting harder for them to grow food, which forces people to leave their home or, in some cases, join terrorist groups.

The foreign affairs section also used *Green shift* framing. However, instead of pointing to individual people's efforts like the news section, this section discussed the green shift at national and international levels. For example, in the article "Climate minister believes in historic breakthrough", where the climate minister is quoted saying: "We want binding national emission targets, but there is unfortunately no mood for this among some of the largest emitting countries, like the US, China and India" (BT 23.07.15). In this quote the blame is put on the US, India and China, while Norway was portrayed as a hero fighting for the Paris agreement. However, the article does not discuss how Norway plans to reconcile oil and gas production back home, while cutting emissions in other countries though carbon offsets.

The most common discourse used in the foreign affairs section of *Bergens Tidende* was what Dryzek called *limits and survival*. According to Dryzek the followers

of this discourse speak of limits or planetary boundaries, and that human demands threaten these boundaries, putting humanity in danger (Dryzek 2013, 35). This fits with the main frames used in this section, because *Disaster* framing implies that there is a limit, otherwise there would not be any danger of exceeding 2 degrees Celsius of global warming. Nor would there be any need to act now, or to stress that the consequences of climate change are happening now, and the world's poor will suffer even more because of it. However, the definition of green shift implies that there should be both economic growth and a reduction of greenhouse gas emissions. This contradicts the *limits and survival* discourse, which seeks a reorientation away from perpetual economic growth (Dryzek 2013, 16). On the other hand, when this frame is used in articles with *limits and survival* discourse, the main theme of the articles is usually about climate change having serious consequences. These articles argue that we should act now to reach the targets, and therefore stop using fossil fuels and shift over to more sustainable forms of energy. This is seen in the article "Good tailwinds for renewable energy", which explains how scientists are becoming surer about the negative consequences of global warming. The article discussed the great risk associated with the path we are on and explained how extreme weather will become more common, and the green shift was mentioned as a positive development: "Therefore it came as good news that we produce more green energy than scientists thought" (BT 12.07.15). I interpret this quote as indirectly talking about the green shift, by simply stating that more renewable energy is being produced. However, this production would not have happened if there were not a market for it, i.e. the possibility for greater resource productivity. The discussion later on will show that the *Green shift* frame is more in line with the *ecological modernization* discourse.

The last section of *Bergens Tidende,* which consists of articles from different sections of the paper such as editorial, comments, and features, included ten articles in the period under scrutiny. The main frame was *Green shift* with a focus on individual people's efforts, and the most common discourse was that of *green consciousness*, which is consistent with the news section. This section will therefore not be discussed further.

To sum up, in the above I have shown how the framing pattern in *Bergens Tidende* highlights the green shift, the consequences of climate change, and oil and gas production. Through *Green shift* framing, *Bergens Tidende* focused on different levels –

how each individual can contribute, what the industry should do, and what governments have to solve. However, there was still a sense of "the green shift should be happening" – or is a wished necessity – rather than a portrayal of how the green shift is happening now. This could make this topic seem distant to the reader, as chapter 3 will show. Still, *Bergens Tidende* was stressing that climate change will lead to severe consequences if left untreated. However, somewhat contradicting this was the reporting of how some governments wish to continue with oil and gas production, and the need for developing carbon capture and storage technology. This is a very provincial and one-sided framing. Climate change was framed as a shift handled by politicians, new technology and *Prometheans*. The consequences of climate change was described in a foreign context, which is further distancing the topic for the readers. There was no mentioning of how changes in other countries might affect Norway. This is a selfish framing that does not include all aspects of climate change.

2.2.2. Sysla

As mentioned in chapter 1, *Sysla* is a digital news site founded in 2014 (Sysla 2016). The green section in *Sysla* was founded in 2015 (Hirth 2015). *Sysla* aims to cover the industry around the west coast of Norway in more detail than other papers do. Professional readers are in their target group, but they still wish to write in so simple a manner that everyone will be able to understand their articles, while simultaneously bringing new knowledge to professional readers (Sally, Sysla, 20.02.17). *Sysla* has 25 000 daily readers; 25 000 of these read the oil and energy section, while 5 000 also read the green section (Sysla 2017). When writing about climate change, the green section of *Sysla* has adopted the assumption that climate change is anthropogenic, and that the Anthropocene will lead to changes in society, both climatic and within the industry (Seth, 21.02.17).

The two main frames in *Sysla* were *Business as usual* and *Green shift*. However, looking at the most common frames in *Sysla* in this manner gives a distorted picture. I analyzed articles from two sections of *Sysla*, the green section (*Sysla Grønn)* and the oil and energy section *(Sysla Olje og Energi)*. *Green shift* framing was only found in the articles from the green section of *Sysla*. *Business as usual* was found in both sections, but was much more common in the oil and energy section of *Sysla* than in

the green section. The most common discourses used in *Sysla* are what Dryzek (2005, 51) calls *Promethean* and *ecological modernization*. Looking closer at the two different sections, it becomes clear that the *Promethean* discourse was the most common discourse in the oil and energy section of *Sysla*, and *ecological modernization* was the most common discourse in the green section. These two sections will therefore be discussed separately. The table below sums up the findings from *Sysla.*

Table 4: The main frames and discourses used in Sysla.

All of *Sysla*	**Oil and energy section**	**Green section**
Frames		
Business as usual 25 articles (50 %)	*Business as usual* 19 articles (100 %)	*Green shift* 22 articles (70.9 %)
Green shift 22 articles (44 %)		*Business as usual* 6 articles (19.4 %)
Disaster 3 articles (6 %)		*Disaster* 3 articles (9.7 %)
Discourses		
Promethean 19 articles (38 %)	*Promethean* 16 articles (84.2 %)	*Ecological modernization* 16 articles (51.6 %)
Ecological modernization 18 articles (36 %)		

The oil and energy section of *Sysla* told a narrative about how we can continue with oil and gas production in Norway, because technological innovations will make the production cleaner. According to *Sysla,* oil companies are doing their part in reducing their emissions. The fact that we need oil, both to maintain the welfare state, and in order to give people more energy, was also present in the articles.

Business as usual framing was used in several ways in the articles from the oil and energy section. One example is the article "- Tough realities for the oil industry", where the CEO of Statoil was quoted saying:

> We know that the demand for energy is increasing. We also know that renewable energy must cover the majority – if not all – of this growth. Oil and gas will continue to be very important energy resources. Even in a two-degree world scenario, we will still need oil and gas at approximately the current level in 2040 (Sysla 23.11.15).

The green shift does imply that we have to restructure our society, and use less fossil fuels and more renewable energy. In this quote, however, Statoil claims that even with an increase in renewable energy production, oil and gas are still needed. Further down in the article the general secretary in the International Energy Agency was quoted saying that the world one day will need the huge oil and gas resources located in the

Arctic. When questioned about whether climate politics will break the oil and gas industry, the general secretary claims that it is the coal industry that will suffer most under a climate agreement, not oil and gas (Sysla 23.11.15). He thereby draws attention to the worse of the two evils. This article does not raise questions about whether the oil and gas industry will still be profitable in a greener world. Instead, it supports the industry's arguments regarding a continuance of fossil fuel production no matter what. Another example of *Business as usual* framing is the article "- We will take Subsea technology longer, deeper and colder", where the director in Statoil was quoted saying:

> We have to reduce the world's greenhouse gases, and we want to be part of the solution. We want to strengthen our efforts in reducing our carbon emissions by producing as sustainably as possible. Statoil's ambition is to be the most carbon efficient oil and gas producer in the world, and I am sure that subsea development will contribute to that (Sysla 17.06.15).

In this quote, Statoil used many sub-frames to support the main frame, *Business as usual*. However, the main message was that new technology will make production cleaner, and that Statoil does everything in its power to become more sustainable, allowing a continuation of oil and gas production. By framing its message in this way, Statoil gives the *Business as usual* frame a green twist. This might seem like it wants to be a part of the green shift, but in reality it is business as usual disguised as green shift. Another interesting part of this article is that the journalist did not ask any critical questions about Statoil's agenda in promoting the subsea development. There were no critical questions raised about whether there is room for fossil energy in the future. The fact that Statoil takes responsibility and tries to reduce its emissions is of course a good thing, but questions have to be asked regarding how much fossil fuels we should use and for how long. The article also gives the impression that technology will solve all of our problems, even though it will not solve all the problems connected to the actual use of fossil fuels.

Why the oil and gas industry claims that we still need fossil fuels has also been elaborated upon in some articles. For example in the article "The oil association is inviting to a climate dugnad"[7], where the CEO of *Norsk Olje og Gass* (Norwegian Oil

[7] Dugnad is a Norwegian concept word, which can be translated to voluntary work, but the true meaning of the word is hard to translate since it embodies the Norwegian culture and way of life. By using

and Gas) is quoted saying: "Reduced greenhouse gas emissions is essential for the world's climate. High production is important for society to provide good health care and good schools" (Sysla 10.03.16). By putting climate up against the welfare state in this way, the interviewee implied that caring about the world's climate is important. However, we need oil if we are going to continue receiving the goods society is giving us now. In other words, cutting back on the oil industry also means cutting back on the welfare state. To frame this as a loss is very effective framing. However, this does not always mean that the readers are buying in to this story, which will be discussed more in chapter 3.

Sysla's goal is to cover the industry on the west coast of Norway, and as chapter 1 discussed, the oil and gas companies are a big part of this industry. The oil and energy section of *Sysla* naturally favors this industry's perspectives on climate change. However, one could discuss whether this industry portrays the best way to handle climate change. News articles from this section of *Sysla* were therefore a good example of how the oil and gas industry in Norway influenced the media's climate change reporting.

As already mentioned, the *Promethean* discourse was the most common discourse used in the oil and energy section of *Sysla*. As explained in chapter 1, *Prometheans* nearly deny the very existence of nature, or at least place humans on the top of the hierarchy, dominating everything else. They believe that the supply of natural resources is infinite – if more is needed, more will be found. They insist on human transformative powers to produce more energy. Given enough energy, all matter is infinitely transformable. The followers of this discourse believe that "with enough energy, with the fruits of economic growth, we can also take care of pollution". Pollution, according to the *Prometheans*, is simply just matter in the wrong place in the wrong form, and this can be corrected through enough skilled application of energy (Dryzek 2013, 59-61).

This perspective is expressed through many of the analyzed articles from the oil and energy section of *Sysla*, for example in one article where the CEO of *Norsk Olje og*

"dugnad" in this headline, the journalist is describing how the oil association encourages everyone in the oil industry to participate in the fight against climate change.

Gass claims that there are still huge resources left in the Norwegian Continental Shelf. This is energy the world will need during the next decades, despite increased access to renewable energy and the need for solving the climate challenge (Sysla 18.11.15). Even though most *Prometheans* deny the existence of climate change, there are *Prometheans* who acknowledge its existence (Dryzek 2013, 57). According to Dryzek (2013, 58) a new kind of *Promethean* environmentalism has even evolved, subscribed to by a *Promethean* who "recognizes the severity of problems but would confront them with technology, developed and deployed by governments as well as markets". The Norwegian oil companies presented in many of the mentioned articles seem to fit right into this category.

The green section of *Sysla* told a story about how the green shift is happening, that new technology will solve the climate crisis, and that it is actually possible to benefit from this adaptation. However, arguments about a continuance of oil and gas production were also present in this story. One example of *Green shift* framing is the article "This is how Norway is going to make money after oil", which quotes a report focusing on how Norway can cut its greenhouse gas emissions by 40 % from 1990-levels within 2030: "Even though climate change is a problem that needs to be solved, the transition to a low-carbon society gives great financing opportunities" (Sysla 20.10.15). Some of Norway's biggest companies were behind this report, and their goal was to show the government how the Norwegian industry supports a green shift. As the quote shows, the companies did not hide the fact that it is possible to make money out of this. *Sysla* had many articles reflecting on this opportunity, not just for businesses, but also for individual people and for example the military. The article "Now the Armed Forces are also getting solar panels on their roofs" discussed how a military defense base in Bergen installed solar panels on its roofs. By doing so, climate gas emissions will be reduced, but the military also reflects on the fact that they were going to save money because of this (Sysla 03.09.15).

What I call *Opportunity* framing can be seen as a sub-category of the *Green shift* frame, since it shows both how we can earn money and reduce emissions simultaneously. Only once has this frame been used in relation to climate change being a good thing. In the article "Climate change makes Norwegian hydropower more valuable", it is stated that climate change will lead to more rain which means that

Norwegian hydropower can produce more and thereby make more money, i.e. doing nothing about climate change leads to the opportunity to make more money (Sysla 15.10.15). This is interesting because Painter (2013) showed in his study that the *Opportunity* frame has most often been used in relation to the type of opportunity coming from *not doing anything* about reducing greenhouse gas emissions. In the green section of *Sysla,* however, this sub-frame has usually been used in relation to people making more money because of efforts they have made to reduce their greenhouse gas emissions.

Other articles also discussed how new technology is a solution in terms of lowering climate gas emissions, for example in the article "Industry efforts produce results", written by Enova[8]. The Program Director for the industry sector in Enova is quoted saying:

> If Norway is going to have a competitive industry and low greenhouse gas emissions in the future, then Norwegian industry must become energy efficient and adopt new energy and climate technology (Sysla 20.05.16).

Since *Sysla* covers the industry, publishing articles about how new technology could decrease its emissions should be a natural part of this. However, developing new technology is only a part of the solution. There are still many other ways the industry could lower its emissions, such as reducing energy consumption, recycling products, or having conference calls over the internet instead of flying.

An example of the presence of *Business as usual* framing in the green section is the article "Still room for Norwegian oil and gas", where the Oil and Energy Minister is quoted saying: "There is no doubt that the driver of greenhouse gas emissions in the world is coal. We definitely have the most to gain if we are to reduce the emissions there" (Sysla 10.11.15). His conclusion in the article is therefore that there is still room for "clean and sustainable" Norwegian oil and gas. In other words, Norway are the good guys, the rest of the world using coal is the bad guy who should stop what they are doing. One would not perhaps expect this framing in the green section of *Sysla*. However, this frame has not been used to the same extent as in the oil and energy section. In addition, the frame was used in articles discussing the oil and gas industry, and it was usually representatives from this industry who promote this frame.

[8] *Sysla* contains some articles that are written by their commercial department or their collaborators.

The most common discourse used in the green section of *Sysla* was that of *ecological modernization*. This fits with *Green shift* being the main frame and the focus on new technology, because as Dryzek writes in his book: "*Ecological modernization* addresses the restructuring of the capitalist political economy along more environmentally defensible lines" (Dryzek 2013, 145). According to Dryzek, the followers of this discourse believe that there is money to be made in this restructuring and transition. This also involves a search for green production technology and clean energy, but at the same time opens up the possibility for a more thorough transformation, involving both political and technological change (Dryzek 2013, 145-146). *Ecological modernization* expresses, in other words, what the green shift is all about: an ongoing process consisting of growth in resource productivity and a decrease in greenhouse gas emissions. *Ecological modernization* was used in half of the articles from the green section of *Sysla*. One example is the article "Go green or become extinct like the dinosaur", where the CEO of Unilever explains how Unilever have made money out of reducing their emissions and going green, and how he now wants other companies to do the same (Sysla 28.04.16).

To sum up, various sections of *Sysla* frame climate change in quite different ways. The oil and energy section focuses on how we still can, and have to continue with the oil and gas industry in Norway. According to this section, the industry is doing the best it can in order to reduce emissions resulting from production, and new technology will contribute to this. It is interesting how both sections focus on technology. Both claim that new technology will lead to decreased climate gas emissions. One section used this as an excuse to continue with business as usual; while the other section focused on how new technology will contribute to the green shift. The green section also frames the green shift as an opportunity for making and saving money. The message from *Sysla* is therefore contradictory, and it will be interesting to see what the readers and journalists have to say about this. However, just as with *Bergens Tidende*, *Sysla*'s framing is also provincial. *Sysla* only reports what has happened to the industry in Norway, and does not speculate on what could happen as a consequence of climate change. The oil and energy section is only concerned with the continuance of the oil and gas industry in Norway. It does not consider the fact that the renewable industry is growing in the rest of the world, and how this might influence the oil and gas industry in Norway. Also surprising is that the green section of *Sysla* does not consider this

either. They report mostly about the green industry in Norway. However, this is mostly positive news about this industry, they do not cover this industry critically either. *Sysla*'s framing is therefore superficial, provincial and not very mobilizing.

2.2.3. Energi og Klima

Energi og Klima is a digital opinion-carrying magazine, launched in 2011 (Energi og Klima 2016). As mentioned in chapter 1, its goal is to be the most important Norwegian source for debate, analysis and background information about climate, renewable energy and clean tech (Energi og Klima 2016). It aims to impart knowledge that contributes to reduced greenhouse gases and energy consumption and leads to the accelerated adoption of new technology and new energy forms (Ethan, EK, 14.02.17, Norsk Klimastiftelse 2017). The magazine has 10 – 12 000 readers a month, and the target group is opinion leaders and decision-makers (Ethan, EK, 14.02.17).

There were three main frames used in *Energi og Klima*: *Green shift*, *Disaster*, and what I call *Natural Science.* I analyzed articles from three different sections of *Energi og Klima*, and as with *Bergens Tidende* and *Sysla*, the different sections used the frames differently. The *Green shift* was the most common frame in the news section and the blog section, while *Disaster* and *Natural science* were the most common frames in the science section - *2℃*. The same goes for the discourses found in *Energi og Klima*. In total *ecological modernization* was the most common discourse, while *limits and survival* was the second most common discourse. Looking closer at the different sections, *ecological modernization* was by far the most common discourse in the news section. *Limits and survival*, on the other hand, was the most common discourse in the scientific section. The table below sums up the findings from the analysis of *Energi og Klima.*

Table 5: The main frames and discourses used in Energi og Klima.

All of *Energi og Klima*	**News section**	**Science section**	**Blog**
Frames			
Green shift 34 articles (68 %)	*Green shift* 26 articles (96.3 %)	*Natural science* 10 articles (66.7 %)	*Gren shift* 7 articles (87.5 %)
Natural science 10 articles (20 %)	*Disaster* 1 article (3.7 %)	*Disaster* 4 articles (26.7 %)	*Business as usual* 1 article (12.5 %)
Disaster 5 articles		*Green shift* 1 articles	

(10 %)		(6.7 %)	
Business as usual 1 article (2 %)			
Discourses			
Ecological modernization 25 articles (50 %)	*Ecological modernization* 20 articles (74.1 %)	*Limits and survival* 12 articles (80 %)	*Ecological modernization* 4 articles (50 %)
Limits and survival 20 articles (40 %)			

Through the news section, *Energi og Klima* told a story about how the green shift is an ongoing process that will not cease to exist, and how technological solutions are contributing to this process. It also stresses the notion that there is an economic risk connected to the continuance of fossil fuels production. A discussion of the consequences of climate change is also present in this story. It is not surprising that *Green shift* framing was the main frame used in the news section, considering that the editor of *Energi og Klima* is the one being credited for coining the term. In an article from journalisten.no he explains that he came up with the concept in collaboration with his previous colleagues in the environmental organization Zero (Mossin 2015).

Energi og Klima has a column every Friday, called "Fem på fredag" (Five on Friday), where the five most important climate news items of the week are discussed. Many of the articles analyzed in this thesis came from this column, where the status of the green shift was often discussed, for example in the article "Five on Friday: Renewable giant heading to court". The green shift is discussed several times in this article, one of which focusing on the coal industry in Scotland:

> On March 24th, 115 years of coal power in Scotland ended. This is the day Longannet coal power plant closed in Fife, once Europe's largest, after 46 years of operation. Longannet had previously supplied electricity to a quarter of Scotland's households. Scotland now covers half of its electricity consumption with renewable energy, and has ambitions to reach 100 percent by 2020 (Energi og Klima 01.04.16).

This quote is rather typical for *Energi og Klima*. When discussing the green shift, it talks about how it is happening now. Instead of discussing how the green shift might happen in the future, a message is sent about how it is an ongoing, unstoppable process. This fits with *Energi og Klima*'s agenda of speeding up the restructuring of society. This news platform is usually directed at the industry, governments etc. The question is:

should not this restructuring be about all parts of society? I.e. changes in our consumption patterns, lifestyle etc. So far no one of the articles analyzed have discussed this issue. The interview with the journalists, however, might shed some light on some of the reasons behind this omission.

Chapter 1 mentioned how oil and gas is a strong industry on the west coast of Norway, and questioned whether this might affect climate change reporting. It does not seem to do so in the case of *Energi og Klima.* It rather refers to this industry as "bad guys", and emphasizes the green shift. For example, when *Energi og Klima* discussed the green shift, it also points to how fossil fuels might not be profitable anymore. This is seen in the article mentioned above, "Five on Friday: Renewable giant heading to court":

> About 1500 new coal power plants are under construction or in the planning stages globally. Investors should be troubled. Nearly a billion dollars might be lost if climate and pollution measures render the new power plants unusable, according to a report from Sierra Club, Greenpeace and Coalswarm (Energi og Klima 01.04.16).

In this quote, *Energi og Klima* warn the reader about how a continuance of fossil fuels production poses an economical risk. This is what most clearly separates *Energi og Klima*'s framing pattern from *Bergens Tidende* and *Sysla*'s. The two latter forwards the oil industry's framing pattern of this matter. *Energi og Klima*, on the other hand, actively tries to reframe this story, which will be discussed more in chapter 4. However, one similarity between all of them is the focus on technology. For example, in the "Five on Friday" column, *Energi og Klima* also emphasized technological news. One of the journalists working in *Energi og Klima* explained that she like to include some uplifting news in this column, and a new, trendy, electric car is a classic example of this (Emma, EK, 15.02.17).

Ecological modernization discourse, as previously mentioned, was the most used discourse in the news section of *Energi og Klima*. This is consistent with *Green shift* being the most common frame, as shown in the discussion of the green section of *Sysla*. One example of an article where the *ecological modernization* discourse was present is the article "Five on Friday: Denmark gets rid of coastal windmills", which talks about one of the biggest companies in Norway's plans on becoming climate neutral:

> Family owned ASKO and its parent company Norgesgruppen AS aims to be climate neutral primarily by setting up its own wind farm in Rogaland, use large amounts of solar energy to cool goods and provide power to electric cars, and by producing biogas from its own food waste (Energi og Klima 13.05.16).

This quote shows how a large company in Norway is adapting towards a more climate friendly future by lowering its emissions. Its business consists of collecting food from all over Norway, storing it and then driving it in trucks to stores all over Norway - not very climate friendly at this time. However, by becoming climate neutral, this business can continue to grow.

I only analyzed eight articles from the blog section. This is perhaps too small a sample to show any patterns, since the frames found in these articles are mostly used one or two times. The exception, however, was the frame *Green shift* which was used in seven articles. The journalists working in *Energi og Klima* wrote some of the articles and comments. I assumed that the blog pieces might say something about the journalists' ideologies and opinions. The frames used in the blog section were similar to what the journalists stated during the interviews, which will be discussed more in chapter 4.

In the science section of *Energi og Klima*, the main framing was what I call *Natural science*. *Disaster* framing was also present in this section. This section told a story about how climate change will have catastrophic consequences when discussing the future or distant places, and stressed what will happen if we do not act quickly enough. It also stressed that some of these consequences can be seen now, and the fact that climate change is anthropogenic is often emphasized, even though it discusses the uncertainty regarding the research. Recent research was presented in most of the articles and this is explained in scientific terms, leaving out discussions of social or systemic causes. One example of *Disaster* framing is the article "The year when the temperature and champagne corks hit the roof":

> There is no room for doubt. Our emission of greenhouse gases into the atmosphere causes rapid heating, and we see increasingly clearer consequences in the form of floods, drought, heat waves, sea level rise and challenges related to access to water and food (Energi og Klima 26.01.16).

This article discusses the official figures from the major weather centers in the world, all confirming that 2015 was by far the warmest year ever recorded on Earth. The quote is from the first part of the article, confirming that the temperature rise has serious consequences for life on earth. This article also used the frame *Natural science* by emphasizing that there is no room for doubt. This is elaborated upon in the article:

> What we can say with great certainty is that the trend is clear. Single years do not change the fact that the earth is warming up, and that we are constantly approaching what researchers characterize as dangerous climate change (Energi og Klima 26.01.16).

Other articles from the science section delve even further into the science of climate change. For example the article "Ocean acidification threatens the food chain – our areas are particularly vulnerable" (Energi og Klima 26.12.15), quotes scientists who talk about how ocean acidification happens much faster in the Norwegian Sea and in the arctic than elsewhere in the world. This is exemplified by discussing pH-levels, and the proportion of carbonate ions and carbonic acid among other scientific terms. This is interesting; however, these scientific terms might be difficult for lay people to understand. *Energi og Klima* wishes to convey research to a wider audience through the scientific section (Ethan, EK, 14.02.17). However, this might turn out to be difficult if readers find it difficult to follow the content in these articles. In addition, framing climate change as catastrophic, and then talking about the natural science evidence, is perhaps not very helpful either. This might make the topic seem even more distant. Both the *Disaster* frame and the *Natural science* frame are also among the frames scientists argue we should not use (see more on it in chapter 3).

The *limits and survival* discourse was the most common discourse in the scientific articles in *Energi og Klima*. The discussion from the foreign affairs section of *Bergens Tidende* mentioned how this discourse is consistent with the *Disaster* framing used in this section. The same argument applies to the scientific section of *Energi og Klima*. *Natural science* framing also implies that there are limits that can be reached, which is consistent with this discourse. The *limits and survival* discourse is used to a much greater extent in the scientific section of *Energi og Klima* than in *Bergens Tidende*.

To sum up, *Energi og Klima* told a story about the status of the green shift, how business as usual regarding the oil and gas industry might prove to be a financial risk, and how new technology is a solution to solving the climate crisis. The disastrous consequences of climate change have both been used as a justification for societal changes, and as an exemplification of the dangers connected to climate change. *Energi og Klima*'s aspiration is to convey scientific information related to climate change to a wider audience. However, its articles focused on natural science, and might be difficult for the readers to follow. I argued that both *Bergens Tidende* and *Sysla*'s framing patterns were provincial, selfish and shallow. *Energi og Klima*, on the other hand, actively tries to reframe the climate change debate, and as chapter 4 will show, this is a conscious act from the journalists. However, their framing is still very technology oriented, which might have a distancing effect on the readers. Their framing also do not embrace all parts of society. They do not talk about the individual responsibility of the readers, or have any kind of visionary framing showing what a climate friendly society looks like.

2.2.4. Comparison of Bergens Tidende, Sysla and Energi og Klima

Table 6: The main frames and discourses used in Bergens Tidende, Sysla and Energi og Klima.

***Bergens Tidende* news section**	***Bergens Tidende* foreign affairs section**	***Bergens Tidende* editorial, comments and feature section**	***Sysla* oil and energy section**	***Sysla* green section**	***Energi og Klima* news section**	***Energi og Klima* science section**	***Energi og Klima* blog**
Frames							
Green shift 12 articles (52.2 %)	*Disaster* 10 articles (58.8 %)	*Green shift* 10 articles (100 %)	*Business as usual* 19 articles (100 %)	*Green shift* 22 articles (70.9 %)	*Green shift* 26 articles (96.3 %)	*Natural science* 10 articles (66.7 %)	*Gren shift* 7 articles (87.5 %)
Business as usual 7 articles (30.4 %)	*Green shift* 6 articles (35.3 %)			*Business as usual* 6 articles (19.4 %)	*Disaster* 1 articles (3.7 %)	*Disaster* 4 articles (26.7 %)	*Business as usual* 1 article (12.5 %)
Disaster 3 articles (13 %)	*Business as usual* 1 article (5.9 %)			*Disaster* 3 articles (9.7 %)		*Green shift* 1 article (6.7 %)	
Natural science 1							

article (4.3 %)							
Discourses							
Green consciousness 7 articles (30.4 %)	*Limits and survival* 8 articles (47.1 %)	*Green consciousness* 5 articles (55.6 %)	*Promethean* 16 articles (84.2 %)	*Ecological modernization* 16 articles (51.6 %)	*Ecological modernization* 20 articles (74.1 %)	*Limits and survival* 12 articles (80 %)	*Ecological modernization* 4 articles (50 %)

As the table above shows, *Green shift* framing was the most common frame used in the news articles in the west coast media. This frame was the main frame in *Bergens Tidende*, the green section of *Sysla*, and the news section of *Energi og Klima*. However, they all used this frame slightly differently. *Bergens Tidende* used this frame when discussing how individual people, the industry, and governments contribute to the green shift. The green section of *Sysla*, on the other hand, focused solely on the industry, discussing both how new technology will lead to reduced emissions, and how the green shift provides new opportunities. *Energi og Klima*, however, discussed the status of the green shift, referring to how it is an ongoing process. It also discussed how new technology would provide a solution to the climate crisis, while stressing how a continuance of oil and gas production presents financial risks. The main difference between these framing patterns is that *Energi og Klima* talked about the green shift as something happening now – a process impossible to stop. *Sysla* also talked about how the green shift is happening now, but from the perspective of the industry in Norway. The reader therefore does not get the same broad picture of the green shift as being something that is occurring in all countries and all sectors. By comparison, *Bergens Tidende* discussed the green shift more in terms of something that should be happening. It did not place an equal amount of attention on how the green shift is happening now, focusing instead on how we can make it happen at different levels.

Bergens Tidende, *Sysla* and *Energi og Klima* show some similarities though, one of them being the focus on new technology. According to all of them, new technology will lead to reduced emissions, and is therefore a solution to solving the climate crisis. This is interesting because, with the exception of some articles in the news section of *Bergens Tidende*, neither of the newspaper/sites discuss how we have to reduce our consumption or make changes throughout all of society to reduce our climate gas emissions. Instead, the readers are left with the impression that technology will solve all

of our problems. This might be related to the oil and gas industry's strong position in Norway.

Business as usual framing was present in all newspaper/sites, however, it was most used in the oil and energy section of *Sysla*. Through this frame, this section told a story about how the oil and gas industry is doing everything it can to reduce its emissions; however, we still need oil. Therefore, we should continue with fossil fuels, because new technology will make the production cleaner. The emphasis on new technology is in other words also evident here. According to the west coast media, new technology will truly solve all problems. New technology can solve the climate crisis, and make it possible for the oil and gas industry to continue with fossil fuel extraction. The fact that new technology can only make the production cleaner, and not solve the problems regarding emissions from the actual use of fossil fuels, is not discussed. The influence from the oil and gas industry was most evident in the oil and energy section of *Sysla*. This section seemed to favor the oil and gas industry's perspective on climate change. *Bergens Tidende* also discussed how carbon capture and storage should be developed in order to reduce emissions from fossil fuel production. However, the newspaper did not discuss the matter at the same length as *Sysla* did.

Energi og Klima had a more critical view on this industry. It referred to this industry when discussing the status of the green shift, expressing how some governments and companies do not acknowledge the shift that is happening. *Sysla's* goal is to cover news about the industry, while *Energi og Klima* has an agenda geared towards reducing climate gas emissions and contributing to the green shift. This clearly affects how much they are influenced by the oil and gas industry's opinion.

Disaster was one of the other main frames used in all the newspaper/sites. This was one of the main frames used both in the foreign section of *Bergens Tidende*, and in the science section of *Energi og Klima*. In both sections, this frame was used when discussing the future consequences of climate change. As mentioned in the beginning of this chapter, many studies found the *Disaster* frame to be the most common frame used in international media. According to Painter (2013, 112), this was also true for the Norwegian newspapers. However, Painter analyzed articles from *VG, Dagbladet* and *Aftenposten.* The two former dailies can be considered as non-subscription based tabloids, and might therefore rely on drama in order to sell more newspapers. The

Disaster frame was used more as a statement in *Bergens Tidende* and *Energi og Klima,* to stress that climate change is a serious issue with serious consequences; therefore, we have to act now. However, they only talked about these consequences in a foreign context. They did not discuss how international catastrophes and climate change might influence Norway. The word count in table 2 confirms these findings. Climate change was defined as a threat and a problem happening to future generations and other countries. This way of framing climate change further distance the topic for the Norwegian readers, instead of mobilize and inspire them to take action.

The science section of *Energi og Klima* also used *Natural science* as one of its main frames. Through this frame, the science behind climate change was discussed. The fact that climate change is anthropogenic was stressed in many of these articles. In fact, neither *Bergens Tidende*, *Sysla* nor *Energi og Klima* questioned this fact. This is consistent with other research. Olausson (2009, 430), for example, found an unquestioned, taken-for-granted frame of certainty in the Swedish press. The science section of *Energi og Klima* did, however, discuss some uncertainties regarding climate change. Uncertainty was one of the most common frames used in media in general (Stoknes 2015, 119). A lot of science is about uncertainty, but lay people have often interpreted this as lack of knowledge (Painter 2013, 7), while journalists have been criticized for not making clearer which research there is uncertainty about, and what is certain (Painter 2013, 42-43). This does not seem to be the case when this frame was used in *Energi og Klima.* It is quite clear that scientists are certain about climate change being anthropogenic, while there are still some uncertainties about for example future consequences. Other framing studies also focused on the *Balance* frame. According to these studies, this frame has often been used when discussing whether climate change is anthropogenic or not. Scientists skeptical to the concept of climate change has been interviewed alongside with the huge majority of scientists who supports anthropogenic climate change, which has led to a bias in the reporting (Boykoff and Boykoff 2004, 129). This has not been the case in any of the news articles analyzed for this thesis. The journalists used balance as a way to express both sides of a matter. Using balance in this way is more in line with the classical journalistic norm of presenting all sides equally, and has not led to a reporting bias in the articles.

Looking closer at the discourses used in the papers, many similarities appear. *Limits and survival*, for example, was used in both the foreign affairs section of *Bergens Tidende*, and the science section of *Energi og Klima*. These two sections are also the ones to use the *Disaster* frame, in addition to *Natural science* framing in the science section, which entails there being limits that were overstepped, just as the *limits and survival* discourse claims. *Ecological modernization* was the most common discourse, used in the green section of *Sysla* and the news and blog section of *Energi og Klima*. *Green shift* was, as already mentioned, the most common frame in these sections. According to this frame, there is an ongoing, unstoppable process that will lead to greater resource productivity and lower emissions, and technological solutions will contribute to that. This is really what *ecological modernization* is all about, since the followers of this discourse believe there is money to be made in the restructuring and transition of society along more environmentally defensible lines, which also involves a search for green production technology and clean energy (Dryzek 2013, 145-146). The news section and the feature/comment/editorial section of *Bergens Tidende* were the only sections to use the *green consciousness* discourse, and the only ones focusing on individual people's efforts through the *Green shift.* This would explain the popularity of this discourse, since both the discourse and this way of framing are about making bottom-up changes (Dryzek 2005, 181). The oil and energy section of *Sysla* was the only section to use the *Promethean* discourse. This is not surprising considering that the followers of this discourse put humans on top of the hierarchy, and believe that natural resources are infinite (Dryzek 2013, 59-61). This fits well into the oil industry's story about the world needing more energy, both for the sake of poor people and the welfare state, and the belief in technology solving all the problems connected to greenhouse gas emissions.

2.2.5. Conclusions

The objective of this chapter was to identify the existing framing patterns in *Bergens Tidende*, *Sysla* and *Energi og Klima*. Existing framing studies have shown that frames portraying the dramatic consequences related to climate change, as well as uncertainty about the science, were common in Norwegian and international media. The same patterns were not found in the news articles analyzed in this thesis. Instead, there

was an overwhelming focus on the green shift and technological solutions. However, all papers did have one section differing from this view. *Bergens Tidende*'s news section talked more about the individual's efforts in regards to climate change; the oil and energy section of *Sysla* conveyed the perspective of the oil industry; while the scientific section of *Energi og Klima* represented scientists. That climate change is anthropogenic was taken for granted by all the papers and the focus is on climate change happening now, the future consequences and who is responsible for doing something about this. The *Disaster* frame was used in many of the articles, however, not in the same way as in previous framing studies. The word count discussed in the beginning of this chapter shows that how climate change was defined is consistent with the framing patterns.

However, this provincial framing portrays climate change as something terrible happening to other countries and future generations. The fact that Norway might be affected by international affairs, such as war and migration, is not set in the context of climate change. The framing was also very technology oriented. Technology is going to solve all of our problems, according to this framing pattern. However, this framing is not very mobilizing, nor does it envision a climate friendly future worth fighting for. How and whether the papers have started to reframe climate change the way scientists argue we should do will be discussed in chapter 4. In the next chapter, however, the focus will be on how the readers' perceptions of climate change is affected by the framing patterns used in *Bergens Tidende*, *Sysla* and *Energi og Klima*.

3. Public Perceptions of the Climate Crisis: The Impact of West Coast Media Stories

The objective of this chapter is to understand how the framing patterns in the west coast media influence the public´s perceptions of climate change. I therefore conducted 16 interviews with readers of *Bergens Tidende, Sysla* and *Energi og Klima*. It is important to get the perspective of these readers because they are representatives of the people living in the Western region of Norway. This is a region highly dependent on the oil and gas industry. As mentioned in the chapter 1, every fifth workplace in Hordaland county is tied to this industry (Ludvigsen and Tvedt 2015, 5). It is therefore likely that the oil and gas industry influences the readers' perceptions of climate change. However, what I found is that the readers' personal beliefs also matter; they determine how susceptible the readers are to the media's framing patterns. On the other hand, what also influences their perceptions of climate change is how they receive news and information about climate change. The readers read more newspapers now than people did before; they are therefore receptive to many framing patterns. In addition to this, many of them go directly to scientific sources to learn more about climate change. In this chapter, I will discuss how the readers define climate change, what influences their perceptions of climate change, how framing patterns in the west coast media are influencing them, and how they think the climate change debate should be reframed. However, before that, I wish to introduce the readers I interviewed and give a short overview of existing research on this subject.

The interviews with the readers were conducted in the period between 21.03.17-29.05.17. The readers were found via social media, the comments section on the newspaper/sites and through tips from journalists, friends and family. *Bergens Tidende* has a broad readership, and I was therefore able to interview six readers from different groups. The informants were in the age group between 20 and 80 years old. They represented the general population with jobs such as carpenter, civil servant and IT consultant. The informants were interviewed in pairs. I also interviewed six readers from *Sysla*, where I conducted one individual interview and one focus group. These readers represented the industry, since they all worked in, or were connected to, green

businesses. They were in the age group between 20 and 70 years old. *Energi og Klima* is a specialized magazine, read by 10 – 12 000 people a month. Therefore, the number of informants is smaller, consisting of four people who were interviewed individually. These readers represented people with a special interest in climate change, and were in the age group between 30 and 70 years old. The readers´ names have been changed to protect their anonymity. These names are based on the first letter from each newspaper/site, e.g. readers from *Bergens Tidende* are given a name beginning with B.

3.1.1. Literature review

The media, and especially newspapers, has been described as the most important channel for providing information about climate change to the general public (Manzo 2010, 198). Mass media is so important because it is able to select and amplify the attention paid to a given topic and thereby influence public opinion (Adomßent and Godemann 2011, 29). The media also serves a vital role in communication processes between science, policy and the public. However, according to Boykoff (2011, 28), even though the media plays a critical role in shaping our perceptions, considerations and action, media representations of climate science and policy do not drive public opinion, individual action, culture or societal change. Instead, people feel overwhelmed and stricken by apathy (Moser 2007, 68). This can be explained by the "protection motivation theory", which states that when people are confronted with issues that are threatening yet treatable, they will be motivated to change their behavior. If the threat is bigger than the possibility of doing something about it, on the other hand, it can lead to a rejection of the proposed measures (Dirikx and Gelders 2009, 209). According to Dilling and Moser (2007, 12), our psychological reactions to information are critical components of our processing and willingness to act. These reactions can sometimes be even more powerful than the way we think about an issue. Strong emotional responses, such as massive fear, despair and powerlessness, can even paralyse all further thinking. Other emotions, such as guilt or other ways of feeling manipulated, can provoke staunch resistance. When people feel threatened, but are not able to do anything about the danger, they switch on diverse defense mechanisms: the denial of the existence of the threat; a belief that it won't happen to them; blaming others or believing that experts will fix it; wishful thinking or rationalization that the problem will go away on its own,

being less severe than believed, or that silver-bullet solutions will be found; a refusal to do anything different; claiming that we do not have enough information to act; paying more attention to other immediate issues; and having thoughts that lead to giving up, such as feeling trapped, or fatalism (Moser 2007, 67-68).

When people react with denial, the standard solution has been to provide even more information, facts, figures and new studies (*Natural science* framing) (Stoknes 2015, 14). The reason for this is the belief that people will wake up and take measures if they *recognize* a threat (Lakoff 2010, 78-79). However, simply providing people with more facts does not automatically lead to behavioral changes. Certain ideas have to be developed consistently and precisely enough over time to create an accurate frame for our understanding (Lakoff 2014, 33). If the facts people are presented with do not fit with the frames already existing in their brains, i.e. their preexisting values and beliefs, then the facts will be ignored, challenged or belittled (Lakoff 2014, xiv). People also do not use the news media in the way scientists assume they do. Newspaper readers are rarely informed enough, or motivated to weigh competing ideas and arguments up against each other. Rather, they use their existing value assumptions, such as political or religious beliefs which function as perceptual screens selecting news outlets and web sites whose outlook match the readers'. In this way their choices of what to pay attention to and accept as valid are reduced (Nisbet and Mooney 2007, 56). Providing people with more information about climate change, also known as the fact-based approach, has been one of the most common frames used by climate communicators. However, this approach creates a sense of climate change being remote, abstract and vague, and leads to a low felt sense of urgency in our information-processing system (Stoknes 2015, 48-49). Statistics and graphs are processed by the reasoning part of our cognitive system, but it is the intuitive part, which best responds to emotive images and narratives, that leads us to action. In other words, by just relying on communicating statistics and facts one may fail to create concern and desire to take action (Busch 2015, 22). If the fact-based approach is going to work, a person must have a frame system in place in order to make sense of the facts. When it comes to climate change, most people do not have this kind of system in the conceptual system in their brain. A frame system like this has to be built up over time, something that has not taken place (Lakoff 2010, 73). If one is to succeed with this frame, the facts and figures must be tailored to fit the different groups of people who receives this information (Stoknes 2015, 52).

Another approach commonly used has been to "scare" people into action, by using *Disaster* framing, as described in chapter 2. Communicators believe that it is necessary to talk about the dangers surrounding climate change in order for people to realize how urgent it is to act. However, this is not very effective in motivating real long-term behavioral change (Moser and Dilling 2007b, 496). In fact, this approach often leads to the opposite of the desired response: denial, paralysis, apathy, or actions that can in fact create greater risks than the one being mitigated. Trying to shame people into changing behaviors is also not very fruitful. Pointing the finger at someone's behavior instead usually leads to them rationalizing their behavior, resulting in rejection, resentment, and annoyance at such manipulation attempts rather than better behavior (Dilling and Moser 2007, 11). When talking about climate change, it has been common to talk about the uncertainty surrounding it, both in terms of whether climate change is anthropogenic or not, but also when discussing the future consequences of climate change. Scientists usually do not repeat the facts that are widely accepted among them, they focus instead on the remaining uncertainties that need to be researched. This is very different from how most people understand science. Lay people were taught in school that science is a source of solid facts and reliable understanding. This kind of science is about communicating what we already understand, while research science, on the other hand, is about developing and expanding our understanding, and talking about uncertainty is a natural part of that (Painter 2013, 12). However, this different way of understanding science is one of the reasons why people conclude that scientists don't know what is going on when they talk about the uncertainties regarding climate change (Stoknes 2015, 119). Climate change has also been communicated as a loss. People are being told that they are going to lose many aspects of our nature, such as snow, polar bears and forests. In addition to this, the solutions also involve losses – the possibility to eat meat, travel where we want, and shop freely. Psychologically speaking, people hate losses twice as much as they enjoy gaining things (Stoknes 2015, 113).

Talking about climate change in these ways has not created a sense of urgency or effective action (Dilling and Moser 2007, 4). In addition, since climate change in itself is such a complex topic, several other reasons make it seem less urgent: climate change has a lack of immediacy surrounding it, since CO_2 and other greenhouse gases are invisible and don't have any direct health impacts on humans like other air

pollutants have. It is also difficult for most people to comprehend how driving their car on a short trip to the mall to buy a sweater has consequences for our climate. Even though climate change is dramatic, most people do not see how it is going to affect them. Climate change is perceived as something happening in the Arctic or Pacific islands. There is also a belief that society will be able to adapt to any adverse changes once they arrive (Dilling and Moser 2007, 5-6). Studies also show that people have difficulty imagining the future. Scenarios happening in 2050 are considered so far into the future that they are almost completely hypothetical (Manzo 2010, 199). A low level of sense of urgency is reinforced by the fact that concrete scientific solutions to climate problems are rarely being discussed by the media in full technical detail. In these situations, the audience is left to fill in their own, often incorrect, concepts of what those solutions might be. There is also the tragedy of commons, where people act in an unsustainable way according to their own self-interest, despite the fact that this might lead to the depletion of natural resources and thereby conflicts in society. In addition, those who benefit from the status quo are also the ones who believe they will be less impacted, and therefore have little incentive to push for action (Dilling and Moser 2007, 6-8). All this leads to climate change not being perceived as a direct personal risk, but something affecting the wider environment and future generations (Whitemarsh 2008, 416). In addition, people often distinguish between "us" and "them" when it comes to messages that convey negative information or ask the recipient to make an effort to change their behavior.

In short, it seems that interpersonal communication is the best way to reach people (Ungar 2007, 93). People learn about climate change by relating it to their concerns, experiences and existing knowledge. They have to understand how this topic is related to things they value, if this new information is going to be integrated into their cognitive or affective domains in a manner that sufficiently influences their behavior (Whitemarsh 2008, 418).

To sum up, the media has been described as one of the most important channels of information about climate change (Manzo 2010, 198). However, interpersonal communication is also very important (Ungar 2007, 93). The way we have talked about climate change so far, in the media and elsewhere, has led to denial and apathy among the public (Moser 2007, 67-68). Talking about climate change both in negative and

purely scientific terms, or as a distant topic filled with uncertainty and losses, has all contributed to this inertia.

3.2 Climate Shift or Global Warming? Readers' Response to Key Framing Concepts in the Norwegian West Coast Press

According to Agenda-setting studies, the frequency with which a topic is mentioned has an even more powerful influence than any particular framing mechanism (Ghanem 1997, 11-12). Some researchers even claim that the news media has limited impact on the vast majority of specific attitudes and opinions that people have about politics and public affairs. What the media does influence, according to them, is what the public thinks about. The media sets the agenda for public thought and discussion (McCombs 1994, 180). Before I start discussing the interviews with the readers, it is therefore interesting to keep in mind how often the west coast media actually writes about climate change. When I gathered articles for the news article analysis, I got 951 hits on the word climate* in *Bergens Tidende*'s paper edition in the period between 01.06.15 and 01.06.16[9]. By comparison, *Bergens Tidende* published 31.000 articles in 2015 (Bergens Tidende 2016b). If they published approximately the same amount of articles in 2016, the number of articles containing the word climate* was therefore 3 %. It is likely that *Bergens Tidende* wrote more articles about climate change than this without actually using the word climate*. However, this number should give an indication of how much the largest paper outside of Oslo writes about climate change compared to other topics. This is interesting because the readers might read one article about climate change in *Bergens Tidende*, while the next article might be about the best places to travel to this year, or how to save money on plain tickets, in addition to ads about the newest offers in the mall. This also influences the readers' perceptions of climate change, since our psychological defense mechanisms discussed earlier make it more pleasant to read about our next holiday than how disastrous our future might be.

[9] Numbers gathered from word search in ATEKST.

3.2.1. How do the readers define climate change: As a shift in climate, a global warming or a crisis?

All of my informants believed climate change is anthropogenic. However, they had different opinions on whether we should use the phrase "climate change" or "global warming" to describe it. Bertha, for example, a retired woman in her late 70s, thought that "climate change" was easier for her to understand. According to her, this phrase was more concrete than "global warming", which she found less comprehensible. Beatrice, a girl in her early 30s, found it more natural to use "global warming" in her daily speech. However, she thought "climate change" was a better phrase:

> I think 'climate change' is more accurate because it doesn't just get warmer, all sorts of things are happening, for example storms, droughts and so on. There are changes that are happening, so 'global warming' might be a misleading term (Beatrice, BT, 26.04.17).

Two of my informants were a bit more formal in this matter. They used the phrase "anthropogenic global warming" to describe this subject. They were also the two informants who had the most knowledge and interest in climate change. Eric's interest in climate change, for example, started in the middle of the 80s, and he has taken every chance to learn more about it since then. According to him, climate change is a consequence of anthropogenic global warming. He defined climate change as "*unnaturally large variations in the climate as a result of global warming*". Edward had a similar reasoning:

> Climate change, what is that? "Climate change" says nothing else than the fact that the climate is changing. It is global warming that is the problem and that it is anthropogenic. Being anthropogenic gives us the opportunity to do something about it (Edward, EK, 29.05.17).

Both Edward and Eric had some good points in their discussion. Neither the phrase "global warming" nor "climate change" indicates that the causes are anthropogenic. Previous studies have shown that choice of terminology affects how the public understands and evaluates this issue. According to Whitemarsh (2008, 416), most people associated "global warming" with the greenhouse effect and heat-related impacts, while "climate change" was associated with natural causes and a range of

impacts. “Global warming” also evoked more concern and was more often believed to have human causes than “climate change”. In addition to this, people also believed that individual or public action was more effective in tackling “global warming” than “climate change”. The reasons for this may be that “global warming” is a more emotive term, since it suggests a clear direction of change towards increasing temperatures. “Climate change”, on the other hand, is more ambiguous. This reasoning is probably logical for people living in southern Europe who are experiencing more heat waves and droughts because of climate change. Norwegians, on the other hand, rarely experiences heat waves, and if so, they would likely be grateful for them. The consequences of climate change in Norway will be more rain, more landslides and more floods. This is perhaps not as easily associated with higher temperatures as heat waves are, which might explain why most of my informants thought “climate change” was a more accurate phrase than “global warming”. However, does this mean that my informants thought of climate change as a distant problem happening elsewhere than in Norway? I asked my informants both if they thought climate change is going be a crisis and how they think climate change is going to affect them personally. Their answers to this might shed some light on my question.

All of my informants agreed that climate change is going to become a crisis – for future generations and other countries. Brennah put it like this:

> We will probably experience how the climate is changing, but it will be worse for the next generations. Temperatures get higher, sea levels rise, there will be droughts some places. It will be harder to grow food, and there will be more floods. I think we will see more of this. There will be a battle for resources that can lead to conflicts (Brennah, BT, 19.04.17).

Brandon and Beatrice elaborated on this by talking about how climate change is going to become a worldwide crisis, and referred to how many people are going to lose their homes in countries like Bangladesh. One of my other informants, Bailey, on the other hand, did raise some concerns about food production in Norway. Norway is not self-sufficient in its food production, and according to Bailey, this could be a problem if a crisis causes other countries to stop exporting food to us. Bailey lives in a smallholding

and wishes to grow more of his own food. He also listed *Nationen*[10] as one of his most important sources for news and information about climate change. This might explain why he was the only informant concerned about this subject. The other informants were more concerned about increased migration as one of the consequences of the climate crisis. Sebastian said it like this:

> I think the biggest thing we are going to notice is increased migration. I get chills on my back when thinking about the consequences that will hit us in Norway. What we have seen until now is only peanuts compared to what will come, especially when you get areas in the world that will be underwater. We just have to get what's coming and help people somehow (Sebastian, Sysla, 27.03.17).

In other words, my informants do not consider climate change to be a crisis waiting to happen in Norway. It seems like they instead consider climate change as a crisis happening "out there", to someone else and in the distant future. Norway will only experience the indirect consequences of this.

It is interesting that my informants perceive climate change as a crisis happening to other countries. This may be due to many factors, for example that Norway is a wealthy and secure country, or that climate change might be good for some people in Norway. Norway has become an affluent country from producing oil and gas, and most of this production is exported to other countries. Norway is, in other words, exporting most of its climate gas emissions, to buy itself some good conscience, while at the same time relying on developing renewable energy back home. Most Norwegians do not see a problem with this double standard, since according to the Norwegian story, Norwegian oil is the "cleanest" in the world. I will come back to where my informants stand on this later. In addition, other elements in the Norwegian discourse contribute to this dissonance. Norwegians see themselves as environmental pioneers, a nature-loving people who have survived in harsh conditions, and who protect the environment with carbon taxes, recycling and anti-pollution technology. In addition, Norway is home to the mother of sustainability, Gro Harlem Brundtland, and the father of deep ecology, Arne Næss. Moreover, if this was not enough, the humanitarian story is also a big part

[10] A daily newspaper that aims to safeguard the economic, social and cultural interests of the local people and districts (Nationen 2017). Among other things, they write a lot about farming in Norway.

of Norwegians´ identity. "Norway is known to be a "small country with a big heart", which shares its economic profit with the poor and the needy". Contributing to this is the fact that Norway has a considerable state budget for aid, is active in peace-keeping, and holds the annual Nobel Peace Prize Ceremony (Krogh 2009, 80-82). There are, in other words, several reasons for why Norwegians create a distance between themselves and the climate crisis. Instead of thinking that Norway is a contributor to suffering and catastrophes, it might be more comfortable to think that Norway is at the cutting edge of new environmental technologies and solutions that will save us all, and the emissions from our oil and gas production are just a drop in the ocean compared to other countries' emissions.

However, my informants were still quite clear in their opinion about Norway's responsibility in solving the climate crisis. Norway has a responsibility to act, according to them, especially since we have become rich from producing oil and gas. "*Even though Norway is a small country, it has the potential to make things happen*", said Betty. When it comes to climate responsibility in Norway, my informants agreed that the government has the main responsibility, but everyone has to contribute as well. Brennah put it like this:

> Global cooperation is crucial, and then it is the national and local authorities that must ensure that it is followed up. However, we cannot just expect that politicians will fix the problem while we go on living as usual. People have a responsibility, for example by taking the bus, eating less meat, taking shorter showers, and not throwing away so much food. [Climate change] is such a big problem and everyone must do his or her part. Everyone can contribute a little (Brennah, BT, 19.04.17)

Even though my informants agreed upon governments being important, there were still some differences between them about how we best can solve the climate crisis. The *Bergens Tidende* readers talked more about small actions that each individual can do, while the *Sysla* readers talked about how important the industry and economics are. "*Economy controls everything*", said Sara, and argued that if changes are going to happen, then things have to get either more expensive or more profitable. The readers from *Energi og Klima*, on the other hand, talked about how important politicians are and how they have to facilitate change. Edward, for example, was very critical towards

the government, arguing that it is not living up to its responsibility. "*Nothing ever happens in the major political parties in Norway, unless a new and unexpected situation should arise*", he said, and argued that nothing new has ever originated from Norway. According to him, major movements, such as green politics, come from elsewhere in the world and then influence Norway. The west coast media focuses on what happens in Norway, forgetting that a crisis happening abroad also could lead to a crisis in Norway.

Despite thinking that climate change will not be a crisis for Norway, my informants still thought of several ways in which they would be affected by climate change. Change in the weather was one of them. Scott put it this way:

> I notice the effects of climate change already now; it's raining more and snowing less. I personally think it's annoying that there is so little snow around. I think this leads to a poorer quality of life. It's selfish to think this way compared to drought in Africa, but it does affect us anyhow (Scott, Sysla, 27.03.17).

Several of my informants mentioned how more rain is going to affect their mood and lead to a poorer quality of life, in addition to more landslides and extreme weather as a cause of climate change. It is interesting how they connect climate change to the weather. According to Dilling and Moser (2007, 10) the *Weather* frame suggests that climate change can neither be caused or solved by humans, since it is an "act of God". This frame might therefore invoke a sense of helplessness or resignation. After all, "who can control the weather"?

From the discussion above, it is quite clear that my informants define climate change as a crisis happening to future generations and other countries, just as the news articles did. These results are similar to other studies, which found that climate change is perceived as a proximate threat happening right now. However, people believe other countries will be affected more (Steentjes et al. 2017, 20). My informants did believe that everyone has a responsibility to do something about the climate crisis, but that the government has to lead the way. However, they did have different opinions about how we should solve the climate crisis. The *Bergens Tidende* readers were for the most part representative of lay people, and they talked more about small actions each individual can take. The *Sysla* readers all worked in green businesses, and talked about how crucial

the industry and economy is. The *Energi og Klima* readers either worked with topics related to climate change, or had a huge interest or engagement in it, and they talked mostly about the government's role.

3.2.2. The west coast media's story about the oil industry and the readers' perceptions of climate change

It was when discussing the oil industry that I noticed the biggest difference between my informants. The readers from *Sysla* and *Energi og Klima* were critical towards this industry, while the readers from *Bergens Tidende* were more positive to *Norsk Olje og Gass*' story. However, there was also a difference of opinion among the *Bergens Tidende* readers, depending on their background.

When discussing the oil industry, Edward from *Energi og Klima* for example, talked about the government´s double moral standards. "*Erna Solberg, Støre and those people see no problem in being very concerned with climate and very keen to empty the Barents Sea of oil*", he said. Edward argued that the Norwegian government believes technology will solve everything, therefore we can continue with business as usual. According to Sophia from *Sysla*, the media and the Norwegian public are both influenced by the oil industry's lobbyism: "*They are strongly positioned so the regular man in the street will probably take it at face value*." She thought that the media should use their power to write more positively about the green shift, because the oil industry is still very influential. Sebastian elaborated on this: "*Norsk Olje og Gass has been good at selling their stories, such as the poor in the world desperately needing Norwegian oil and gas to survive, and Norwegian oil and gas being the greenest in the world*," he said. A belief in these stories was shared by some of my informants. "*What I'm thinking about when they talk about oil and gas is… In Europe, they have a lot of coal, isn't our gas cleaner than their coal? In that way, I think it's necessary to continue producing gas if we are going to get rid of coal*," Bertha, from *Bergens Tidende*, said. There were also elements of *Norsk Olje og Gass*' story in Brandon and Beatrice's discussion. "*Yes, I think we will continue [with oil and gas production] as long as we have oil. That's our main income,*" Beatrice argued. "*If we want to continue with the welfare state and all our good arrangements, which contribute to research and development, then we need a*

large source of income. Resource utilization is getting better and better in this industry as well; they have less CO_2 emissions now." Brandon agreed with her:

> There is a lot of good environmental policy in Norway, but we can't just shut down the oil industry in one day, because where will we get our money from then? As far as I understand, the Oil Fund will be used up by 2030, what should we do then? We need a soft transition (Brandon, BT, 26.04.17).

Beatrice and Brandon both argued that we have to do something about climate change, and stressed that there is going to be a crisis if we do not. However, they were not sure how Norway could best lower its emissions. "*Perhaps more environmentally friendly cars*," Beatrice said. Existing research show that association of one's participation in the green shift by buying electric cars is common among Norwegians, especially in the western parts of Norway, where many people's livelihood is dependent on oil (Tvinnerein and Austgulen 2014, 319). These people mostly believe in the urgent need to do something about climate change. However, they do not believe Norway should stop producing oil and gas: taking palliative measures like going electric is enough. The result of this is a standstill, where Norway in reality does nothing, which is exactly what has happened during the last 20 years – Norway has portrayed itself as an environmental nation which saves the rainforest and helps developing countries, while increasing its emissions back home.

Betty from *Bergens Tidende*, on the other hand, was more critical of this story. "*What do they mean by the welfare state?*" she asked. "*Is everyone going to live like those who earned the most in the oil industry?*" According to her, the welfare state means having a good support system and having enough money to put food on the table, not owning luxury cars, a cabin in the mountains, and indulging in high levels of consumption. She therefore believed that it is possible to maintain the welfare state even without the oil industry. Edward agreed with her. He explained how he grew up in the 1950s, and claimed that Norway was a welfare state long before we started gaining income from the oil industry. He argued that Norway is a welfare state because of the way we manage our income - not because of oil, but because we are a society built on equality and justice. "*However*", he added, "*no one should delude anyone into thinking*

that it will be easy for Norway to get rid of oil." Brennah talked about why it will be particularly difficult for Norway to shut down the oil industry:

> We have been very dependent on oil and gas in Norway, which makes things more difficult when there are so many people working in this industry. Oil has made Norway rich, so there has been a lot of lobbying. Therefore, it is a challenge for Norway to move away from oil and gas and switch to greener solutions (Brennah, BT, 19.04.17).

The readers of *Bergens Tidende* clearly had different opinions about the oil industry in Norway. Their background might explain why this is so. Those who were positive to the oil industry had a connection to this industry. For example, Brandon took a course in well technology hoping to work in the oil industry a couple of years earlier, and now he works for a company delivering computer technology to the oil industry. Those who were critical towards the oil industry, on the other hand, either worked with, studied or had an interest in the environment. Brennah, for example, listed the UNFCCC as her most important source to news and information about climate change, and she had recently written a thesis related to climate change. Other studies confirm how influential people's background is. According to Tvinnerein and Austgulen (2014, 319), if one's work depends on the production or consumption of fossil fuels, this personal economic interest is likely to affect the interpretation and perception of climate science and the threat associated with climate change.

According to the framing patterns found in the west coast media, *Bergens Tidende* talked about how the government wants to continue with the oil and gas industry, and how we should develop carbon capture and storage. Most of my informants from *Bergens Tidende* thought it was positive that the oil industry plans to develop technology to make their production cleaner. However, there was a difference between them in how effective they thought it would be. "*Oil is oil, there will be emissions anyway. It may have an effect, but it's a thin argument in the broad context*," Betty said. Brandon, on the other hand, thought developing new cleansing technology might be an alternative, since we cannot shut down the oil industry. Bertha had a similar conclusion:

> It will be a challenge the day developing countries reach the same level of consumption as us. What about Stoltenberg's moon landing project, what

> happened to that? We may need to proceed with that. If developing countries enter the market, they will have a huge need for energy (Bertha, BT, 19.04.17).

However, the fact that developing countries could use renewable energy instead, did not cross her mind, which shows how influential *Norsk Olje og Gass*' story is. Whether *Bergens Tidende*'s framing pattern influences my informants opinions on this matter, seems to be more dependent on their background. This is consistent with the theory which claims that the text alone does not determine meaning, but interacts with the audience's memory and existing perceptions (Reese 2010, 9). The *Sysla* readers' opinions further confirm this connection. Most of my informants from *Sysla* read both the green section and the oil and energy section, and were therefore susceptible to *Green shift* framing and *Business as usual* framing. However, they either worked with or studied topics related to the renewable energy sector. I therefore argue that their background and workplace influenced their perceptions of climate change and Norway's role in the oil industry, since they were all critical towards the oil industry and argued that we have to focus more on renewable energy and the green shift in Norwegian industry.

Energi og Klima was more critical towards the oil industry, and so were their readers. Their backgrounds might also explain this, since all of my informants from *Energi og Klima* had a strong interest and engagement in topics related to climate change. However, some of my informants used arguments and conclusions put forward by *Energi og Klima*. Elizabeth, for example, argued that we should not spend time searching for oil and gas in the Barents Sea and Lofoten, since it will not be profitable to produce oil and gas there. In other words, it might be a financial risk, which is a topic *Energi og Klima* has focused a lot on.

A great deal of my informants were very interested in climate change and had a lot of knowledge about it, and many of them therefore disagreed with the west coast media's story about the oil industry. However, I argue that most of the typical readers of *Bergens Tidende* and the oil and energy section of *Sysla* do not have the same interest and level of knowledge as most of my informants from *Sysla* and *Energi og Klima* do. Oil is part of people's livelihood in the western part of Norway. My research was conducted in a place which is one of the loci of oil extraction, and where Norway really

increases its ecological footprint on the planet. If the people living here do not work in a business related to the oil industry themselves, they most likely have a friend or family member who does. It is therefore reasonable to believe that most of the readers of *Bergens Tidende* and *Sysla* have beliefs more similar to my informants who were positive to the oil industry. Most of my informants' perceptions of the oil industry are therefore probably representative of people who are especially interested in climate change, not the public at large.

3.2.3. The emergence of social media as a competitor to in-depth analysis in the mainstream paper media

As mentioned in chapter 1, people spend more time reading media now than before, but what we expose ourselves to is more influenced by our pre-existing values and motivation (Moe and Kleiven 2016, 3-4). This was also true for my informants. They read 5.2 newspapers/sites on average, and most of them read the news online. There was a connection between the age of the informant and how many newspapers they read. The oldest informant, Bertha, 79 years old, read one newspaper, while the youngest informants in their late 20s read five or six newspapers/sites.

The most common newspaper read by my informants were *Bergens Tidende*, which was read by 14 of 16 readers. *NRK* was the second most popular news site, read by nine readers, while eight of them read *VG* and *Aftenposten*, and seven read *Dagens Næringsliv* frequently. So how do these papers influence their perceptions of climate change?

Ryghaug (2006) analyzed articles published between 2002 and 2005 from all of these newspapers, except *NRK* and *VG*. She found that the journalists emphasized the dramatic aspects of climate change, and often used doomsday images. The journalists also focused on conflicts, and there was little discussion regarding technology and solution-oriented themes such as energy use and energy related technology. At this time the debate regarding whether climate change was anthropogenic or not was also present. Krogh (2009, 76) found in her analysis of articles from *VG*, *Aftenposten* and *Dagens Næringsliv* published in 2007 and 2008, that the problems of climate change were still described in rather apocalyptic terms. When discussing solutions, the "scientific" story of the IPCC, with its technical approximations, was the most powerful. Krogh also

found that climate change was not presented as a cultural challenge, and there was little space devoted to the need for attitude changes required by the climate challenge. A more recent study of *Aftenposten*, *Klassekampen* and *Dagsavisen* in 2014 showed that journalists wished to avoid focusing on dramatic and scary stories about climate change, focusing rather on solutions. The journalists argued that articles focusing on technological solutions were more expedient than those focusing on individual actions (Brattfjord 2015, 104). These studies show that the framing has probably shifted from focusing on disasters to solutions in other Norwegian newspapers as well. However, this is only my assumption since I have not been able to find any other recent Norwegian media analyses of this subject.

Many of my informants got their news from social media, which they used as their own personal news channel. However, many of them reflected on the dangers of media becoming more fragmented because of social media. Sebastian put it like this: "*It is a paradox and challenge that there is such a huge information flow. There is so much information out there that getting a proper overview is almost impossible. Therefore, you need to specialize in some areas*." Sara pointed to the dangers related to this development. "*It's a big challenge when you don't have moderators that filter the news like news agencies do*," she said. Sara further argued that when this happens, the news only reaches people who are interested in the topic. You get more expert opinions in this way, but the challenge is how to reach the people who need this information, but do not care about it, she added. However, as many of my informants also argued, there are not enough journalists who have sufficient knowledge about climate change to actually write good articles about it. Edward, for example, was not very impressed by the Norwegian media's climate coverage. "*There are three or four journalists throughout all of Norway who have enough knowledge to actually write something of interest*," he argued. "*The other ones are mostly microphone stands because they know so little. Thus, with a few exceptions, we have terribly bad journalism in this area*." According to Edward, the main problem with the media is that it runs on entertainment news 24/7, which he saw as a threat to democracy. "*I think it's a tragic development within the big media. The smaller newspapers are much better. The big newspapers only exist to give profit to their owners*."

Sylvester talked about the consequences of the changes that have occurred within the media in the last years: "*The media has been depleted in one way or another. They have not been able to bet on the right people. Good journalists are not created by snapping one's finger. He must have time to get into the things he should be good at*." Sylvester has been a CEO of several companies, and he explained how changes in the media have affected how it delivers information to the public:

> As business leaders, we had to go to the journalists and ask for help to get them to write about us. They were very valuable. Today, however, we write everything ourselves. We have employed our own communication manager, who formerly worked in the parliament. He is very important to us. He writes as a journalist and we publish as a media. We set the agenda. Now the media has begun to print what we are writing. This makes me laugh so hard. No wonder they have problems if they are not able to produce their own stuff anymore (Sylvester, Sysla, 21.03.17)

Sylvester points to one of the biggest changes that has happened within the mainstream media industry here: the lack of resources to produce its own articles. Instead, clickbait and publishing other journalists' or media communicators' work has become more common. Many industries and institutions also publish their own articles in their own channels, excluding the media as the intermediary. However, this means also excluding the moderator who can filter the news and include more sources. On the other hand, as Scott emphasized, the media is still important:

> It is important that the media has a critical view of things, such as the bio fuel case that has become a major issue, which may be a blind spot. This would never come up unless the media had started writing critically about it. Now it may be stopped because of critical journalism (Scott, Sysla, 27.03.17).

However, even though the media has an important role as a critical watchdog, there is not really any daily climate coverage, as Eric pointed out:

> There is no coverage in the daily news stream. When something shows up, it is usually something extreme, for example a large ice sheet breaking up

> in Antarctica. The news is usually connected to things like that (Eric, EK, 23.05.17).

This is a challenge to the media. If it is to write about climate change, then it has to be relevant, and it has to bring something new to the table. This is why Eric did not perceive the media as the driver of change. In fact, he believed the media sometimes involuntarily slowed things down by focusing too much on specific subjects. This lack of coverage might explain why many of my informants listed scientists, conferences and research institutions as their main source of news about climate change. The informants were either in direct contact with the scientists through work, attended conferences frequently or followed the research institutions on social media. Many of them also turned to international news sites in order to get enough information about climate change. Beatrice explained why: "*The Norwegian media usually writes about what happens in Norway. There is not much focus on the major dramatic consequences around the world, such as climate refugees. They focus on all the small things instead*." The other *Bergens Tidende* readers, such as Betty, mostly agreed on this matter:

> [*Bergens Tidende*] has no clear attitude. They only write generally about different policy instruments, such as the benefits people get from driving an electric vehicle. […] It's not in *Bergens Tidende* that I read most professional articles about climate. […] They focus a lot on consumers, what benefits and lesser benefits they receive [from going green, meaning using electrical cars] (Betty, BT, 10.05.17).

Contradicting this view is the fact that the *Bergens Tidende* readers later mentioned that they thought it was helpful that *Bergens Tidende* wrote more about what each individual can do to combat climate change.

Many of the informants praised *Bergens Tidende* for writing article series that go in depth into an issue, for example the series about carbon offsets a couple of years back. These articles argued that Norway was involved in some dubious projects through the carbon offset program. The informants found these articles particularly interesting and informative, and wished *Bergens Tidende* could write more such articles, something newspapers in most cases are not able to do anymore. However, even though the readers wished to read more in-depth articles, I question whether they in reality would do so. As

the journalist from *Bergens Tidende* said, the editors know exactly how long each reader reads an article and which types of articles are more popular. Therefore, the newspapers adjust their online news to the readers' behavior. Even though the readers claimed that they wish to read more in-depth articles, the reality is that this is not the most popular kind of article, and the media, which focuses on making enough money to survive, obeys this command. The changes in the media industry were also reflected in the *Sysla* readers' opinions about *Sysla*. "*I think they are good at writing, in purely linguistic terms, but lack a basic understanding of the industry*," said Sylvester. "*In my opinion, they could have written more. It often is a bit short, at least for us who are above average interested and know more than the average. I wish they went into more detail*," Scott added. Sebastian, on the other hand, defended *Sysla*:

> I've been following the green section of *Sysla* since they started. There wasn't anyone who took that position [i.e. wrote about the green industry in Norway]. It's a great place where one gets headlines and [reports of climate-related] events. We know why they don't write more, they lack capacity and resources. In any case, they give us a starting point where we can dig further. In general, we find deeper information in other places if there is any. *Sysla* gives a positive pointer to what's possible. They have a good function (Sebastian, Sysla, 27.03.17)

These comments sum up the media industry's challenges. The journalists are becoming generalists; few have the opportunity to immerse themselves in a specific topic, leaving it up to the reader to gather more information about the topic on their own. *Energi og Klima*, on the other hand, focuses solely on topics related to climate change, and the journalists working there have a lot of knowledge about this subject. This is reflected in their readers' opinion of them. Edward, for example, thought *Energi og Klima* is particularly good at creating commitment to the climate issue. They make it imperative to care about climate change in several sectors, such as the business sector. They are, in other words, able to frame climate change in a way that other people, besides those who typically care about the environment, pay attention to. However, he still thought that they sometimes have a too narrow perspective, and focus too much on the fact that technological and economic arguments are decisive. He also felt that the trade unions, the representatives of the people, were missing. Eric elaborated: "*I have read many*

interesting articles [from Energi og Klima], so I think they are onto something. However, I think they are only able to reach a fairly narrow group, and then it will never be enough anyway."

The discussion above shows that the changes in the media industry have influenced the way the readers receive news and information about climate change. Because of these changes, people are influenced by many different sources, not just the traditional media. As a result, they have more freedom to choose where they get news and information about climate change from. It is true that people read more newspapers; however, they go directly to the scientific sources when they want to learn more about climate change. People build up their own personal newsfeed drawing on the news media, and the agendas of organizations and institutions. The danger is that people only receive the information that they are interested in, information that confirms what they already know. However, this also means that people are able to gather information on topics that the media is neglecting. Does this mean that – in view of the diversity of information sources – the west coast media's framing pattern does not have any influence at all? This is what I will turn to discussing next.

3.2.4. The effectiveness of media framing patterns and the readers' perspectives on reframing

Even though the readers had a wide variety of news outlets to choose from, the news outlets such as *Bergens Tidende*, *Sysla* or *Energi og Klima* did play a central role in shaping their perceptions. Therefore, I wish to discuss how the framing patterns from these news outlets influenced the readers' perceptions of climate change.

All of the newspaper/sites used *Green shift* framing. The green shift is still a new concept, and some of my informants therefore had little knowledge of it, while others had strong opinions about it. Brennah, for example, was the only *Bergens Tidende* reader who had a lot to say about it:

> It is something that must happen. We need to change how we live, what we are building our economy on; everything has to change if we are going to reach the climate targets. I'm not so impressed by the green shift announced by the current government. They talk about it, but the green

> shift means that we have to stop producing oil and gas in Norway and find other options (Brennah, BT, 19.04.17).

However, even though she thought Norway has to prepare for the green shift, she did not think the shift is going to happen straight away. The other readers from *Bergens Tidende* had heard about the green shift, but had little knowledge about it. The informants from *Sysla* and *Energi og Klima*, on the other hand, all thought of the green shift as something happening now. However, they were critical towards the phrase. Sara, from *Sysla*, described green shift in the following terms: "*It's a nice expression, but we're in a world that can be divided into two. You have those who understand that things must change and those who oppose change. For the latter it's a terribly bad concept*." Sara thought the phrase is too abstract and hard to understand, and argued that we have to make it more concrete and explain what it entails. Sebastian agreed with her, and saw it as a concept that was established before the content was in place. However, when *Bergens Tidende* discussed the green shift, it also focused on individual people's efforts, which most of the informants were positive about. "*It's positive that they talk about it so that people feel they can contribute, that it doesn't take that much to do something*," said Brennah. She thought that we focus more on what people can do now than before. "*People used to think that it doesn't matter what they do, so why bother*."

The other informants from *Bergens Tidende* also thought that if the media talked more about what people can do themselves, then more people would act. The readers from *Sysla* and *Energi og Klima*, on the other hand, were more critical towards this focus on individual people's efforts. Edward, for example, thought that the climate debate is perceived to be alien to most people and goes completely above their heads. "*Thus, people turn to the close things that they feel they can master and oversee, like sorting trash and such things. That's okay, but it doesn't change the world*," he said. Edward has a good point here - in Norway the government has focused on "low hanging fruit" when it comes to reducing greenhouse gas emissions, for example electric car policy and energy reduction in buildings. This focus transfers the blame on individual people, who react with skepticism and resistance, since it might be hard for them to see how those small actions could make any discernible difference to this global problem (Dilling and Moser 2007, 6), especially since the main contributors to greenhouse gas emissions, such as the oil industry, can pay off their emissions with carbon offsets.

A focus on technological solutions was also common in the west coast media. According to the "European Perception of Climate Change" study, 56 % of the Norwegian respondents agreed that science and technology will eventually solve our problems with climate change (Steentjes et al. 2017, 22). However, only two of my informants shared this view. Both Beatrice and Brandon thought that new technology will be revolutionary for us, and they had little belief in people reducing their consumption instead. This might be related to their connection to the oil industry, since many Norwegians experience cognitive dissonance as a result of Norway portraying itself as a climate-friendly country at home and abroad, while being unable to curb its domestic emissions and maintaining fossil fuel exports at relatively high levels (Steentjes et al. 2017, 10). Developing new technology is an easy solution to this problem. The other informants, however, did not agree, and argued that we have to reduce our consumption and change our lifestyles, even though they were skeptical towards people's willingness to do so. Edward put it like this:

> There is a strong technological optimism in Norway. This might be because we have been a rich country for a long time, and because we have an abundance of technology both in our private and professional lives. Therefore, it's comfortable to think that technology will solve everything (Edward, EK, 29.05.17).

He further went on to say that there is a lack of realism when it comes to technology in Norway, for example the belief that carbon capture and storage will be of great importance. He felt that this was an illusion maintained for the purpose of business as usual in the oil and gas industry. It is interesting that Edward was so critical towards technological optimism in Norway, when *Energi og Klima* focused a lot on technological solutions. However, Edward also talked about how important it was to reach out to people's moral sense when discussing climate change - how we have to reach out to their hearts. In other words, he talked like a follower of the *green consciousness* discourse, while the journalists working in *Energi og Klima* talked more about systemic changes and characterized themselves as technological optimists, which is more in accordance with *green politics* and *ecological modernity*. In other words, my research shows that people's personal opinions matter. However, many of my informants repeated the arguments of *Bergens Tidende*, *Sysla* and *Energi og Klima*,

which thereby shows that they were influenced by the media's framing patterns. For example, the readers of *Sysla* focused on business opportunities related to the green shift, which was in accordance with *Sysla*'s framing pattern. On the other hand, these informants worked in businesses focusing on the green shift and renewable energy, so it is not very surprising that they agreed with *Sysla* on this matter. In summary, the framing patterns provided by these sources influenced the way my informants talked about climate change, but my informants were also influenced by other factors in their life such as their personal beliefs.

The informants' opinion about *Disaster* framing, on the other hand, was surprising. As discussed earlier, there are a number of international studies that argue that *Disaster* framing leads to distance and apathy. The majority of my informants, on the other hand, thought it was helpful that the media talked about climate catastrophes as a consequence of climate change. "*I think they have to do it if people are going to realize how serious this issue is*," Brandon said. Beatrice agreed with him on this matter, but she also mentioned that she got frightened and stressed when she watched documentaries about climate change. The other informants from *Bergens Tidende* had conflicting opinions about the matter. On the one hand, they agreed that the media should talk about the dire consequences of climate change. On the other hand, they also argued that if the media only talks about natural disasters and all the negative elements connected to climate change, this might lead to people refusing to pay attention anymore. The informants from *Energi og Klima*, however, were quite clear in their opinion about *Disaster* framing. Edward, for example, thought *Disaster* framing might have a paralyzing effect, but he still emphasized that we should not just talk about how amazing the green future might be either. Instead, we need a balance between the two. Elizabeth, on the other hand, who works in a science institution, argued that it is impossible for researchers to talk about solutions instead of disasters; after all, the natural science behind climate change includes disasters as a natural part of its analysis.

When my informants talked about how the climate change debate should be reframed, they wished the media would focus more on positive stories, solutions, the results from our efforts, and the use of striking metaphors. Brennah, for example, argued that it might be easier for people to relate to climate change if we focus more on the solutions than the challenges. The readers from *Bergens Tidende* agreed that

Bergens Tidende wrote about some solutions, but did not think the newspaper was able to connect this to the bigger picture. "*The solution Bergens Tidende writes about is that the fees should be raised so that we can spend more money on public transport. The solution in Bergen is to use the city rail*," said Brandon. "*The problem is that they only write about the city rail, but forget to bring in the bigger picture, to connect it to climate change*," Beatrice added. Sebastian talked about focusing on the positive stories. "*We spend little time talking the oil industry down, but make positive stories about the possibilities. Then you can quickly pull people over to the green winning team*," Sebastian said, referring to his work. My informants also talked about how we have to make climate change more relevant and connect it to local topics. "*It's sad to read about climate refugees, but it's hard to relate to it. We have to relate it to everyday life here in Norway*," Beatrice said. Betty agreed with her, saying that it might be easier for people to understand climate change if we focus on what is happening in Norway and what they can do themselves. However, as previously mentioned, the informants also thought that the media is not global enough in its writing. "*The only global subject they write about is terrorism*," Brandon said. Still, their point is that we need a balance between talking about global and local affairs, just as other studies have suggested (see for example Cole and Watrous 2007, 187).

3.2.5. Conclusions

The objective of this chapter has been to understand how the framing patterns in the west coast media influenced the public's perceptions of climate change. To find this out, I interviewed the readers from *Bergens Tidende, Sysla* and *Energi og Klima*. My research shows that the west coast media's framing patterns do influence the readers' perceptions of climate change, because many of my informants repeated the arguments and conclusions put forward by *Bergens Tidende, Sysla* and *Energi og Klima*. For example, the *Energi og Klima* readers argued that continued oil extraction is a financial risk, following *Energi og Klima*'s stance on this matter. They also claimed that politicians and governments have the main responsibility when it comes to solving the climate crisis. The *Bergens Tidende* readers, on the other hand, argued that individual action, such as recycling and less meat consumption, was just as important.

However, my research also shows that other aspects of their life, such as their personal beliefs and workplace, influenced my informants' perceptions of climate change. For example, the *Sysla* readers were susceptible to both *Business as usual* and *Green shift* framing. They were, however, quite critical towards *Norsk Olje og Gass'* story, which claims that Norwegian oil and gas are environmentally friendly, and that new technology will solve all the problems related to greenhouse gas emissions from oil production. Instead, they argued that the green shift provides a business opportunity, and that we have to invest our oil money in renewable industry. All of my informants from *Sysla* worked, or were connected, to the renewable industry, and I argue that this affected which framing patterns they were more susceptible to. The *Bergens Tidende* readers further confirmed this. Those of my informants who have a connection to the oil industry argued that it was necessary to continue with oil and gas production. Those who had an environmental background on the other hand, argued the opposite.

In their studies of responses to climate shift, Dilling and Moser (2007, 12) argued that our psychological reactions to information are critical components of our processing and willingness to act. Strong emotional responses can for example lead to a belief that the threat will not happen to oneself, or that silver-bullet solutions will be found (Moser 2007, 67-68). All of my informants believed climate change was something that is going to happen to other countries and apply mainly to future generations. This is a form of denial, which I argue is related to the media's focus on catastrophes and technological solutions, among other things. In other words, the west coast media's framing patterns did not mobilize people to act. However, what is interesting is that the majority of my informants argued that it is necessary for the media to talk about the alarming and negative consequences of climate change, so that people realize how serious it is. Still, this does not change the fact that my informants did not perceive climate change as an urgent topic for the west coast of Norway. Rather they distinguished between "us" and "them", as discussed in the literature review (Ungar 2007, 93). More information and facts has done little to modify their responses (Stoknes 2015, 14). As Lakoff (2014, 33) argues, more figures and facts do not automatically lead to behavioral changes.

My research shows that the changes that have occurred in the media industry have contributed to the fragmentation of knowledge and contradictions in people's

perceptions. Even though people read more newspapers now than before, they build up their own personal newsfeed consisting of news that confirms what they already believe (Moe and Kleiven 2016, 3-4). In addition to this, my informants were all critical of the Norwegian media. They argued that the Norwegian media is not global enough, that it does not write enough about climate change, and lacks resources and knowledge to actually expand its reporting on climate change. Because of this, my informants went directly to scientific sources when searching for news and information about climate change. In addition, they argued that the media should talk more about the results of our efforts, positive stories and solutions when reporting about climate change, in addition to connecting climate change to local topics. This is exactly what other researchers argue that we have to do, as the literature review in chapter 4 will show.

It might sound contradictory to argue that my informants were influenced by the west coast media's framing patterns, but at the same time their perceptions included their pre-existing beliefs, values and life situations. However, what is important to keep in mind when discussing people's perceptions of climate change is our subconsciousness. We are surrounded by an abundance of information, advertising, social media, headlines, TV, radio, etc. One can therefore question where people's opinions really come from. Are they a sum of what they have read and assimilated without realizing that they have absorbed it? Alternatively, do the readers always weigh competing ideas and arguments up against each other, and then form their opinions? According to Nisbet and Mooney (2007, 56), people use their value predispositions as a perceptual screen in selecting news outlets and web sites whose outlook match that of the reader. The subconsciousness is not a much studied topic when it comes to framing. However, I argue that both our cultures and our subconsciousness affect our reactions to different framing patterns. Norway has become an affluent country from producing oil and gas, and most of this production is exported to other countries. This leads to a dissonance among the Norwegian public since Norwegians see themselves as environmental pioneers, a nature-loving people who protects the environment, and share its wealth with those who need it (Krogh 2009, 80-82). It is therefore more comfortable for the Norwegian public to think that Norway is at the cutting edge of new environmental technologies and solutions that will save us all, and that our emissions from the oil and gas production are just a drop in the sea compared to other countries' emissions. My research shows that our subconsciousness is an important engine of

people's perceptions. The west coast's, oil-dominated subculture, and the Norwegian cultural values in general, have therefore played an important role in shaping newspapers' and readers' framing and behavioral patterns.

4. Reframing the Climate Change Debate: What Can We Learn from the Journalists

The objective of this chapter is to explore ways to better frame climate change in the Norwegian west coast media. In order to do so, I interviewed in total five journalists from *Bergens Tidende*, *Sysla* and *Energi og Klima* individually between 14.02.17 – 02.03.17. These journalists had written the majority of the news articles analyzed for this thesis. One of the journalists has a journalistic education, while the others have other types of educations, but have worked as journalists for a long time. The journalists' names have been changed to protect their anonymity, and just as with the readers, these names are based on the first letter from each newspaper/site. The journalists from *Sysla* were for example given a name starting with S. It is important to get the perspective of these journalists because they represent both traditional and new media. In addition, they communicate to different groups of society, such as the general public, the industry and the elite. These different roles might influence their framing and perspective on reframing. The new insight I wish to bring to the table is that the reframing of the climate change debate has already started in the mainstream and specialized media located on the west coast of Norway. However, this framing is technology-orientated and not very mobilizing. The reframing has started because of the efforts made by a few agenda driven journalists. Most journalists, however, are concerned with preserving the journalistic norm of objectivity, and I argue that this influences how they perceive their role as journalists and their opinion on reframing.

There are simple measures the journalists could take as a first step in reframing the climate change debate. The Guardian columnist George Monbiot, for example, argues that we have to use different words to describe nature and our relationship with it, so we can better defend it. He claims that "the environment" is just an empty word that creates no pictures in peoples' mind, and that "climate change" confuses natural variation with the catastrophic disruption we are causing. He therefore suggests that we should use terms such as "living planet" and "natural world" to describe the environment, and "climate breakdown" instead of "climate change", since these phrases would better allow us to form a picture of what we are describing. He argues that

professional ecologists should recruit poets, cognitive linguists and amateur nature lovers to help them find new words (Monbiot 2017). In this chapter, I wish to discuss whether journalists play this role. Journalism is more than just reporting, it is also about being creative, innovative and mobilizing. The media plays different roles, such as being critical watchdogs of society, and being a source of education, innovation and public debate. To what extent does the media framing meet these criteria, and what do the journalists have to say about these roles? The journalists had different opinions about whether it is their responsibility to reframe the debate. I will therefore explore the tension between agenda driven and objectivity driven journalism. The structure of this chapter will be divided into how the journalists define climate change; what influences their framing patterns; and their perspective on reframing the climate change debate. First, however, I will give a short review of the existing literature on this subject.

4.1.1. Literature review

According to the researchers who argue that we should talk about climate change in a different way, many of them argue that we have to reframe the debate. Stoknes, for example, claims that:

> […] when we become aware of how perception, risk, and framing together influences the mind, we can start crafting solutions. New ways of envisioning climate change can bring the message all the way to our own doorstep, feet, and lungs. We can start to discard the framings that maintain current barriers and embrace the new ones that support solutions (Stoknes 2015, 62).

In other words, when we become aware of how climate change communication affects us, we can start talking about climate change in a way that leads to action, not despair and denial. By reframing the debate, we can discuss climate change in a way that makes it easier for people to relate to the topic, and thereby make it easier to work on the solutions.

Reframing, however, is not just about words and language. According to Lakoff (2014, 151) reframing is about ideas. Lakoff argues that reframing is an ongoing process that does not happen overnight. He claims that when we successfully reframe public discourse, we change the way the public sees the world. Therefore, in order to

reframe, we have to access what people already believe unconsciously, make it conscious, and repeat it till it enters normal public discourse (Lakoff 2014, xii-xiii). Moser and Dilling (2007b, 504) have a good explanation for why we should start reframing the climate debate. According to them, since we live in an information-overloaded world, our filters have become very selective. Therefore, people may block out climate change stories that follow the same familiar pattern, or talk about it in the same disastrous way. In order to break through the sound barrier, we have to give people a reason to pay attention and then sustain their engagement. One way of doing so is to tailor the message to different public groups according to their beliefs and attitudes (Adomßent and Godemann 2011, 35). We should also use metaphors, allusions and examples that will trigger climate change awareness in a personally relevant manner (Nisbet 2009, 15). Because, according to Whitemarsh (2008, 418), "[c]ustomized information is likely to have a greater impact on action." For example, it will be easier for individuals who are shown how their consumption directly relates to their energy bill, to lower their consumption. Both because they know how to modify their behavior, and because they become aware of the financial benefits of their action. An example of metaphor use could be to explain the greenhouse effect as a "thickening blanket of carbon dioxide" that "traps heat" in the atmosphere. Research has shown that when people were presented with this image, their response and understanding improved markedly. Metaphors such as these might therefore solve some of the communication problems regarding climate change observed so far (Bostrom and Lashof 2007, 38-39). Doyle (2011, 8) argues that climate change needs to be understood as a concern for the "here and now," rather than a distant term referring to something happening "out there". By connecting climate change to local threats, the issue becomes more salient and urgent than global problems (Leiserowitz 2007, 53). People are also more willing to engage in mitigating actions when the issue is connected to their local environment (Busch 2015, 23). For example, if you explain to an American that you won't be able to grow Merlot grapes in Napa – Sonoma after a certain time, that means more than talking about how global temperatures will rise. One must use highly specific examples to reach people and communicate urgency (Cole and Watrous 2007, 187). We also have to include other aspects in the discussion, such as human health, economic prosperity, and national security. In this way we can talk about climate change in a way that concerns everybody (Busch 2015, 23). Hulme (2009, 362) argues that instead of

"solving" climate change, we need to see how we can use the idea of climate change to rethink how we move forward with our political, social, economic and personal projects over the decades to come.

Research has also shown that strong negative emotions correlate to low support for climate action, while positive emotions likewise correlate with increased support. It is therefore important to pay attention to people's feelings when communicating about climate change (Ring 2015, 412). If people are positive about a solution, then it will work better than if the solution were implemented through guilt, rule, or fear of punishment (Stoknes 2015, 94). Vivid images and stories appeal more to people's emotions, which is the primary drive of action taking, than charts, graphs, and scientific data. However, overuse of emotional appeals, especially messages of doom, could lead to "numbing" (Busch 2015, 23). This does not mean that we should not use facts. Factual information may be important for those already motivated to take the next step, but this type of information is usually not sufficient to motivate behavior in the first place (Chess and Johnson 2007, 228). In addition, when using facts and figures, they must be tailored to fit how different groups of people process information (Stoknes 2015, 52). Appealing to emotions also means engaging people to envision a future worth fighting for. Creating a positive vision might be difficult at first. However, communicators can do this by pointing to the many positive efforts under way, and create a forum where people can engage in the visionary process. To stop thinking in terms of the doomsday scenario is also helpful. Appealing to people's innate goodness has also shown to be effective in encouraging climate action, in addition to appealing to logic and responsibility. Psychologists confirm that people have a deep desire to live a "good" or "meaningful" life, where they can use their strength, talents and skills to belong to and serve a larger purpose. By reminding people of the common good, one could provide meaning beyond self-serving goals. This could be essential to counter individuals' sense of isolation and futility in the face of climate change (Moser 2007, 74-75). Other researchers argue that focusing more on solutions and adaptation, and less on frightening statistics, is the way to go. By doing so, one would move from denial and despair to action (Shanahan 2007, 3). "People want to know what they can do, that they are able to do it, and that others are doing their share as well." Providing information about the solution is just as important, perhaps more important, than providing information about the problem (Moser and Dilling 2007b, 505).

Apart from tailoring the information to the specific audience, researchers also argue that we should talk about opportunity, risk, uncertainty, and emphasize that climate change is happening now. According to Shanahan (2007, 2), many companies are acting faster than governments since climate change is increasingly portrayed as a business opportunity. When targeting governments or officials involved in decision making, Painter (2013, 35) argues that risk language has clear advantages. Risk framing could provide policy makers more clarity concerning options and the process of making decisions related to them (Painter 2013, 2-3). However, how effective risk framing is on the general publics' understanding is more uncertain. Painter (2013, 35) claims this effect varies from audience to audience. Other framing studies have discussed *Uncertainty* framing a lot. Some researchers argue that it is important to talk openly about remaining uncertainties. Leiserowitz (2007, 56) for example, argues that communicators should "…openly describe and discuss the known likelihood and severity of potential impacts, and narrate scenarios that describe possible local and regional futures." In addition, communicators should explain why uncertainty exists. For example, because the science has not been done yet or the systems involved are so complex that science has yet to understand them sufficiently. Stoknes (2015, 119), on the other hand, argues that instead of discussing the uncertainty, we should talk about preparedness instead. That would involve telling a story about getting ready for the upcoming changes, strengthening our resilience and our feeling of safety. By reframing uncertainty in this way, it would not make sense to do nothing.

According to Leiserowitz (2007, 55), Americans are already disposed to associating melting ice and glaciers in the Arctic with a strongly negative effect. I would argue that the same is true for Norwegians. What people need to know is how climate change affects the rest of the world, i.e. people, places, economies, cultures, and ecosystems. By highlighting the current impacts of climate change, the topic will be perceived as more salient and urgent than when discussing the future impacts (Leiserowitz 2007, 54).

To sum up, existing framing studies argue that when reframing climate change, we have to tailor the information directly to the specific audience. In doing so, we should connect the issue to the local environment, exemplifying what will happen there instead of speaking in general terms. We should use metaphors instead of scientific

terms, and include other aspects in the discussions, such as human health. In this way climate change will concern everyone. We should also discuss solutions, adaptation, and results, in addition to paying attention to people's emotions. Talking about opportunity, risk, and emphasizing how climate change is happening now is also helpful. Likewise, it is worth explaining why there still are some uncertainties regarding the science. Later I will compare this research to the framing patterns found in west coast media, and discuss the journalists' perspective on this. However, first I will discuss how the journalists define climate change.

4.2 The Journalists' Perspective on Climate Change Communication

4.2.1. The journalists' definition of climate change, and the tension between objectivity and agenda driven journalism

All the interviewed journalists believed climate change is anthropogenic. Seth put it as follows when discussing how the green section in *Sysla* started: "*What we set as a premise for the work we do, is that we believe in climate change and that it will lead to many societal changes, both climactic and in the industry*."

This belief in climate change being anthropogenic was also reflected in the journalists' work. I did not find any debates about whether climate change is anthropogenic or not in my analysis. However, I did not analyze the debate sections, so it is possible that this debate was present there. Emma from *Energi og Klima*, for example, referred to *NRK*, which she accused of bringing climate sceptics into their debates. "*It's not relevant*," she said. "*We give [climate sceptics] exposure in Energi og Klima too, because we can't censor them. However, this is not what we discuss anymore; we have come further than this. Now we discuss what needs to happen. Not whether climate change exists*." Ben, on the other hand, argued that the climate change debate in the media followed the publication of the IPCC reports. The first report discussed the natural science behind climate change, and the media therefore discussed whether climate change is anthropogenic or not. The last report, on the other hand, focused on mitigation and adaptation. Thereby, the media now focusses more on this. Either way, these results correspond with other research conducted on this topic. Duarte

(2010, 47), for example, found that only 8 % of the climate coverage in Norwegian newspapers consisted of climate sceptics. This is interesting, considering that a recent poll showed that one in five Norwegian voters do not agree that climate change is anthropogenic (Mortensen and Eilertsen 2017). This poll was conducted on behalf of *NRK* and one thousand people participated in it. Nevertheless, it still shows that there are climate sceptics among the Norwegian public, and probably their number is higher than the one suggested by the media. The media has therefore taken a stance representing scientific consensus instead of representing all sides of a matter equally. What the media does to educate the public about climate change, however, will be discussed at greater length in the further discussion.

Most of the journalists prioritized the concept of "climate change" instead of "global warming" when reporting about climate change. "*The use of the word "global" makes it easy to believe that this is a global problem where one's actions don't matter*," explained Seth. Ben, from *Bergens Tidende*, elaborated on this: "*[The phrase] "climate change" also conveys that there might be different changes in different regions, and that the process in some places, and in some seasons, might even lead to lower temperatures*." However, when it came to defining climate change, the journalists were a bit more ambivalent than the readers were. Sally, for example, did not wish to define climate change in any certain way, and would rather stick with what her informants said. Seth and Emma, on the other hand, both defined climate change as a crisis. Emma put it like this: "*I think it's important to make people realize that this is a matter of urgency, that the time aspect is under-communicated. I therefore find it appropriate to communicate this as the crisis it already is […]*". Ben would rather define it as a "shift in climate", because he strived for a fact-based dissemination without the use of loaded descriptions. However, he would still use words such as "crisis" if his sources did so.

Already here one can see a difference between the journalists from *Bergens Tidende* and *Sysla* and the journalists from *Energi og Klima*. The first two strive to follow journalistic norms of objectivity, while the latter have an agenda they wish to convey. This also influenced how they perceived their role as a journalist. Sally, for example, emphasized many times that she was a journalist, not an activist:

> I don't think that if I write this or that way, then more people will want to do something about climate change. We are not activists; we are objective

> and neutral in our coverage. The angle is determined more by the case, in my opinion, than by an ideological stance (Sally, Sysla, 20.02.17).

Sally therefore argued that it is not up to the media to write about climate change in a way that leads to mobilization; other groups or activists have to take care of that. The journalists from *Energi og Klima*, on the other hand, saw it as their mission to bring new information into the public agenda. Emma put it like this:

> We who work here often discuss these questions: What does the debate need now, what knowledge is missing, is there anything new that has happened that we need to bring forward to make the discussion informed and knowledge-based? Are there any people we can challenge to say something, to share their knowledge? (Emma, EK, 15.04.17).

Both Emma and Ethan perceived their role as journalists to be both educational and a source for public debate, which I will come back to later. However, Sally was not the only journalist who was concerned with objectivity. Both Ben and Seth believed it would be difficult for them to operate as independent journalists if they took a stance in a matter. "*I think there should be a distinction between commentary and news journalism, because it's terribly hard to go back and cover a company neutrally if you either judge them or praise them the day before*," said Seth. Ben explained that he used the "good old journalistic ideals" as a basis for his reporting, where all authors have a right to defend themselves if they are being attacked in an article, and where journalists do not use loaded descriptions that reveal their stance, but instead are sober in their formulations. He was glad that he did not have to be both a reporter and a columnist as Mathismoen in *Aftenposten* is. Ytterstad (2011, 323-343) explored several dimensions of the ideal of objectivity among Norwegian climate change journalists in his article from 2011. He concluded that the support for agenda journalism is low among the journalists and most of the journalists in his research answered that "journalists should always seek a balanced representation and never mark their own views". In other words, many Norwegian journalists do agree with Sally's, Seth's, and Ben's view of objective journalism.

To sum up, in contrast to the readers, the journalists did not all agree upon how climate change should be defined. Some of them believed it should be defined as a crisis, others as a shift in climate, and one of them preferred not to define it. The tension between agenda driven journalism and striving for objectivity influenced how the

journalists perceive their roles. Some of them argued that the media is not responsible for mobilizing the public, while others saw it as their mission to bring new information to the public agenda. There will be several more examples of this tension in this chapter. In the next section, I wish to discuss what influences the journalists in their writing, and how they perceive their role as educators, societal watchdogs, and a source for public debate and innovation. I also wish to understand who is behind the story the journalists are writing, and whether the journalists are free to tell everything.

4.2.2. What influences the journalists' framing patterns: agenda, objectivity and the media crisis

There were several things influencing the journalists' framing patterns, such as their own ideology and agenda, the changes that have occurred in the media industry, and how they perceive their role as a journalist.

The journalist from *Bergens Tidende* was the one who talked the most about his role as an educator. He explained that he always kept his role as a public informer in the back of his mind:

> I keep in mind that we have a role as a public informer. I believe it's especially important to keep this in mind within climate journalism. That you try to explain the context and be aware of how you discuss some things. I am not the one who says that climate change is anthropogenic; therefore, we have to be precise that this message comes from the vast majority of climate researchers. We have to present it in a way that doesn't lead to confusion among the readers regarding whether there is disagreement about climate change being anthropogenic or not. This is extra relevant now with Trump and fake news (Ben, BT, 02.03.17).

Ben also explained that they have to write their articles in a way that is relevant to their readers, and does not take for granted that the readers have much knowledge about the topics they write about. For example, leading up to the Paris meeting they wrote articles about climate change that would enable readers without much prior knowledge to understand what this meeting was about. They used a concept called "Brief", where they tried to explain in very basic terms what topics such as the 2°C target are. *Bergens Tidende* saw it as their duty to inform the public. According to Ben, *Bergens Tidende* uses three criteria to define their articles. The first is for articles that provide more

traffic on their website - articles that people can read without a subscription. The second is for articles that will sell more newspapers and subscriptions, e.g. touching human stories, and the third is for what his editor calls "the County Governor" – important stories they have to write despite traffic and sales numbers.

The journalists from *Energi og Klima* also stepped into the educational role. However, instead of educating the general public about the 2℃ target, *Energi og Klima* brought forward new information and knowledge about climate change. For example, when Emma prepared the news stories for their "Five on Friday" column, she payed extra attention to international newspapers, looking for news about big politics and reports that does not reach the Norwegian media. She even saw it as their mission to educate journalists. "*A part of our job is to educate journalists. So we send stuff to them, and they participate in our "Climate Breakfasts" – not to report, but to listen*," said Emma. She explained that *Energi og Klima* started because much of the news and information about climate change does not reach traditional media. This is also why they publish articles in their scientific section, *2℃*, to convey scientific research to a larger audience. "*I believe they have a duty to convey their research*," said Emma referring to scientists. "*However, they are not always successful in doing so." "[Climate research] needs translation*," added Ethan, "*we try to help out to the best of our limit, but we have reached our capacity in terms of resources*." However, what is interesting about this is the readers' opinions about *Energi og Klima*'s scientific section. Erik, for example, argued that if these articles were going to reach a broader audience, then the magazine should have a different name than *2℃*. He did not think that people, who have no interest in climate change, would be triggered to read these articles. In other words, the scientific section would need some reframing for the general public to be interested in it.

The journalists from *Energi og Klima* went directly to the scientific sources when searching for the new knowledge they wished to bring forward. Ethan, for example, said that Twitter was his most important source, and claimed that if you follow the right people there, you are constantly up to date with the best and newest information emerging worldwide. Emma added to this with direct contact with research institutions, in addition to following international news sites and spending time on websites "*that no one else has heard about*," for example Carbon Watch. The other journalists also

mentioned research institutions and international media as a source of knowledge. However, I still got the impression that the journalists from *Energi og Klima* went deeper into these sources than the other journalists. Ben, for example, mentioned *Norsk Klimastiftelse* and *Energi og Klima* as two of his sources. He saw them as knowledge banks, which collect and prepare quality information for the journalists - information they previously had to look for themselves.

Ethan spent a lot of time on Twitter, where he picked up things that happen internationally, giving them a Norwegian twist and spreading them to the Norwegian audience. This is interesting, because I have argued earlier that the Norwegian media is not able to see beyond its own nose, i.e. is not concerned with international issues that might influence Norway in the future. Ethan, however, does the exact opposite. He tracks Twitter, looking for international news and information that will serve the Norwegian debate. In addition to taking an educational role, *Energi og Klima* was also a source for the public debate. In other words, the journalists from *Energi og Klima* were concerned with bringing new knowledge and perspectives into the Norwegian climate debate. The journalists from *Bergens Tidende* and *Sysla*, on the other hand, were concerned with being objective and neutral in their reporting. Their different perspectives on the journalistic role influenced what kind of stories they write.

The journalists from *Bergens Tidende* and *Sysla* had heard about framing, but had little knowledge of it. The journalists from *Energi og Klima*, on the other hand, used framing actively in their work. The financial risk angle was an example of this. They thought the financial risks related to oil and gas production were under-communicated, and therefore applied for funding to work more with it. "*Why do we constantly say that Norway is pumping oil and gas so that Africa can get electricity? Does this allegation mean that we lack some knowledge here or is there something that is not communicated well enough*?" asked Emma, and explained that in situations like these they write articles and invite people to debate this subject. Ethan added to this:

> We use risk framing when discussing fossil energy. When you do that, you communicate information and content that shows that there is a financial risk related to fossil fuel production. This is a different framing than the one saying that oil and gas always provide profitability and prosperity, which is the main framing in Norway. If you start asking questions about profitability, and whether there is a need for oil etc., then you get another

> debate that engages other types of people, such as finance departments (Ethan, EK, 14.02.17).

Another type of framing actively used in *Energi og Klima* was *Green shift* framing. "*[The green shift] is an effective framing because it conveys a message that this is meant to happen, that one can't avoid dealing with this changing process*," said Ethan. However, the journalists own ideology also influenced their framing patterns. As previously discussed in ch.3, Ethan talked like a follower of *Green politics* and *Ecological modernity*:

> It wouldn't make that much of a difference if some more people lived like Erik Dammann described [in his book] "Fremtiden i våre hender" (The Future in our hands). We need structural changes that involve using less fossil energy and using our resources in a more correct way, at a structurally superior level. I am totally convinced that this is the right way to do it (Ethan, EK, 14.02.17).

Both he and Emma referred to themselves as "technological-optimists". According to Ethan, technology and changes in economic structures are crucial. "*New technology can lead to big changes once you reach the tipping points*," he said. Ethan explained how he always believes that the changes that need to happen eventually will happen, even though he was a bit more concerned now because of the political changes that had occurred, such as Brexit and Trump. This is consistent with the framing pattern found in *Energi og Klima*, which used *Green shift* framing, and focused on technological solutions and the financial risks related to the oil industry. Therefore, the journalists from *Energi og Klima*'s ideology clearly influenced how they communicate about climate change. The other journalists from *Bergens Tidende* and *Sysla*, on the other hand, were not influenced by their own ideology in the same way. I therefore argue that they were more susceptible to their sources' framing patterns.

Ben for example, argued that climate scientists, organizations and politicians are the ones who bring *Disaster* framing forward:

> I am a little surprised after reading a lot of climate research to see how some politicians really pull this out and use very dramatic terms about what can happen. However, it may be a way for them to reach out. They know they have little time to convey the message, and they do it in a way they know will get attention. Therefore, the media is more a messenger of other people's catastrophic images (Ben, BT, 02.03.17).

There seems to be a vicious circle here. The journalists' informants have to use dramatic words to break through the information barrier and catch the media's attention. The media, on the other hand, exploits this in order to catch their readers' attention. "*It's easy to get carried away when someone uses big words*," said Ben, before continuing to talk about how the media should perhaps be more critical of this.

Another example is the oil and energy section and the green section in *Sysla* that used very different framing patterns. However, Sally explained that they had no conscious reflection about this distinction. "*As a journalist you are more concerned with finding the most interesting point and getting as many readers as possible, not whom or what you are writing about*," she said and continued: "*One doesn't read these articles completely out of context*". Sally argued that even though they write one article about the oil and energy minister who says that we have to cheer for oil, there is usually another article in the news feed stating that we have to reduce our carbon footprint. The readers are therefore informed of both sides. According to the journalists I interviewed, their job is to be objective and critical to every story that is being told. Still, *Energi og Klima* were far more critical to the oil industry than *Sysla* and *Bergens Tidende* were. On the other hand, *Norsk Klimastiftelse*, which is led by an executive board, runs *Energi og Klima*. This board urges *Energi og Klima* to, among other things, contribute to measures leading to reduced greenhouse gas emissions. In other words, the executive board influences what kind of stories *Energi og Klima* writes.

However, because of their guidelines the journalists from *Energi og Klima* were probably freer to express their opinions about the oil industry in their writing. Emma, for example, argued that Norwegians are doped on oil. "*We have managed to create an idea in Norway that if one presents a proposal that affects the oil industry, then one isn't patriotic enough. The political environment has contributed greatly to this*," said Emma. She thought that Norway neglects its full potential within the renewable energy sector because of our strong ties to the oil industry. "*Other countries have come a long way within the offshore wind sector for example. Norway could have done this as well a long time ago; instead this is still a tiny industry in Norway*." Emma also thought that Norway has a lot of competence within the oil industry that could be used in the offshore wind industry:

> They are going to operate in the same environment. However, they only think and hope that the oil prices will increase again. They don't think about the fact that they can be part of the changing process and create new value with renewable energy. This is why things are moving very slowly in Norway. We use the money earmarked for climate on buying carbon offsets abroad, while Sweden and Denmark use this money back home. Therefore, Norway's climate gas emissions have increased since 1990, while Sweden and Denmark have reduced their emissions. They involved their people, making it both a national and public effort. You cannot expect people in Norway to take part in this when we outsource it all (Emma, EK, 15.02.17).

Energi og Klima saw it as their mission to bring new elements into the Norwegian debate. *Sysla* were the ones who most clearly took on the role of a source of innovation. They wrote a lot about how the green shift leads to business opportunities. "*To focus solely on the negative makes it difficult to do anything about it. One must be able to figure out what opportunities exist in technology and industrial development, which in the long term can do something about the climate challenge*," said Seth. He also explained that *Sysla* got started as a response to the changes in the media industry.

> *Sysla* focuses on several things, such as Podcasts and *Sysla Live* where we take the journalism on stage. We are continuously developing our content. We are supposed to be innovative and discover new things. We are a test company of Schibsted (Seth, Sysla, 21.02.17).

Bergens Tidende, on the other hand, took on the role as societal watchdog. Ben found it interesting to look at Norway's role in the climate negotiations, and the consequences of our climate politics.

> We like to appear to be very offensive, but much of what we do is linked to what we do in other countries. Norway has a position internationally in relation to the billions we spend on saving the rainforest, while we simultaneously make up our climate accounts largely through carbon offsets purchases (Ben, BT, 02.03.17).

Ben thought it was exciting to work with this topic and referred to the articles he had written on this subject. If he and other journalists had not started writing critically about Norway's carbon offset program, the government might just continue with this program while neglecting or perhaps not even being aware of all the problems related to it.

However, due to the media crisis the journalists don't have the same opportunities to carry out extended projects like this anymore, thereby failing to perform their duty.

> There aren't as good opportunities to do it now as there was two years ago, to put it simply. However, it is still possible to apply for external funding for projects like these […]. It's a pity that the media houses cannot put money on the table for these projects anymore. Nevertheless, if one wants it strongly enough, it's still possible to do it, even though it's tougher now (Ben, BT, 02.03.17).

In other words, it is up to the journalists to work hard and apply for funding if they want to do extended projects. Ben explained how *Bergens Tidende* do not have journalists who specialize in a certain field anymore, now they are more all-rounders. The paper also closed down its foreign department, and focuses more on regional news. Even though times have become harder for the media industry, Ben argued that the quality of good journalism has become better now.

> There was a lot of lazy work around and about. I noticed that myself that one got away with many things. One could write a lot about a theme without being aware of how interesting it was for the readers. At that time, we weren't told how many people and for how long people read our articles (Ben, BT, 02.03.17).

Ben further added that journalists are more aware of how they present their articles now. They work harder at writing their articles in a more engaging and more exiting manner in the beginning of the article, e.g. by emphasizing a conflict or an argument. "*I believe this is good for us, and it doesn't have to endanger the quality. It may in fact give us an extra push to write our articles in a way that makes more people interested in them*," argued Ben. This confirms my finding in ch.3. The journalists make more of an effort to satisfy their readers now, and pay more attention to which type of articles are more popular. However, at some level the media are digging their own grave, because they are not able to provide everything the readers ask for. The readers wished the media could write more about global news and more in-depth articles, both of which *Bergens Tidende* does not prioritize as much as before because of financial constraints.

Energi og Klima also noticed the financial struggles in the media industry. "*There is a constant struggle to get enough income*," said Ethan. They wished to expand on their reporting, for example by reporting more news, but would most likely only be

able to continue as they do now, writing comments and analysis. Ethan was, however, grateful for the changes that have occurred in the media industry. "*The information flow happens much faster now. It is more democratic because one gets access to things much faster and without the filter that traditional media creates*," said Ethan, and added that a lot was written before as well, but people did not get a hold of it. "*Where it gets published really doesn't matter anymore. It immediately gets caught up in the global news stream, anyhow*," he said, and claimed that it would not be possible for *Energi og Klima* to exist without Twitter and all the information they have access to there.

The journalists from *Sysla* were influenced by both their guidelines and the changes that have occurred in the media industry. They could only write about subjects related to the industry. Seth put it like this:

> I had one main requirement - to relate my stuff to the industry. If it didn't have that link, then there wasn't any point writing about it. For example, I wrote one article about *Klimapartnere* (Climate Partners), and then spent twice as much time arguing with my boss whether I could publish the article (Seth, Sysla, 21.02.17).

Sally explained that they did not write any independent articles that were only about climate change; instead, they gathered articles like these from NTB (the Norwegian news agency). However, Seth, who has been with *Sysla Green* from the start, added that the green section became less about climate and more about energy after a while. This was partly because he thought it was more fun to write about energy, and partly because it was easier to find an industry angle within the technology and energy sector. In addition to this, he struggled to find enough climate material, both because it is difficult to get an overview of this field and because it is more complex to convey the material.

> Climate issues are more time consuming to write about, and not all researchers are as easy to deal with either. Not all of them are able to explain what they are doing in a manner such that lay people understand it. We also got a lower reading rate on these articles. It's a shame, but it's a little click-based. Therefore, when I worked on these articles for several days, it felt like I wasn't paid well enough for it (Seth, Sysla, 21.02.17).

Seth also explained that they had a policy about producing one fresh article each morning, and it therefore became a struggle to find new material for all subjects each day.

To sum up, *Bergens Tidende*, *Energi og Klima* and *Sysla* each had their clearly defined roles in journalism, and their framing patterns were influenced by several elements. *Bergens Tidende*, a representative of traditional media, took on the role as a source of education and critical societal watchdogs. For example, relating to the COP21 meeting in Paris, the paper had an article series explaining basic issues related to the climate negotiations, and the paper has previously focused on investigative journalism. Due to the media crisis, however, the paper does not have the resources to do these extended projects anymore. Instead, the journalists have to apply for funding elsewhere if they want to do these projects. Therefore, I argue that their role as critical watchdogs has been weakened. I also argue that *Bergens Tidende* and *Sysla*'s concerns with objective and neutral reporting made them more susceptible to their sources framing patterns. E.g., the journalist from *Bergens Tidende* argued that the way scientists' presents their findings influences how they tell their stories. *Sysla* was also influenced by the changes that had occurred in the media industry and by their guidelines, which were to only tell stories related to the industry. *Sysla* is supposed to be an example of innovative new media, but they also have to deliver a fresh story every day, and writing about climate change turned out to be too complex and time-consuming.

What influenced *Energi og Klima*'s story the most was their mission statement issued by the board behind *Norsk Klimastiftelse.* These guidelines urge *Energi og Klima* to write in a manner that makes the green shift happen faster than it otherwise would have done. This allows *Energi og Klima* to be more critical towards the oil and gas industry than *Sysla* and *Bergens Tidende* were. However, the journalists' own strong opinions also contributed to this, and I argue that the journalists from *Energi og Klima* were freer to express their own opinion about the oil industry. On the other hand, *Energi og Klima* were very dependent on Twitter. Their stories were therefore dependent on what people decided to share on Twitter.

4.2.3. Reframing the climate change debate: The journalists' perspective

The focus on solutions was one thing all of the journalists had in common when discussing how to reframe the climate change debate. Ben, for example, claimed that *Bergens Tidende* already had started to reframe the debate:

> We are writing about solutions without actually saying that we do so. We write about the turnover of electric cars, the transition to more renewable energy, much of what is happening in the world. [Climate change] has become an integral part of all societal development, and the way media writes about this is perhaps not perceived as writing about solutions (Ben, BT, 02.03.17).

Ben is probably right about the readers not perceiving this as writing about solutions, because the readers from ch.3 wished *Bergens Tidende* and other media would write more about solutions. Emma also argued that *Energi og Klima* always focusses on solutions. "*Nothing else works in my opinion*," she said. She further explained that when they arrange conferences, Climate Breakfasts etc., they always start with focusing on the consequences of climate change for the first few minutes, and then solely focus on the solutions. Sally also argued that *Sysla* focusses on possibilities and solutions. "*We look at what technology exists, what people do and what is actually happening*," she said.

My analysis shows that the journalists focused a great deal on technological solutions. However, as I have previously argued, this gives the impression that technology is going to save us all. Do not other aspects matter, such as connecting climate change to human health, and national security, as discussed in the literature review? Many solutions, such as biofuel and carbon capture, also come with their own sets of problems. Some of the articles analyzed for this thesis discussed this challenge. However, the journalists did not reflect on the complexity of this problem. Instead, some of the journalists thought we should focus more on technology. Seth, for example, believed that technology and energy development is linked to the climate issue, and that we have to focus more on this link. "*In the energy and technology part there is more optimism […]. So if we manage to pull some of the positivity and optimism over to the boring climate part, then I believe this would be helpful*," said Seth. Emma agreed with this:

> What I wish the Norwegian media could write more about is technology development in relation to the climate issue, and value creation in relation to adaptation – what jobs and opportunities are there in the transition from a fossil based to a renewable society? (Emma, EK, 15.02.17).

Based on these two remarks, it looks like the journalists believe even more in technological solutions than the readers did. These results are, in other words, more in line with the "European Perception of Climate Change" study, where 56 % of the Norwegian respondents also had this belief in technological solutions (Steentjes et al. 2017, 22). Many of my readers had strong opinions about climate change and might therefore be less susceptible to media framing about it (Takeshita 1997, 27). However, readers who do not have much interest or knowledge about climate change might be left with the impression that developing new technology is the only solution to solving the climate crisis. Therefore, they might conclude that there is not much they can do themselves. In other words, the strong focus on technological solutions can have a distancing effect on the readers.

Emma also talked about how people still do not realize how serious the consequences of climate change might be. Therefore, she argued that we need clinical, simple explanations of the consequences that are not filled with catastrophe.

> I wish we could have more of the undramatic, fact-based stories. Those will make us realize that something needs to happen quickly. It will also make us think about whether we can make money out of this, if we can create new values based on this changing process, and which industries can contribute to this (Emma, EK, 15.02.17).

According to Emma, more fact-based stories about climate change will lead to a wake-up call among the public. However, as discussed in the literature review, the fact-based approach does not necessarily lead to behavioral change (Chess and Johnson 2007, 228). Instead, people need to be presented with a vision of a better society that has tackled climate change, which will make them be able to imagine a future worth fighting for. However, there is a lack of such visionary framing in the media analyzed for this thesis, and the journalists did not talk about such a future either. They rather argued that we have to talk more about climate change and find new angles. On the other hand, many journalists argue that climate change has to be "news relevant" for them to write about it. Sally put it like this: "*You need a hook if you are going to write about it, there must be a point, a change or something new related to it. We don't grab news out of thin air, we need an entry point*." Her colleague agreed with her, however, he still thought it was possible to find new angles. "*People lose interest if it isn't news relevant, since it mostly will be repetition then. However, I still believe that there are so*

many possible angles that it shouldn't be that hard to make it relevant," said Seth and continued, "*even planning where to build cities is climate relevant [...]. You can talk about the consequences of climate change without writing the same story about how far we are behind the 2℃ target every time*." Ethan had an extra comment: "*There is a lot to go on,"* and, *"[climate change] is about everything from whether Norwegian municipalities are able to handle more rainfall in their sewer system, to Statoil's profitability*." He wished that the mainstream media would use more journalistic resources on researching what kind of societal changes are connected to climate change and climate politics.

However, the journalists were vaguer and did not talk as much about reframing as the readers did. One of the reasons may be that it might be easier for the readers to look critically at the media than it is for the journalists to have an objective, critical view of their own work. The framing patterns found in ch.2 showed that west coast media has started to reframe the climate change debate through *Green shift* framing, and this is likely a result of *Energi og Klima* and *Norsk Klimastiftelse*'s efforts. They were the ones who started using the phrase "green shift", and the other journalists referred to them as a source of knowledge. Therefore, I would argue that *Energi og Klima* is very influential even though they only have 10 – 12.000 readers a month. The journalists from *Energi og Klima* were also the ones with most knowledge about framing, and they used this knowledge to reframe the Norwegian climate change debate. The other journalists had a more limited knowledge about framing, and they did not actively try to reframe the debate in the same way. Instead, they went with the direction of how the debate evolved around them, leaving the reframing up to their sources.

Through *Green shift* framing, the debate evolves around the shift that needs to happen, not whether climate change is anthropogenic or not. This is exactly what the journalists from *Energi og Klima* wanted. However, it was mostly *Energi og Klima* that discussed the status of the green shift, i.e. talking about the green shift as something happening now. *Bergens Tidende* talked more about how the green shift *should* happen and how it *can* happen at different levels of society. *Sysla* also referred to the green shift as something happening now, but not to the same extent as *Energi og Klima* did. They talked more about the opportunities related to this shift. The biggest difference between the three, however, was that *Energi og Klima* also actively tried to reframe the fossil

fuel debate. *Energi og Klima* deliberately discussed the financial risks surrounding continued oil and gas production as a way to turn this debate, while *Bergens Tidende* and *Sysla* to a greater extent passed over the oil industries' framing on this subject. However, even though *Energi og Klima*'s efforts to reframe the debate have produced results, there is still much left to do.

Segal (2017, 123-124) argues that the mass media has succeeded in communicating the basic facts behind climate change, but not the narrative around these facts – the narratives that explain what it means for there to be a scientific consensus, or what a complex system looks like. According to Segal, questions like these have a direct bearing on the climate change conversation without necessarily being about climate change. "They, and others like them, constitute a suprascientific narrative that is necessary for science to become culture." He also argues that the media needs to explain the process of how we figured scientific discoveries out, not just provide the answer. Otherwise, people can just go onto the web and find an alternative answer. However, as Duarte (2010, 88-89) argues in her thesis, the Norwegian journalists' level of knowledge is too low. In general, there are not good enough science or research journalists in Norway, as there are in other countries. This can be a problem when the journalists do not have enough knowledge about the subject they are going to write about, because the journalists cannot ask control questions to their informants, nor will they be able to explain the process behind scientific discoveries. As Duarte argues: "The media should not just be a passive messenger, but rather invite readers to debate, especially about climate change. This requires some insight in climate research."

The journalists I interviewed, on the other hand, had different opinions about the media's role as advocates. Some of the journalists argued that they have to be objective, therefore, they cannot have an agenda the way *Energi og Klima* does. However, I argue that this means that they instead are more likely to convey the agenda and frames of different interest groups. 97 % of all climate change researchers agree that climate change is anthropogenic and that it is urgent that we make great efforts to reduce our emissions. In Norway, however, we are more concerned with continuing with oil and gas production, while using carbon offsets to make up for our climate gas emissions, and this is the message the media is conveying to the public. I therefore argue that the media in Norway is not critical enough towards the oil industry and its supporters. With

some exceptions, most journalists in Norway do not have enough knowledge about climate change to write in-depth articles about topics related to it. This also means that they do not have enough knowledge to reframe the debate. The reframing will instead happen when their informants start to reframe climate change. One of the most important aspects of reframing climate change communication is to connect climate change to local topics, and target the message to different public groups according to their beliefs and attitudes. This requires a lot of knowledge about how climate change will affect our local environment. It also requires time to work on these articles. The media, on the other hand, focusses more on short, entertainment style news. In the media's defense, these articles are the most popular. The readers therefore have to take their part of the blame, and so do scientists, environmental organizations and institutions. This latter group should work harder at reframing their own communication, and stop focusing on dramatic messages as an attempt to get the media's attention.

4.2.4. Conclusions

The objective of this chapter was to explore ways to better frame climate change in the Norwegian media. To figure this out I needed to understand how the journalists I interviewed perceived climate change, who and what influences their reporting, and whether it is possible to actually reframe the climate change debate. The journalists defined climate change in different ways. Some defined it as a crisis, which we have to inform the public about, and argued that the media is responsible for keeping the debate alive. Others defined climate change as a shift in climate, and only used strong words such as crisis if their informants used those words. One of the journalists, on the other hand, was especially concerned with being objective, and would therefore only define climate change the way her sources did. The media was also not responsible for mobilizing the public, in her opinion. There was, in other words, a difference between the journalists. The journalists from *Bergens Tidende* and *Sysla* were more concerned with journalistic norms such as being objective, while the journalists from *Energi og Klima* had an agenda they wanted to convey, and actively worked on reframing the debate. Both *Energi og Klima* and *Sysla* are representatives of the specialized new media, and they took on different roles than *Bergens Tidende*; *Energi og Klima* is a source of the public debate, *Sysla* is an innovative new media. *Bergens Tidende,* on the

other hand, a representative of the traditional regional media, took on the traditional roles as an educator and societal watchdog.

External drivers or agendas in some way influenced all of the journalists' reporting. The board's directives, as well as their own ideology and agenda influenced the journalists from *Energi og Klima*, in addition to information posted on Twitter and other international websites, which they used as a source in their reporting. The journalists from *Sysla* were influenced by their guidelines to only tell stories related to the industry. Finances influenced all of the journalists. Those from *Energi og Klima* struggled to get financing and wished they had the opportunity to expand their reporting. Those from *Sysla* have to produce a fresh news story every day, and found it too complex and time-consuming to write about climate change, and *Bergens Tidende* has more limited resources, which results in employing more all-round journalists and less time to do extended projects. All of this limits the journalists' possibility to reframe climate change. Some of them argue that it is not their job to do so, while others have started to do so already. I argue that many journalists in Norway do not have enough knowledge about climate change and framing, and do not have enough time and resources to better frame the climate change debate (Duarte 2010, 88-89). The reframing will most likely come from their informants, or a few dedicated journalists who are personally willing to gain enough knowledge to make a difference.

In the beginning of this chapter, I argued that there are simple measures the journalists can take in order to reframe the climate change debate, such as coming up with new words and concepts. Most of the journalists I interviewed would probably argue that it is up to their informants to produce these new words. On the other hand, journalists make up new words and phrases for other phenomena all the time. Still, these are usually new words for new phenomena - most words related to climate and the environment already have existing words used to describe them. Creating new words and phrases for them therefore requires a conscious reflection of why they are needed. In other words, it requires knowledge about the power words and phrases have to shape our perceptions. I have reasons to doubt that most journalists have this knowledge or consciously think about this in their everyday work. However, I argue that they should take on this responsibility. Norway needs more journalists with extended knowledge of the subjects they write about, i.e. specialized journalists. This is not the direction

journalism is heading in. More and more journalists are becoming all-rounders, who do not get the opportunity to specialize and become experts in specific fields. My research shows that this contributes to climate change not being perceived as an urgent problem in our daily lives, because this leads to poorer quality and less reporting about climate change.

In the introduction of this chapter, I argued that it is important to get the perspective of the journalists I interviewed because they represent both traditional and new media, and communicate to different groups in society. My discussion above shows that there are Norwegian journalists actively working on reframing the climate change debate. However, the focus so far has been on the green shift, new technology and the financial risks related to continued oil production. The majority of the journalists I interviewed are concerned with being objective and neutral in their reporting, and I argue that they therefore are more susceptible to their sources' frames. There is no visionary framing of what a society that has tackled climate change looks like. There is also no framing that considers how all parts of society will be affected, and how it needs to participate in the battle against climate change. Neither is there framing that discusses how the changes that occur worldwide as a consequence of climate change will affect us in Norway. This lack of framing creates a distance between the Norwegian public and climate change. Other researchers argue that we have to tailor the message to specific groups (Adomßent and Godemann 2011, 35), and connect climate change to local topics (Leiserowitz 2007, 53). Both *Energi og Klima* and *Sysla* tailor their message to specific groups, but both them and *Bergens Tidende* could do a better job at connecting the message to local topics. The reframing has started because of a few idealistic journalists, but there is still much left to do.

5. Conclusions

The purpose of this thesis has been to identify and define the existing framing patterns in *Bergens Tidende*, *Sysla* and *Energi og Klima*. In order to explore them, I conducted a framing analysis of 150 news articles published in the period between 01.06.15 - 01.06.16. I also wished to understand how the framing patterns in the west coast media influenced the public's perceptions of climate change. I therefore interviewed 16 readers from my chosen media. Finally, I wished to explore ways to better frame climate change in the Norwegian west coast media. I therefore interviewed five of the journalists who worked in my chosen media.

Painter (2013, 70) found in his content analysis of three newspapers in six countries that the media tends to focus on the dramatic consequences of climate change, in addition to the uncertainty surrounding the research when reporting about climate change. However, other research shows that uncertainty has shifted towards an unquestioned, taken-for-granted frame of certainty in the media reporting (Olausson 2009, 430). Recent studies also show that the media has gone from focusing on conflict and drama to technological solutions (Brattfjord 2015, 104). This is consistent with my own findings. My research shows that the west coast media had an overwhelming focus on the green shift and technological solutions. Green shift was one of the main frames used in all of my chosen media. However, they all used this frame slightly differently. *Bergens Tidende* talked about it as something that should be happening, *Sysla* as something that is happening in the industry, and *Energi og Klima* as an ongoing process that is impossible to stop. The focus on new technology was something all of my chosen media had in common. However, I argue that this technology oriented framing might have a distancing effect on the readers, leading them to think that outside silver-bullet solutions might solve all the problems related to climate change, allowing them to persist in their unsustainable lifestyles.

The influence of the oil and gas industry was most evident in the oil and energy section of *Sysla*. This section seemed to favor the oil and gas industry's perspective on climate change, and told a narrative about how the oil and gas industry were doing everything in its power to reduce its emissions; however, we still need oil. Therefore, we should continue using fossil fuels because new technology will make production

cleaner. *Bergens Tidende* also discussed how carbon capture and storage should be developed in order to reduce emissions from fossil fuels production. *Energi og Klima*, on the other hand, had a more critical view on this industry. It argued that continued oil extraction is a financial risk, and that some governments and companies do not acknowledge that the green shift is happening right now.

The west coast media defined climate change as a threat and problem happening to other countries or future generations. Apart from *Green shift* framing the west coast media also used *Disaster* framing to stress how serious climate change is, and that we therefore have to act now. However, they only talked about these consequences in a foreign context. They did not discuss how international disasters, such as war and migration, might affect Norway. The west coast media framing was in fact rather provincial and selfish. Climate change was portrayed as a problem happening "out there"; the focus was on how to continue with oil and gas production. *Energi og Klima* was the only source actively trying to change this story. However, their framing was rather technology oriented, and they focused on governments and the elite, excluding the grassroots level. The west coast media's framing patterns does not include all aspects of climate change; instead, it shows how it is up to the government, new technology and *Prometheans* to solve the climate crisis. This framing is not very mobilizing; instead, it has a distancing effect on the readers.

Existing research shows that most of the public has responded to climate change communication in the form of denial. They believe that the threat does not concern them, and that silver-bullet solutions will be found (Moser 2007, 67-68). Climate communicators have responded to this with more information and facts, which does not automatically lead to behavioral changes (Lakoff 2014, 33, Stoknes 2015, 14). My informants also reacted with a form of denial, since they defined climate change as a crisis happening to other countries and future generations.

My research shows that the west coast media's framing patterns do influence the readers' perception of climate change. However, other aspects of their life, such as their existing beliefs, and workplace, also matter. For example, the *Sysla* readers were susceptible to both the *Green shift* and *Business as usual* framing put forward by *Sysla*. They were, however, quite critical to the *Business as usual* framing. Instead of arguing for continued oil exploration, they argued that the green shift provides business

opportunities, and that Norway should invest its oil money in the renewable industry, just as the green section in *Sysla* argues. On the other hand, all of my informants from *Sysla* were connected to the renewable industry. This is in line with research that argues that if one's work depends on the production or consumption of fossil fuels, this personal economic interest is likely to affect the interpretation and perception of climate science (Tvinnerein and Austgulen (2014, 319). The readers from *Bergens Tidende* further confirm this point. Those of my informants who had a connection to the oil industry argued that Norway should continue with its oil and gas production. Those who had an environmental background, on the other hand, argued the opposite.

My informants were quite critical of the coverage of the climate problematique in Norwegian media. They argued that the media is not global enough, and that journalists have neither the resources nor knowledge to expand their reporting about climate change. Therefore, the readers went directly to scientific sources when looking for information about climate change. They wished the media would connect climate change to local topics, and write more about the results of our efforts, positive stories and solutions when reporting about climate change. My informants contradicted themselves by arguing that the media is not global enough, but should also connect climate change to local topics. However, their point was that we need a balance between talking about global and local affairs, just as other studies have suggested (see for example Cole and Watrous 2007, 187).

According to the researchers who argue that we have to reframe the climate change debate, we need to tailor the message to different public groups according to their beliefs and attitudes (Adomßent and Godemann 2011, 35), in addition to using metaphors, allusions and examples that trigger climate change awareness in a personally relevant manner (Nisbet 2009, 15). It would also be useful to connect climate change to local threats, and include other aspects in the discussion, such as human health, economic prosperity, and national security (Leiserowitz 2007, 53, Busch 2015, 23).

The biggest difference between the journalists I interviewed concerned their opinions about their role as journalists, which influenced both how they framed climate change, and their opinions about reframing. *Bergens Tidende*, a representative of the traditional regional media, took on the traditional role as an educator and societal watchdog. The representatives of the new media, *Energi og Klima* and *Sysla*,

respectively took on the role as animators of public debate, and an innovative new media. *Sysla* was for example a test company of Schibsted, who were supposed to be innovative and try out new concepts. In addition to this, *Bergens Tidende* and *Sysla* strived for objectivity, which influenced both how they defined climate change, and their opinion about the media's responsibility in mobilizing the public. *Energi og Klima*, on the other hand, had an agenda it wished to convey, and it actively tried to reframe the climate change debate. The journalists working there defined climate change as a crisis, and argued that the media is responsible for keeping the debate alive.

My research shows that some Norwegian journalists have started to reframe the climate debate. However, the focus so far has been on the green shift, new technology and the financial risks related to continued oil exploration. However, the majority of the journalists I interviewed were concerned with being objective and neutral in their reporting. The greatest challenge lies in the lack of visionary framing that considers what a climate friendly society looks like. Neither is there a framing that considers how all parts of society will be affected, and there is no discussion of how the changes happening worldwide might affect us in Norway. I also argue that many journalists in Norway do not have enough knowledge about climate change or framing, or enough time and resources to actually start reframing the climate change debate (Duarte 2010, 88-89). The reframing will most likely come from their informants, or a few dedicated journalists who are personally willing to gain enough knowledge to make a difference.

As with all research, this study has its limitations. The results might have been different if I had interviewed other readers or journalists, or if I had analyzed news articles from a different time period, or some other newspapers from the west coast. The news articles analyzed were written in Norwegian and the interviews were conducted in Norwegian, so some meaning might have been lost in translation. However, I still argue that my research has displayed some of the existing framing patterns in the Norwegian media, and showed how this framing influenced the public's perceptions of climate change. My research has also demonstrated where the media stand in the process of reframing the climate change debate. Increasingly, the media is challenged by other climate change communicators, such as NGOs, environmentalists, or politicians. Are they better at framing their message? Who is responsible for mobilizing the public: the media, activists, or the government? How do they influence each other's

communication? There are still many interesting questions to delve further into within the topic of climate change communication. My conclusion is that if Norwegians are to be more engaged in the climate battle, climate change must be more related to their daily lives and aspirations. By linking global climate change to local conditions, using metaphors to explain scientific concepts, in addition to focusing on solutions and results, the media can give people hope and inspiration to engage in the battle for a climate friendly future.

References

Primary sources

News articles

Heading	Newspaper/site	Section	Date
Bestemor med et oppdrag	Bergens Tidende	By & Folk	14.04.16
Et forsiktig håp	Bergens Tidende	Comment	01.12.15
Grønt marked	Bergens Tidende	Comment	17.06.15
Ingen kan spå fremtidens energimarked, så alle forsøker å blåse vinden i sin retning	Bergens Tidende	Comment	21.04.16
Kraftfull bevegelse	Bergens Tidende	Comment	30.09.15
Den sjette masseutryddelsen	Bergens Tidende	Editorial	04.08.15
En ambisiøs avtale	Bergens Tidende	Editorial	13.12.15
Større mulighet for klima	Bergens Tidende	Editorial	14.04.16
- Et sted mellom farlig og dødelig	Bergens Tidende	Foreign affairs	12.12.15
- Mer tørke og ekstremvær kan forverre flyktningkrisen	Bergens Tidende	Foreign affairs	22.22.15
Bare én sak bekymrer oss mer enn dette	Bergens Tidende	Foreign affairs	03.01.15
Burkina Faso tar opp kampen mot klimaendringene	Bergens Tidende	Foreign affairs	30.11.15
Dette krangler de om i Paris	Bergens Tidende	Foreign affairs	09.12.15
Et brøl om klimarettferdighet	Bergens Tidende	Foreign affairs	11.12.15
Etterforskes for løgn om klimaendringer	Bergens Tidende	Foreign affairs	07.11.15
Farene i verden øker	Bergens Tidende	Foreign affairs	15.01.16
Fire ting du bør vite om togradersmålet	Bergens Tidende	Foreign affairs	01.12.15
Forskere forbløffes av «absurd varme» i Arktis	Bergens Tidende	Foreign affairs	01.03.16
Gledestårer og jubel	Bergens Tidende	Foreign affairs	13.12.15

Heading	Newspaper/site	Section	Date
God medvind for fornybar energi	Bergens Tidende	Foreign affairs	12.07.15
Her er fire ting du trenger å vite om toppmøtet i Paris	Bergens Tidende	Foreign affairs	29.11.15
Klimaendringene rammer verdens fattige hardest	Bergens Tidende	Foreign affairs	10.11.15
Klimaministeren tror på historisk gjennombrudd	Bergens Tidende	Foreign affairs	23.07.15
Minst 10.000 varme år i vente	Bergens Tidende	Foreign affairs	13.02.16
Livet på solsiden	Bergens Tidende	Hus og Hjem	22.04.16
Makt i handlekurven	Bergens Tidende	Magazine	
- Kildesortering har ingen miljøeffekt	Bergens Tidende	News	08.06.15
- Klimaeffekt i løse luften	Bergens Tidende	News	06.05.16
- Tiden for tut og kjør er over	Bergens Tidende	News	15.12.15
Ber om hjelp til grønt smelteverk	Bergens Tidende	News	02.03.16
De nære ting tenner klimaengasjement	Bergens Tidende	News	30.03.16
Denne boksen skal redusere matsvinn	Bergens Tidende	News	22.05.16
Dette får Vestlandet mye mer av	Bergens Tidende	News	22.09.15
Får pepper for nullmål	Bergens Tidende	News	24.09.15
Forbereder århundrets rettsak mot staten	Bergens Tidende	News	18.01.16
Forskere bekrefter varmere klima	Bergens Tidende	News	04.07.15
Fortsatt 85 prosent sikker på enighet	Bergens Tidende	News	24.11.15
Gjøken kan bli helt borte	Bergens Tidende	News	15.04.16
Hundrevis ac nordmenn reiser til klimamøtet	Bergens Tidende	News	23.11.15
Hver tredje nye bil er elektrisk	Bergens Tidende	News	15.01.16
Kan ikke love raske klimakutt her hjemme	Bergens Tidende	News	18.01.16

Heading	Newspaper/site	Section	Date
Så filmen Cowspiracy og sluttet å spise kjøtt	Bergens Tidende	News	17.02.16
Slik skal man nå Paris-målene	Bergens Tidende	News	09.03.16
Slik skal skipsfart bli grønn	Bergens Tidende	News	07.04.16
Til Paris for å redde klimaet	Bergens Tidende	News	30.11.15
Tråkker tusen mil for bedre klima	Bergens Tidende	News	27.08.15
Tyssedal blir grønt fyrtårn	Bergens Tidende	News	12.05.16
Utbetaler millarder etter skader. Bruker smuler til forebygging	Bergens Tidende	News	03.09.15
Verre oversvømmelser og høyere stormflo	Bergens Tidende	News	09.09.15
Solenergi: Billigere, raskere, større	Energi og Klima	2°C	16.12.15
Klimapolitikk må bli koblet med velferd, vekst og innovasjonspolitikk	Energi og Klima	2°C	23.12.15
Bekymringsfull ustabilitet i Antarktis	Energi og Klima	2°C	08.12.15
Hvilke faktorer fremmer klimahandling?	Energi og Klima	2°C	12.12.15
Fns klimapanel lager ny rapport om 1,5 grader oppvarming	Energi og Klima	2°C	18.04.16
Ny giv for klimatilpasning etter Paris	Energi og Klima	2°C	11.05.16
Varme somre for romerne – enda hetere nå	Energi og Klima	2°C	03.02.16
Derfor gir havbunnen svar på klimaspørsmål	Energi og Klima	2°C	26.04.16
Et sted må grensen gå	Energi og Klima	2°C	21.11.15
Et våtere og	Energi og Klima	2°C	17.11.15

Heading	Newspaper/site	Section	Date
varmere Arktis			
Utfordringen ligger i å tenke nytt	Energi og Klima	2°C	27.12.15
Havforsuring truer næringskjeden – våre områder er spesielt utsatt	Energi og Klima	2°C	26.12.15
Menneskeskapte endringer og naturlige variasjoner	Energi og Klima	2°C	30.11.15
Klimaendringer alene forklarer ikke vårt ekstremvær	Energi og Klima	2°C	16.05.16
Året då temperaturen og champagnekorkane gjekk i taket	Energi og Klima	2°C	26.01.16
Stort fall i Norges oljeforbruk	Energi og Klima	Blog	06.04.16
Sol i sentrum – fremtidens energisystem	Energi og Klima	Blog	28.01.16
Britene kutter kull	Energi og Klima	Blog	09.02.16
Mye godt om Norden	Energi og Klima	Blog	25.05.16
Full gass for investering og utvinning på norsk sokkel	Energi og Klima	Blog	02.05.16
Nye letelisenser på statens regning og risiko	Energi og Klima	Blog	18.05.16
Grøn skipsfart: Leiarskap eller tilfeldig omstilling?	Energi og Klima	Blog	01.02.16
Ikkje rom for ferjefri E39	Energi og Klima	Blog	02.03.16
Fem fra 2015: De viktigste sakene i året som gikk	Energi og Klima	News	29.12.15
Fem på fredag: Elbilene kommer – og vil drepe oljeetterspørsel	Energi og Klima	News	26.02.16
Fem på fredag: Exxon under kraftig press	Energi og Klima	News	27.05.16
Fem på fredag:	Energi og Klima	News	06.05.16

Heading	Newspaper/site	Section	Date
Klima og katastrofebrannen i Alberta			
IEA: Klimautslippene flatet ut i 2015	Energi og Klima	News	16.03.16
2015: Rekordinvisteringer i fornybar energi	Energi og Klima	News	14.01.15
Fem på fredag: Danmark skroter kystnære vindmøller	Energi og Klima	News	13.05.16
Fem på fredag: Giganttap på kull og gass i Tyskland	Energi og Klima	News	11.03.16
Fem på fredag: Sol danket ut kull i Storbritannia	Energi og Klima	News	15.04.16
For generøse skattevilkår vil være sløsing	Energi og Klima	News	06.04.16
Oljefondet må få bygge kompetanse innen unotert infrastruktur	Energi og Klima	News	06.05.16
Oljehistoriker: Norge har gitt bort store beløp til internasjonale oljeselskaper	Energi og Klima	News	18.04.16
Fem på fredag: Kullkollaps og solbonanza i USA	Energi og Klima	News	15.01.16
Fem på fredag: Forvaltere som gir blaffen i klima risikerer søksmål	Energi og Klima	News	12.02.16
Fem på fredag: Fornybarindustrien i USA jubler over Energi og Klima nytt budsjettforlik	Energi og Klima	News	18.12.15
Fem på fredag: Grøne obligasjonar skal finansiere elektrifisering av Londons Black Cabs	Energi og Klima	News	20.05.16
Fem på fredag:	Energi og Klima	News	22.01.16

Heading	Newspaper/site	Section	Date
Kinas grønne transformasjon er i gang			
Fem på fredag: SunEdisons konkurs – korleis påverkes solindustrien?	Energi og Klima	News	22.04.16
EU ikke på sporet mot eget klimamål	Energi og Klima	News	07.04.16
Fem på fredag: Fornybargigant mot skifteretten	Energi og Klima	News	01.04.16
Fem på fredag: Full stopp for kinesiske kullgruver	Energi og Klima	News	08.01.16
Færre fornybarjobber i EU	Energi og Klima	News	22.03.16
Grasrotgründeren	Energi og Klima	News	08.01.16
Kritiserer passivt EU etter Paris-avtalen	Energi og Klima	News	29.03.16
Ni EU-land – og Norge – har klart fornybarmålet for 2020	Energi og Klima	News	25.02.16
Strømrebeller og gode energiborgere	Energi og Klima	News	03.01.16
Subsiderer Norge oljen eller subsiderer oljen Norge?	Energi og Klima	News	13.03.16
- Vi vil ta subsea-teknologien lengre, dypere og kaldere	Sysla	Olje og Energi	17.06.15
Oljeforeningen inviterer til klimadugnad	Sysla	Olje og Energi	10.03.16
Statoil vil lete etter mer olje i Barentshavet	Sysla	Olje og Energi	03.12.15
Statoil mener en revolusjon må til for å redde verden	Sysla	Olje og Energi	05.06.15
Oljetopper vil betale for CO2-utslipp	Sysla	Olje og Energi	01.06.15
- Statoil risikerer ryktet sitt på Lofoten	Sysla	Olje og Energi	23.09.15

Heading	Newspaper/site	Section	Date
- Vil Europa ha denne gassen?	Sysla	Olje og Energi	22.10.15
10 Oljetopper skal samarbeide om klima	Sysla	Olje og Energi	16.10.15
- Jeg kjenner på at omstillingen er veldig tøff	Sysla	Olje og Energi	12.04.16
- Harde realiteter for industrien	Sysla	Olje og Energi	23.11.15
- Oljeprisfall et sjokk for norsk økonomi	Sysla	Olje og Energi	07.01.16
- Oljeselskaper er i gang med klimatilpasning	Sysla	Olje og Energi	13.12.15
-Norske oljeinvesteringer snur i 2017	Sysla	Olje og Energi	18.11.15
Statoil ser behov for nye letearealer	Sysla	Olje og Energi	21.09.15
Statoil skjerper klimamålet med 50 prosent	Sysla	Olje og Energi	11.11.15
Statoil-sjefen mener fakling er meningsløs sløsing	Sysla	Olje og Energi	08.12.15
SV vil stenge gassturbinene på Melkeøya	Sysla	Olje og Energi	20.02.16
Oljeselskapene: - Lav risiko ved leting i Barentshavet sørøst	Sysla	Olje og Energi	18.04.16
Aldri før har vi tjent mer på norsk gass	Sysla	Olje og Energi	28.12.15
Han selger videre strømmen han ikke trenger selv	Sysla	Sysla Grønn	21.03.16
Tror det vil være flere tusen hydrogenbiler på veien i 2020	Sysla	Sysla Grønn	11.03.16
Tror røykeloven blir modell for det grønne skiftet	Sysla	Sysla Grønn	08.03.16
Fire prosjekter som kan redde verden	Sysla	Sysla Grønn	29.05.16

Heading	Newspaper/site	Section	Date
Industrisatsing gir resultater	Sysla	Sysla Grønn	20.05.16
- Fremtidens penger er ikke i oljeindustrien	Sysla	Sysla Grønn	18.09.15
- Fremdeles plass til norsk olje og gass	Sysla	Sysla Grønn	10.11.15
- Stor endring hos Statoil etter at de byttet sjef	Sysla	Sysla Grønn	21.10.15
Amerikanske selskaper på vei til Mongstad	Sysla	Sysla Grønn	18.09.15
Bytter drivstoff på 900 lastebiler	Sysla	Sysla Grønn	19.10.15
Her får kyrne strøm fra solen	Sysla	Sysla Grønn	31.03.16
Klimaendringene gjør norsk vannkraft mer verdifull	Sysla	Sysla Grønn	15.10.15
Kutter utslipp i dag for å vinne marked i morgen	Sysla	Sysla Grønn	09.02.16
Løper 30 km hver dag på vei til Paris	Sysla	Sysla Grønn	15.10.16
NASA Trolig uunngåelig at havet stiger 1 meter	Sysla	Sysla Grønn	27.08.15
Nok drivstoff til å reise jorden rundt	Sysla	Sysla Grønn	31.08.15
Nå skal forsvaret også ha sol på taket	Sysla	Sysla Grønn	03.09.15
Slik mener de Norge skal tjene penger etter oljen	Sysla	Sysla Grønn	20.10.15
Slik unngår du de verste energityvene	Sysla	Sysla Grønn	10.03.16
Sol på taket skviser gassen	Sysla	Sysla Grønn	23.06.15
Ti globale olje-og gasselskaper med felles erklæring om klimaendringene	Sysla	Sysla Grønn	16.10.15
- Bli grønn eller dø ut som dinosauren	Sysla	Sysla Grønn	28.04.16
- Klimaendringene vil ramme matproduksjonen	Sysla	Sysla Grønn	03.03.16

Heading	Newspaper/site	Section	Date
Foreløbig nei til karbonnøytralitet i 2030	Sysla	Sysla Grønn	13.04.16
Kina brenner langt mer kull enn rapportert	Sysla	Sysla Grønn	04.11.15
Klimaendringene setter snøen under press	Sysla	Sysla Grønn	09.03.16
Klimagassutslippene steg med 1,5 prosent	Sysla	Sysla Grønn	20.05.16
Mange tusen investormilliarder ut av olje og kull	Sysla	Sysla Grønn	23.09.15
Norge innfrir klimabidrag til Brasil	Sysla	Sysla Grønn	15.09.15
Oljefondet får lite igjen for miljøsatsing	Sysla	Sysla Grønn	10.03.16
To nye «månelandinger» i år	Sysla	Sysla Grønn	06.11.15

Interview – journalists

Journalist	Newspaper/site	Date
Ethan	Energi og Klima	14.02.17
Emma	Energi og Klima	15.02.17
Sally	Sysla	20.02.17
Seth	Sysla	21.02.17
Ben	Bergens Tidende	02.03.17

Interview readers

Sylvester	Sysla	21.03.17
Sebastian	Sysla	27.03.17
Sophia	Sysla	27.03.17
Sam	Sysla	27.03.17
Sara	Sysla	27.03.17
Scott	Sysla	27.03.17
Elizabeth	Energi og Klima	05.04.17
Emily	Energi og Klima	05.04.17
Eric	Energi og Klima	23.05.17
Edward	Energi og Klima	29.05.17
Bertha	Bergens Tidende	19.04.17
Brennah	Bergens Tidende	19.04.17
Beatrice	Bergens Tidende	26.04.17
Brandon	Bergens Tidende	26.04.17
Betty	Bergens Tidende	10.05.17
Bailey	Bergens Tidende	10.05.17

Secondary sources

Adomßent, Maik, and Jasmin Godemann. 2011. "Sustainability Communication: An Integrative Approach " In *Sustainability Communication Interdisciplinary Perspectives and Theoretical Foundations* edited by Jasmin Godemann & Gerd Michelsen, 27-37. Springer.

Analysis, Institute for Governance & Policy. 2016. "Fellows." accessed November 15. http://www.governanceinstitute.edu.au/people/fellows/person-2752/john-dryzek.
Bang, Guri. 2003. "Sources of influence in climate change policymaking: A comparative analysis of Norway, Germany, and the United States." PhD, University of Oslo.
Boenker, Karyn. 2012. "Communicating Global Climate Change: Framing Patterns in the US 24-Hour News Cycle, 2007-2009." Master, Master of Science, University of Washington.
Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. 2008. *The craft of research*. USA: The University of Chigaco Press.
Bostrom, Ann, and Daniel Lashof. 2007. "Weather it's climate change?" In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 31-43. New York: Cambridge University Press.
Boykoff, Maxwell T. 2007. Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006. *Area* 39 (4): 470-481.
Boykoff, Maxwell T. 2008. The cultural politics of climate change discourse in UK tabloids. *Political Geography* (27): 549-569. doi:10.1016/j.polgeo.2008.05.002.
Boykoff, Maxwell T. 2011. *Who speaks for the Climate? Making Sense of Media Reporting on Climate Change*. New York: Cambridge University Press.
Boykoff, Maxwell T., and Jules M. Boykoff. 2004. Balance as bias: global warming andthe US prestige press. *Global Environmental Change* 14: 125-136. doi:10.1016/j.gloenvcha.2003.10.001.
Brattfjord, Ellisiv. 2015. "Klimakvalme eller løsningsjournalistikk? En komparativ studie av dansk og norsk klimadekning." Master, Institutt for medier og kommunikasjon, University of Oslo.
Bruner, Jerome. 1986. *Actual Minds, Possible Worlds*. USA: Havard University Press.
Bruner, Jerome. 1990. *Acts of Meaning*. USA: Harvard University Press.
Busch, K. C. 2015. Polar Bears or People? Exploring Ways in Which Teachers Frame Climate Change in the Classroom. *International Journal of Science Education, Part B*: 1-29. Accessed January 04, 2016. doi:10.1080/21548455.2015.1027320.
Cacciatore, Michael A., Dietram A. Scheufele, and Shanto Iyengar. 2016. The End of Framing as we Know it … and the Future of Media Effects. *Mass Communication and Society* 19 (1): 7-23. Accessed January 17, 2016. doi:10.1080/15205436.2015.1068811.
Carey, Benedict. 2016. Jerome S. Bruner, Who Shaped Understanding of the Young Mind, Dies at 100.
Chaffee, Steven H., and Miriam J. Metzger. 2001. The End of Mass Communication? *Mass Communication and Society* 4 (4): 365-379. doi:10.1207/S15327825MCS0404_3.
Chess, Caron, and Branden B. Johnson. 2007. "Information is not enough." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 223-233. New York: Cambridge University Press.
Cole, Nancy, and Susan Watrous. 2007. "Across the great divide: supporting scientists as effective messengers in the public sphere." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by

Susanne C. Moser and Lisa Dilling, 180-199. New York: Cambridge University Press.
comScore, and TNSGallup. 2016. Internettbruk 2015. Årsrapport fra comScore og TNS Gallup.
Dalen, Monica. 2001. *Intervju som forskningsmetode, en kvalitativ tilnærming*. 2 ed. Oslo, Norway: Universitetsforlaget.
Dilling, Lisa, and Susanne C. Moser. 2007. "Introduction." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 1-27. New York: Cambridge University Press.
Dirikx, Astrid, and Dave Gelders. 2009. "Global Warming through the Same Lens. An Explorative Framing Study in Dutch and French Newspapers." In *Climate change and the Media*, edited by Tammy Boyce and Justin Lewis, 200-210. New York: Peter Lang.
Doulton, Hugh, and Katrina Brown. 2009. Ten years to prevent catastrophe? Discourses of climate change and international development in the UK press. *Global Environmental Change* (19): 191-202. doi:10.1016/j.gloenvcha.2008.10.004.
Doyle, Julie. 2011. *Mediating Climate Change*. Great Britain: Ashgate.
Dryzek, John S. 2005. *The Politics of the Earth. Environmental Discourses*. 2 ed. New York: Oxford University Press.
Dryzek, John S. 2013. *Politics of the Earth. Environmental Discourses*. Third ed. United Kingdom: Oxford University Press.
Duarte, Katherine Berrios. 2010. "En ubehagelig sannhet om norsk klimadekning. Hvilke stemmer og holdninger blir representert i norsk pressedekning av klimaendringer?" Master, Institutt for informasjons- og medievitenskap, University of Bergen.
Eide, Elisabeth, and Andreas Ytterstad. 2011. The Tainted Hero: Frames of Domestication in Norwegian Press Representation of the Bali Climate Summit. *International Journal of Press/Politics* 16 (1): 50-74. doi:10.1177/1940161210383420.
Entman, Robert M. 1993. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communication* 43 (4):51-58.
Ghanem, Salma. 1997. "Filling in the Tapestry: The Second Level of Agenda Settin." In *Communication and Democracy. Exploring the Intellectual Frontiers in Agenda-Setting Theory*, edited by Maxwell McCombs, Donald L. Shaw and David Weaver, 3-14. New Jersey: Lawrence Erlbaum Associates.
Goffman, Erving. 1974. *Frame Analysis. An Essay on the Organization of Experience*. New York: Harper & Row.
Gould, D. 2004. "Writing a Media Analysis." Communication Consortium Media Centre, accessed January 04. http://www.issuelab.org/research/writing_a_media_analysis.
Hirth, Martin Larsen. 2015. "Vi lanserer Sysla Grønn." Sysla, accessed January 20. http://sysla.no/2015/07/01/blogginnlegg/vi-lanserer-sysla-gronn_53888/.
Hornby, A.S. 2005. Oxford Advanced Learner's Dictionary. edited by Sally Wehmeier. Oxford: Oxford University Press.
Howard-Williams, Rowan. 2009. "Ideological Construction of Climate Change in Australian and New Zealand Newspapers." In *Climate change and the Media*, edited by Tammy Boyce and Justin Lewis, 28-40. New York: Peter Lang.
Hulme, Mike. 2009. *Why We Disagree About Climate Change. Understanding controversy, inaction and opportunity*. New York: Cambridge University Press.

Hulme, Mike. 2009b. "Mediated Messages about Climate Change. Reporting the IPCC Fourth Assessment in the UK Print Media." In *Climate change and the Media*, edited by Tammy Boyce and Justin Lewis, 117-128. New York: Peter Lang.
Høst, Sigurd. 2016. Avisåret 2015. In *Rapport nr.77*. Volda, Norway.
Klima, Energi og. 2016. "Om Magasinet." accessed January 20. http://energiogklima.no/om/
Klimastiftelse, Norsk. 2017. "Stiftelsens formål." accessed April 17. http://klimastiftelsen.no/stiftelsens-formal/.
Kristiansen, Ingar. 2015. Hvordan jeg overlevde 30 timer i buss med Natur og Ungdom. *iTromsø*. Accessed 06.04.17.
Krogh, Marte von. 2009. "What's the story? [Norwegian Glory]. An Intertextual Approach to Climate Change Communication in the Norwegian Media." Master thesis, Centre for Development and the Environment, University of Oslo.
Lakoff, George. 2010. Why it Matters How We Frame the Environment. *Environmental Communication* 4 (1): 70-81. Accessed January 03, 2016. doi:10.1080/17524030903529749.
Lakoff, George. 2014. *The All New Don't Think of an Elephant! Know your values and frame the debate*. USA: Chelsea Green Publishing.
Law, New York University School of. 2016. "In Memoriam: Jerome Bruner, 1915-2016." accessed November 15. http://www.law.nyu.edu/news/in-memoriam-jerome-bruner.
Leiserowitz, Anthony. 2007. "Communicating the risks of global warming: American risk perceptions, affective images, and interpretive communities." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 44-63. New York: Cambridge University Press.
Ludvigsen, Stian Skår, and Martin Tvedt. 2015. Olje- og gassklynga i Hordaland: Produksjon og ringverknader. In *AUD-rapport nr: 1-15*. Bergen, Norway.
Maher, Michael T. 2010. "Framing: An Emergin Paradigm or a Phase of Agenda Setting?" In *Framing Public Life. Perspectives on media and our understanding of the social world*, edited by Stephen D. Reese, Oskar H. Gandy Jr. and August E. Gran, 83-94. New York: Routledge.
Manzo, Kate. 2010. Beyond polar bears? Re-envisioning climate change. *Meteorological Applications* 17: 196-208. doi:10.1002/met.193.
McCombs, Maxwell. 1994. "The Future Agenda for Agenda Setting Research." *Journal of Mass Communication Studies* 45 (1):171-181.
McCombs, Maxwell. 2015. Agenda Setting, Media Effects on. *International Encyclopedia of the Social & Behavioral Sciences* 1 (2): 351-356. doi:10.1016/B978-0-08-097086-8.95007-4.
McCombs, Maxwell, and Salma I. Ghanem. 2010. "The Convergence of Agenda Setting and Framing." In *Framing Public Life. Perspectives on media and our understanding of the social world*, edited by Stephen D. Reese, Oskar H. Gandy Jr. and August E. Gran, 67-81. New York: Routledge.
McCombs, Maxwell, and Donald L. Shaw. 1972. "The Agenda-Setting Function of Mass Media." *Public Opinion Quarterly* 69:176-187.
Medienorge. 2017. "Lesertall for norske papiraviser - resultat." accessed April 14. http://www.medienorge.uib.no/statistikk/medium/avis/273.
Midttun, Atle, Paddy Coulter, Audrey Gadzekpo, and Jin Wang. 2015. Comparing media framings of climate change in developed, rapid growth and developing

countries: Findings from Norway, China and Ghana. *Energy & Environment* 26 (8): 1271-1292.
Moe, Arne, and Hanne Hestvik Kleiven. 2016. Bruksmangfold. En analyse av nordmenns nyhetskonsum. TFoU-rapport 2016:7. Steinkjer, Norway.
Monbiot, George. 2017. "Forget 'the environment': we need new words to convey life's wonders ". The Guardian, accessed 24.08. https://www.theguardian.com/commentisfree/2017/aug/09/forget-the-environment-new-words-lifes-wonders-language#img-1.
Mortensen, Martin, and Marit Eilertsen. 2017. "Bekymret over miljøskeptikere." NRK, accessed 01.09. https://www.nrk.no/troms/bekymret-over-miljoskeptikere-1.13667518.
Moser, Susanne C. 2007. "More bad news: the risk of neglecting emotional responses to climate change information." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 64-80. New York: Cambridge University Press.
Moser, Susanne C., and Lisa Dilling. 2007b. "Toward the social tipping pont: creating a climate for change." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 491-513. New York: Cambridge University Press.
Mossin, Bjørn Åge. 2015. "Anders Bjartnes er mannen bak årets nyord: Det grønne skiftet." *Journalisten*. Accessed 17.03.2017. http://journalisten.no/2015/12/anders-bjartnes-er-mannen-bak-aarets-nyord%3A-%22det-gronne-skiftet%2.
Naper, Anja. 2014. "Klimakrise eller oljefest? Perspektiver fra kommentariatet." In *Klima, medier og politikk*, edited by Elisabeth Eide, Dag Elgesem, Siri Gloppen and Lisa Rakner, 217-236. Oslo: Abstrakt forlag.
Nationen. 2017. "Om Nationen." accessed 27.06. http://www.nationen.no/om-nationen/.
Newman, Nic, Richard Fletcher, David A. L. Levy, and Rasmus Kleis Nielsen. 2016. Reuters Institute Digital News Report 2016.
Nisbet, Matthew C. 2009. Communicating Climate Change: Why Frames Matter for Public Engagement. *Environment: Science and Policy for Sustainable Development* 51 (2): 12-23. Accessed January 04, 2016. doi:10.3200/ENVT.51.2.12-23
Nisbet, Matthew C., and Chris Mooney. 2007. Framing Science. *Science, New Series* 316 (5821): 56.
Olausson, Ulrika. 2009. Global warming—global responsibility? Media frames of collective action and scientific certainty. *Public Understand. Sci.* 18 (4): 421-436. doi:10.1177/0963662507081242.
Painter, James. 2013. *Climate change in the media. Reporting risk and uncertainty*. Edited by Adam Corner and Rasmus Kleis Nielsen, *RISJ Challenges*. London: I. B. Tauris.
Pavlik, John V. 2010. "News Framing and New Media: Digital Tools to Re-engage an Alienated Citizenry." In *Framing public Life. Perspectives on media and our understanding of the social world*, edited by Stephen D. Reese, Oskar H. Gandy Jr. and August E. Gran, 311-321. New York: Routledge.
Pettersen, Øyvind Breivik. 2016. "Bergens Tidende." Store Norske Leksikon, accessed April 14. https://snl.no/Bergens_Tidende.
Press, Oxford University. 2017. "English Oxford Living Dictionaries." Oxford University Press, accessed 09.10. https://en.oxforddictionaries.com/definition/mainstream_media.

Reese, Stephen D. 2010. "Prologue - Framing Public Life: A Bridging Model for Media Research." In *Framing public Life. Perspectives on media and our understanding of the social world*, edited by Stephen D. Reese, Oskar H. Gandy Jr. and August E. Gran, 7-31. New York: Routledge.

Ring, Wendy. 2015. Inspire Hope, Not Fear: Communicating Effectively About Climate Change and Health. *Annals of Global Health* 81 (3): 410-415. doi:http://dx.doi.org/10.1016/j.aogh.2015.06.006

Rothbauer, Paulette M. 2008. "Triangulation." In *The SAGE Encyclopedia of Qualitative Research Methods*, edited by Lisa M. Given, 893-894. USA: SAGE Publications, Inc.

Ryghaug, Marianne. 2006. «Some like it hot» – Konstruksjon av kunnskap om klimaendringer i norske aviser. *Norsk medietidsskrift* 13 (3): 197-219.

Sandbrand-Nisipeanu, Julia. 2016. "Media Coverage on Climate Change: An Analysis of the Relationship between Newspaper and Government Frames " PhD, Journalism, Kent.

Segal, Michael. 2017. The Missing Climate Change Narrative. *South Atlantic Quarterly* 1 (116): 121-128. doi:10.1215/00382876-3749370.

Shanahan, Mike. 2007. Talking about a revolution: climate change and the media. An IIED Briefing.

Shehata, Adam, and David Nicolas Hopmann. 2012. FRAMING CLIMATE CHANGE. *Journalism Studies* 13 (2): 175-192. doi:10.1080/1461670X.2011.646396.

Sjøvaag, Helle. 2016. "Mediemangfold i Norge?" Medieforskerkonferansen 2016, Bergen, Norway.

Spence, Alexa, and Nick Pidgeon. 2010. "Framing and communicating climate change: The effects of distance and outcome frame manipulations." *Global Environmental Change* 20:656-667.

Srebrowska, Urszula. 2005. "ATEKST kan lede på villspor." *Norsk Medietidsskrift* 12 (1):40-43.

Steentjes, K., N. Pidgeon, W. Poortinga, A. Corner, A. Arnold, G. Böhm, C. Mays, M. Poumadère, M. Ruddat, D. Scheer, M. Sonnberger, and E. Tvinnereim. 2017. European Perceptions of Climate Change. Topline findings of a survey conducted in four European countries in 2016. Cardiff.

Stoknes, Per Espen. 2015. *What We Think About When We Try Not To Think About Global Warming: Toward A New Psychology Of Climate Action*. USA: Chelsea Green Publishing.

Sysla. 2016. "De viktigste nyhetene, fra de viktigste bransjene." accessed January 20. http://sysla.no/om-sysla/.

Sysla. 2017. "Vi samler troppene og tar oss betalt." accessed April 17. http://sysla.no/annonseartikkel/annonseartikkel/vi-samler-troppene-og-tar-oss-betalt/.

Takeshita, Toshio. 1997. "Exploring the Media's Roles in Defining Reality: *From Issue-Agenda Setting to Attribute-Agenda Setting*." In *Communication and Democracy. Exploring the Intellectual Frontiers in Agenda-Setting Theory*, edited by Maxwell McCombs, Donald L. Shaw and David Weaver, 15-27. New Jersey: Lawrence Erlbaum Associates.

Tankard, Jr. James W. 2010. "The Empirical Approach to the Study of Media Framing." In *Framing public Life. Perspectives on media and our understanding of the social world*, edited by Stephen D. Reese, Oskar H. Gandy Jr. and August E. Gran, 95-106. New York: Routledge.

Tidende, Bergens. 2016. "Avisen Bergens Tidende." accessed January 20. https://kundeportal.bt.no/om-bt/vare-medier/avisen-bergens-tidende/.
Tidende, Bergens. 2016b. "Redaksjonelt regnskap 2015." accessed 12.10. https://www.bt.no/spesial/redaksjonelt-regnskap-2015/.
Tidende, Bergens. 2017. "Visjon og verdier." accessed April 14. https://kundeportal.bt.no/om-bt/visjon-og-verdier/.
Tvinnerein, Endre, and Marthe Hårvik Austgulen. 2014. "Når det snakkes om klima, bør vi se oljearbeideren i rommet. Yrke, arbeidsplass og holdninger til klimaendringer." In *Klima, medier og politikk*, edited by Elisabeth Eide, Dag Elgesem, Siri Gloppen and Lisa Rakner, 317-334. Oslo: Abstrakt forlag.
Ungar, Sheldon. 2007. "Public scares: changing the issue culture." In *Creating a Climate for Change. Communicating Climate Change and Facilitating Social Change*, edited by Susanne C. Moser and Lisa Dilling, 80-104. New York: Cambridge University Press.
Whitemarsh, Lorraine. 2008. What's in a name? Commonalities and differences in public understanding of "climate change" and "global warming". *Public Understanding of Science* 18 (4): 401-420. doi:10.1177/0963662506073088.
Wilhite, Harold. 2013. "Energy Consumption as Cultural Practice: Implications for the Theory and Policy of Sustainable Energy Use." In *Cultures of energy : power, practices, technologies* edited by Sarah Strauss, Stephanie Rupp and Thomas Love, 60-72. USA: Left Coast Press
Ytterstad, Andreas. 2011. Klimakrisen utfordrer objektivitetsidealet i norsk journalistikk *Norsk Medietidsskrift* 18 (04): 323-343.
Zehr, Stephen C. 2000. Public representations of scientific uncertainty about global climate change. *Public Understand. Sci.* (9): 85-103.

Appendix A

Main frames in Bergens Tidende, Sysla, Energi og Klima

Main frames	Bergens Tidende	Sysla	Energi og Klima
Main frame: **Business as usual**	5 (10 %)[11]	9 (18 %)	1 (2 %)
Buy our way out	1 (2 %)		
Gas is the answer		1 (2 %)	
Loss	1 (2 %)	2 (4 %)	
Norway good guy		1 (2 %)	
Statoil good guys		2 (4 %)	
Technological fix	1 (2 %)	4 (8 %)	
We are doing our part		5 (10 %)	
We need oil		1 (2 %)	
Sum:	**8 (16 %)**	**25 (50 %)**	**1 (2 %)**
Main frame: **Disaster**	8 (16 %)	3 (6 %)	4 (8 %)
Climate justice	3 (6 %)		
It's happening now	2 (4 %)		1 (2 %)
Sum:	**13 (26 %)**	**3 (6 %)**	**5 (10 %)**
Main frame: **Green shift**	8 (16 %)	9 (18 %)	27 (54 %)
Bad guys	1 (2 %)	1 (2 %)	
Cost	1 (2 %)		
Financial risk			3 (6 %)
Leave it to the experts	2 (4 %)		
Leave it to the market			1 (2 %)
Norway good guy	2 (4 %)	2 (4 %)	
Norway's double play	1 (2 %)		
Opportunity		3 (6 %)	
Small action	11 (22 %)	3 (6 %)	2 (4 %)
Technological fix	2 (4 %)	4 (8 %)	1 (2 %)
Sum:	**28 (56 %)**	**22 (44 %)**	**34 (68 %)**
Main frame: **Natural science**			
Certainty	1 (2 %)		1 (2 %)

[11] The percentage shows how many times this frame has been used in the total number of articles.

Main frames	**Bergens Tidende**	**Sysla**	**Energi og Klima**
Distance			1 (2 %)
Leave it to the experts			2 (4 %)
Scientific evidence			3 (6 %)
Sustainable development			1 (2 %)
Uncertainty			2 (4 %)
Sum:	**1 (2 %)**		**10 (20 %)**
Number of articles	50	50	50

Appendix B

Main frames in each section of Bergens Tidende, Sysla and Energi og Klima

Main frames	Bergens Tidende news	Bergens Tidende foreign	Bergens Tidende other	Sysla oil and energy	Sysla green	Energi og Klima news	Energi og Klima Blog	Energi og Klima sceience
Main frame: **Business as usual**	4 (17,4 %)	1 (5,9 %)		8 (42,1 %)	1 (3,2 %)		1 (12,5 %)	
Buy our way out	1 (4,3 %)							
Gas is the answer				1 (5,3 %)				
Loss	1 (4,3 %)			1 (5,3 %)	1 (3,2 %)			
Norway good guy				1 (5,3 %)				
Statoil good guys				1 (5,3 %)	1 (3,2 %)			
Technological fix	1 (4,3 %)			2 (10,5 %)	2 (6,5 %)			
We are doing our part				4 (21,1 %)	1 (3,2 %)			
We need oil				1 (5,3 %)				
Sum:	**7 (30,4 %)**	**1 (5,9 %)**		**19 (100 %)**	**6 (19,4 %)**		**1 (12,5 %)**	
Main frame: **Disaster**	2 (8,7 %)	6 (35,3 %)			3 (9,7 %)			4 (26,7 %)
Climate justice	1 (4,3 %)	2 (11,8 %)						
Its' happening now		2 (11,8 %)				1 (3,7 %)		
Sum	**3 (13 %)**	**10 (58,8 %)**			**3 (9,7 %)**	**1 (3,7 %)**		**4 (26,7 %)**
Main frame: **Green shift**	4 (17,4 %)	1 (5,98 %)	3 (33,3 %)		9 (29 %)	20 (74,1 %)	6 (75 %)	1 (6,7 %)
Bad guys		1 (5,9 %)			1 (3,2 %)			
Cost	1 (4,3 %)							
Financial risk						2 (7,4 %)	1 (12,5 %)	
Leave it to the experts		2 (11,8 %)						
Leave it to the market						1 (3,7 %)		
Norway good guy	1 (4,3 %)	1 (5,9 %)			2 (6,5 %)			
Norway's double play			1 (11,1 %)					
Opportunity					3 (9,7			

Main frames	**Bergens Tidende news**	**Bergens Tidende foreign**	**Bergens Tidende other**	**Sysla oil and energy**	**Sysla green**	**Energi og Klima news**	**Energi og Klima Blog**	**Energi og Klima sceience**
					%)			
Small action	6 (26,1 %)		5 (50 %)		3 (9,7%)	2 (7,4 %)		
Technological fix		1 (5,9 %)	1 (11,1 %)		4 (12,9 %)	1 (3,7 %)		
Sum	**12 (52,2 %)**	**6 (35,3 %)**	**10 (100 %)**		**22 (70,9 %)**	**26 (96,3 %)**	**7 (87,5 %)**	**1 (6,7 %)**
Main frame: **Natural science**								
Certainty	1 (4,3 %)							1 (6,7 %)
Distance								1 (6,7 %)
Leave it to the experts								2 (13,3 %)
Scientific evidence								3 (20 %)
Sustainable development								1 (6,7 %)
Uncertainty								2 (13,3 %)
Sum	**1 (4,3 %)**							**10 (66,7 %)**
Number of articles	23	17	10	19	31	27	8	15

Appendix C

Discourses used in Bergens Tidende, Sysla and Energi og Klima

Discourse[12]	Bergens Tidende	Sysla	Energi og Klima
Limits and survival	14 (28 %)	3 (6 %)	20 (40 %)
Promethean	3 (6 %)	19 (38 %)	8 (16 %)
Leave it to the experts	7 (14 %)	2 (4 %)	4 (8 %)
Leave it to the market	4 (8 %)	1 (2 %)	10 (20 %)
Sustainable development	1 (2 %)		1 (2 %)
Ecological modernization	8 (16 %)	18 (36 %)	25 (50 %)
Green consciousness	13 (26 %)	5 (10 %)	3 (6 %)
Green politics	3 (6 %)	1 (2 %)	1 (2 %)
Number of articles	50	50	50

[12] Some articles used more than one discourse, which explains why the total number of discourses for *Bergens Tidende* and *Energi og Klima* exceeded the total number of articles.

Appendix D

Discourses used in each section of Bergens Tidende, Sysla and Energi og Klima

Discourse	Bergens Tidende news section	Bergens Tidende foregin section	Bergens Tidende other	Sysla oil and energy section	Sysla green section	Energi og Klima news section	Energi og Klima blog	Energi og Klima 2 ℃ - science section
Limits and survival	5 (21,7 %)	8 (47,1 %)	1 (11,1 %)		3 (9,7 %)	8 (29,6 %)		12 (80 %)
Promethean	2 (8,7 %)	1 (5,9 %)		16 (84, 2 %)	3 (9,7 %)	7 (25,9 %)	1 (12,5 %)	
Leave it to the experts	3 (13,0 %)	3 (17,6 %)	1 (11,1 %)		2 (6,5 %)	4 (14,8 %)		
Leave it to the market	3 (13,0 %)		1 (11,1 %)	1 (5,3 %)		7 (25,9 %)	3 (37,5 %)	
Sustainable development		1 (5,9 %)						1 (6,7 %)
Ecological modernization	4 (17,4 %)	2 (11,8 %)	2 (22,2 %)	2 (10, 5 %)	16 (51,6 %)	20 (74,1 %)	4 (50 %)	1 (6,7 %)
Green consciousness	7 (30,4 %)	1 (5, 9 %)	5 (55,6 %)		5 (16,1 %)	3 (11,1 %)		
Green politics	1 (4,3 %)	1 (5,9 %)	1 (11,1 %)		1 (3,2 %)		1 (12,5 %)	
Number of articles	23	17	9	19	31	27	8	15

Appendix E

Translated media quotes

2.2

Klimaendringene rammer verdens fattige hardest (BT 10.11.15).

2.2.1

Til Paris for å redde klimaet

Terroraksjonene var skremmende. Men hvis det er en sak som får meg til å reise til Paris akkurat nå, så er det kampen for en god og rettferdig klimaavtale (BT 30.11.15).

Ber om hjelp til grønt smelteverk

Ilmenittsmelteverket har planene klare for en radikal omlegging av produksjonsprosessen. I fremtiden skal fabrikkpipene i industribygden slippe ut vanndamp, ikke CO2 som i dag (BT 02.02.16).

Slik skal man nå Paris-målene

Karbonfangst og lagring er eneste løsning for å holde den globale oppvarmingen under to grader (BT 09.03.16).

Fire ting du bør vite om togradersmålet

Ødelagte økosystemer, mer tørke og oversvømte landområder er noen av effektene som kan komme (BT 01.12.15).

Burkina Faso tar opp kampen mot klimaendringene

Det endrede klimaet like sør for Sahara har gitt grobunn for terrorister fra Mali og migrasjon vekk fra området (BT 30.11.15).

Klimaministeren tror på historisk gjennombrudd

Vi ønsker forpliktende nasjonale utslippsmål, men det er dessverre ikke stemning for dette blant noen av de største utslippslandene, som USA, Kina og India (BT 23.07.15).

God medvind for fornybar energi

Derfor kom det som en god nyhet at vi produserer mer grønn energi enn forskerne trodde (BT 12.07.15).

2.2.2

– Harde realiteter for oljeindustrien

Vi vet at etterspørselen etter energi øker. Vi vet også at fornybar energi må dekke mesteparten - om ikke hele - denne veksten. Olje og gass vil imidlertid fortsatt være svært viktige energiressurser. Selv I en togradersverden trenger vi olje og gass omtrent på dagens nivå i 2040 (Sysla 23.11.15).

– Vi vil ta Subsea-teknologien lengre, dypere og kaldere

- Verdens utslipp av drivhusgasser må reduseres, og her vil vi være en del av løsningen. Vi vil styrke innsatsen for å få et lavere karbonutslipp ved å produsere på så bærekraftig måte som mulig. Statoils ambisjon er å være den mest karboneffektive olje- og gassprodusenten i verden, og her er jeg sikker på at subsea-utbygginger vil bidra, sa Øvrum (Sysla 17.06.15).

Oljeforeningenn iviterer til klimadugnad

Reduserte klimagassutslipp er viktig for verdens klima. Høy produksjon er viktig for at samfunnet skal kunne gi gode helsetilbud og gode skoletilbud (Sysla 10.03.16).

Slik mener de Norge skal tjene penger etter olje

-Mens klimaendringene er et problem som må løses, gir overgangen til et lavkarbonsamfunn store finansieringsmuligheter (Sysla 20.10.15).

Nå skal også Forsvaret ha sol på taket (Sysla 03.09.15).

Klimaendringene gjør norsk vannkraft mer verdifull (Sysla 15.10.15).

Industrisatsing gir resultater

Skal Norge i fremtiden både ha en konkurransedyktig industri og lave klimagassutslipp, må norsk industri bli energieffektiv og ta i bruk ny energi- og klimateknologi (Sysla 20.05.16).

Det er ingen tvil om at driveren for klimagassutslipp i verden er kullkraft. Her er det definitivt mest å hente om vi skal redusere utslippene (Sysla 10.11.15).

- Bli grønn eller dø ut som dinosauren (Sysla 28.04.16).

2.2.3

Fem på fredag: Fornybargigant mot skifteretten
24.mars tok 115 år med kullkraft i Skottland slutt. Da stengte Longannet kullkraftverk i Fife, en gang Europas største, etter 46 års drift. Longannet har tidligere levert strøm til en fjerdedel av Skottlands husstander. Skottland dekker nå halve sitt strømforbruk med fornybar energi, og har ambisjoner om å nå 100 prosent innen 2020 (Energi og Klima 01.04.16).

Rundt 1500 nye kullkraftverk er under bygging eller planlegging globalt. Investorene bør være urolige. Nesten en billion dollar kan gå til spille dersom klima- og forurensingstiltak gjør at de nye kraftverkene ikke blir tatt i bruk, ifølge en rapport fra Sierra Club, Greenpeace og Coalswarm (Energi og Klima 01.04.16).

Fem på fredag: Danmark skroter kystnære vindmøller
Familieeide ASKO og moderselskapet Norgesgruppen AS har som mål å bli klimanøytralt primært ved å sette opp en egen vindpark i Rogaland, bruke store mengder solenergi til å kjøle ned varer og sørge for strøm til elbilene, og ved å produsere biogass av eget matavfall (Energi og Klima 13.05.16).

Året då temperaturen og champagnekorkane gjekk i taket
Våre utslepp av drivhusgassar til atmosfæren fører til rask oppvarming, og vi ser stadig tydelegare konsekvensar i form av flom, tørke, hetebølgjer,

havstigning og utfordringar knytt til tilgang på vatn og mat (Energi og Klima 26.01.16).

Det vi kan seie med stor grad av sikkerhet, er at tendensen er klar. Enkeltår endrar ikkje det faktum at jorda vert varmare, og at vi stadig nærmar oss det forskarane karaktiserer som farlege klimaendringar (Energi og Klima 26.01.16).

Havforsuring truer næringskjeden - våre områder er spesielt utsatt (Energi og Klima 26.12.15).

Appendix F

Definitions of frames

Bad guys	Blame others. Key words: China, US, oil companies
Business as usual	Continuance of fossil fuels
Buy our way out	Reducing emissions through carbon offsets
Certainty	Climate change is real and anthropogenic (Olausson 2009, 430)
Climate justice	Rich countries responsible, poor countries suffer most
Cost	How much climate change will cost economically.
Disaster	An emphasis on general or specific adverse consequences or impacts from climate change (Painter 2013, 46)
Distance	Portraying climate change as distant, geographically and in time (Stoknes 2015, 49)
Financial risk	There is an economic risk connected to extracting fossil fuels (Journalist 1)
Gas is the answer	Gas will be the bridge between fossil fuels and renewable
Green shift	An unstoppable, continuing process of change that embraces everything that gives greater resource productivity and lower emissions (Mossin 2015)
It's happening now	Climate change is happening now and the consequences are appearing
Leave it to the experts	The experts will solve the climate crisis
Leave it to the market	The market will solve the climate crisis
Loss	What we are going to lose: money, polar bears, forests, snow, ice etc. (Stoknes

	2015, 113)
Natural science	Focusing on the natural science behind climate change, with no emphasis on the social consequences or systemic causes
Norway's double play	Norwegian double standards: Environmental global leaders and oil-producing nation (Eide and Ytterstad 2011, 115)
Norway good guy	The national hero and global leader (Eide and Ytterstad 2011, 115)
Opportunity	Possible to earn money because of climate change
Scientific evdence	Explaining climate change in scientific terms
Small action	"I'm doing my bit for the planet – and maybe my pocket" (Shanahan 2007, 2) Key terms: ground-up, individual action, small efforts
Statoil good guys	Portraying themselves as environmentally sustainable (Eide and Ytterstad 2011, 54)
Sustainable development	Socially and sustainable economic growth that helps the developing world to step out of poverty, while the industrial countries take responsibility for their actions (Dryzek 2005, 153)
Technical fix	"Technology will provide the answer" (Hulme 2009b, 121)
Uncertainty	Existing research is inconclusive (Shehata and Hopmann 2012, 180)
We are doing our part	Making an effort towards reducing climate change emissions, and taking climate change seriously
We need oil	Poor people in the world need more energy, we need oil to maintain the welfare state

Appendix G

Interview guide - readers

Focus group – x readers Date

First name:	
Education and occupation (short):	
What kind of newspaper/sites do you usually read?	
Do you read most news on paper or online?	
How much of your news do you get from social media? (A little, half, most?)	
What kind of social media do you get news from?	
Where do you get information about climate change and climate related	

news?	
What kind of news about climate change are you most interested in? (New research, new technology, consumer related news etc.)	
Do you get this kind of news through x or other places? What other places?	
How often do you read x? (Daily, a couple times a week, a couple times a month …)	
What section do you read the most? (x)	

Interview guide *Bergens Tidende*

About me, consent form, structure interview

1. What is more natural for you to use, the phrase “climate change” or “global warming”?
    - Could you elaborate upon your answer?
    - How would you define climate change, as a shift in climate, a global warming and/or a crisis? Why?
2. Regarding climate change, are you optimistic or pessimistic in terms of the future?
    - Do you think there will be more extreme weather, food shortage and crisis in the world because of climate change?
3. What kind of information do you think *Bergens Tidende* tries to convey to their readers in terms of climate change?
4. Who do you think is responsible in solving the climate crisis? (The government, the industry, each individual)
5. What do you think of people’s efforts in terms of climate change, do you think it helps to recycle, drive electric vehicles, consume less etc.?
    - Do you think each individual can make a difference in terms of climate?
6. In Norway, one can get the impression that technological solutions will be crucial, and that we don’t have to reduce our consumption. Do you agree with this assumption?
7. The green shift is a much discussed term in Norway, what are your thoughts about the green shift?
8. What do you think about Norway’s responsibility compared to bigger countries such as the US and China?
9. Do you think oil and gas will be an important resource to Norway in the next decades?
10. Do you think it’s possible to continue with the oil and gas industry if new technological solutions reduce emissions tied to production?
11. Do you think climate change is going to affect you personally? If so, in what way?

    - How do you think we should talk about climate change so that more people can relate to it?
12. What kind of news about climate change makes you want to act?
13. Potential disasters have been much discussed when talking about climate change, do you think we talk too much about the disasters or do you think it helps to do so?
14. Scientists argue that we should talk about solutions and adaptations when discussing climate change, do you think *Bergens Tidende* does this?

Interview guide *Sysla*

About me, consent form, structure interview

1. Who do you think is responsible for solving the climate crisis? (The government, industry, each individual)
2. In Norway, one can get the impression that technological solutions will be crucial, and that we don't have to reduce our consumption. Do you agree with this assumption?
3. The green shift is a much discussed term in Norway, what are your thoughts about the green shift?
4. What do you think about possibilities in terms of climate change? Can it lead to more business opportunities, or will it instead lead to loss, catastrophe and costs to society?
5. Do you think oil and gas will be an important resource to Norway in the next decades?
6. Do you think we should continue with the oil and gas industry, if new technological solutions reduce the emissions tied to production?
7. Do you think it's necessary to continue with the oil and gas industry in order to maintain the welfare society, and for the world to have access to enough energy?
8. What do you think about the oil and gas industries efforts in terms of the climate crisis?
9. Do you think climate change is going to affect you personally? If so, in what way?
    - How do you think we should talk about climate change so that more people can relate to it?
10. What kind of news about climate change makes you want to act?
11. Potential disasters have been much discussed when talking about climate change, do you think we talk too much about the disasters or do you think it helps to do so?
12. Scientists argue that we should talk about solutions and adaptions when discussing climate change, do you think *Sylsa* does this?

Interview guide *Energi og Klima*

About me, consent form, structure interview

1. What is more natural for you to use, the phrase “climate change” or “global warming”?
    - Could you elaborate upon your answer?
    - How would you define climate change, as a shift in climate, a global warming and/or a crisis? Why?
2. Regarding, climate change, are you optimistic or pessimistic in terms of the future?
    - Do you think there will be more extreme weather, food shortage and crisis in the world because of climate change?
3. Who do you think is responsible for solving the climate crisis? (The government, the industry, each individual)
4. In Norway one can get the impression that technological solutions will be crucial, and that we don’t have to reduce our consumption. Do you agree with this assumption?
5. The green shift is a much discussed term in Norway, what are your thoughts about the green shift?
6. Do you think oil and gas will be an important resource to Norway in the next decades?
7. Do you think we should continue with the oil and gas industry, if new technological solutions reduce the emissions from the production?
8. Do you think it’s necessary to continue with the oil and gas industry in order to maintain the welfare society, and for the world to have access to enough energy?
9. Do you think it’s a financial risk to continue with oil and gas exploration?
10. *Energi og Klima* has a scientific section, *2°C*, where they write about the science behind climate change. Do you think it’s helpful to read these articles?
    - Do you think the general population find these articles useful?
    - Many scientists argue that articles discussing scientific terms, the Artic, Pacific islands and the future, makes climate change feel more distant. Do you agree with this?

11. Do you think climate change is going to affect you personally? If so, in what way?
    - How do you think we should talk about climate change so that more people can relate to it?
12. What kind of news about climate change makes you want to act?
13. Potential disasters have been much discussed when talking about climate change, do you think we talk too much about the disasters or do you think it helps to do so?
14. Scientists argue that we should talk about solutions and adaptions when discussing climate change, do you think *Energi og Klima* does this?
15. What do you think about the general media in Norway's climate coverage?

Appendix H

Interview guide - journalists

About me, consent form, structure interview

1. Can you tell me about your education and background?
2. Could you tell me about your job as a journalist in x?
3. How do you proceed when writing a story about climate change?
4. What are your thoughts about the media in Norway's climate coverage?
5. Where do you get information about climate change?
6. In Norway, one can get the impression that technological solutions will be crucial, and that we don't have to reduce our consumption. Do you agree with this assumption?
7. This thesis is based on a theory called framing. Have you heard of framing before?
8. This theory claims that the angle in a news article will affect how people notice, understand and remember the matter, and thus how they will behave in relation to this matter afterwards. What do you think about that?
9. In your opinion, who is responsible for reaching out with information about climate change and climate-related news?
10. Many journalists argue that it's important to be objective, neutral and critical in their reporting. How does this norm influence your climate change reporting?
11. Do journalists have a responsibility to write about climate change, even though it's not news relevant?
12. Researchers argue that the way we have communicated about climate change so far, has been about disasters, fears, loss and blame. What are your thoughts on this?
13. According to these researchers, this negative angle has led to people losing all hope, and a sense that they can't do anything anyway, so why bother, in addition to there being a distance between people and climate change, which leads to denial. What are your thoughts on this?

14. These researchers argue that they have to communicate about climate change in a different way, in a way that inspires people and gives them hope. What do you think about that?
15. How can we talk about climate change in a different way?
16. Researchers argue that we need to adapt the news about climate change to the target audience we speak to, i.e. to their values and attitudes. Do you think this is possible and a good solution?
17. Researchers also argue that we have to think about what climate change can do for us, instead of what it is doing to us. I.e. we have to focus on possibilities and solutions. Do you think this is possible?
18. The media is facing a challenging time, with falling readership, competition from social media etc. What do you think about the future of traditional media?
19. Do you believe social media affects information and news about climate change?
20. How can the media reach out with news about climate change to younger generations?