

The framing of climate change, how objective are Dutch newspapers?

Bachelor thesis

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4 July 2019

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Word count:
(15.730)

Abstract

The research question of this thesis is *How do Dutch newspapers write about the governmental top-down initiative of the energy transition, and the social bottom-up initiatives of the student protests, in the Netherlands, and how do the newspapers relate to each other thereby?* The selected Dutch newspapers for this research are *NRC*, *De Telegraaf*, *Volkskrant* and *Algemeen Dagblad*. On the basis of a newspaper article analysis and four sub-questions, the research question is answered. The selected articles are coded using the Charmaz approach of initial coding, focused coding, and theoretical coding. The data is analyzed with a narrative analysis approach in which mainly the attention lies by the used frames and sources. The difference between articles within a newspaper on the bottom-up social initiative and the governmental top-down initiative is the used sources and the frames that could be identified. Newspapers write in general more content-oriented about the top-down initiative and mainly contemplative about the bottom-up initiative. This thesis is as well scientific relevant as socially relevant because the paper is an addition to the existing literature of framing in newspapers about climate change in the Netherlands, and it is important to make newspaper readers aware of the question how their newspaper is influencing their opinion on a specific theme.

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Introduction

In recent years, climate change is a hot topic for researchers, politicians, and journalists. Climate change will possibly affect all the people in the world and so also the citizens of the Netherlands, but the way in which Dutch citizens contemplate climate change differs. An important role in the climate change debate is reserved for the media. They are the bridge keeper between the politic, science, and the public. The role of media and journalism is highly important because in the way facts are presented, stories are told, and a stage is given to different opinions, in short, how articles are framed, is influencing all their readers. However, the way in which different news media present this theme differs strongly and this leads to contested knowledge. Readers live, partly conscious but mostly unconscious, in their own filtered bubble. They read often only facts which fit into their own worldview. So, it becomes possible that two people, who live next to each other, have a totally different opinion about the topic of climate change due to the fact that they read different newspapers. In this study, a closer look will be given into the articles of four prominent Dutch newspapers and their way of framing articles with climate change related topics.

Framing gives the power to influence people. A story can be told in many different ways through the way in which facts are presented and this leads to contested knowledge. The individual who understands this process can use it in order to strengthen their own power. A politician, for example, who knows which paper frames according to his or her opinion, can conduct interviews with only this newspaper in order to convince more people to vote on his or her party. Another example is a newspaper editor who, through framing and the presentation of only certain articles, makes it more likely for the readers to believe his worldview and opinion on certain topics. The mass public is influenced strongly by the newspapers that are read. In a time, where people live in own media bubbles and only want information which strengthens the own opinion, this study is highly relevant to show how people are influenced by their own information sources without really knowing it. This study will give an insight into the question which newspapers use which frames and how they relate to each other. This will help to understand the opinions of the public on certain topics related to the newspapers that they read and this is practical relevant knowledge.

A lot of research about framing and climate change has already been done around the world. Chetty et al did a study about this topic in New Zealand (2015), Bhatta et al

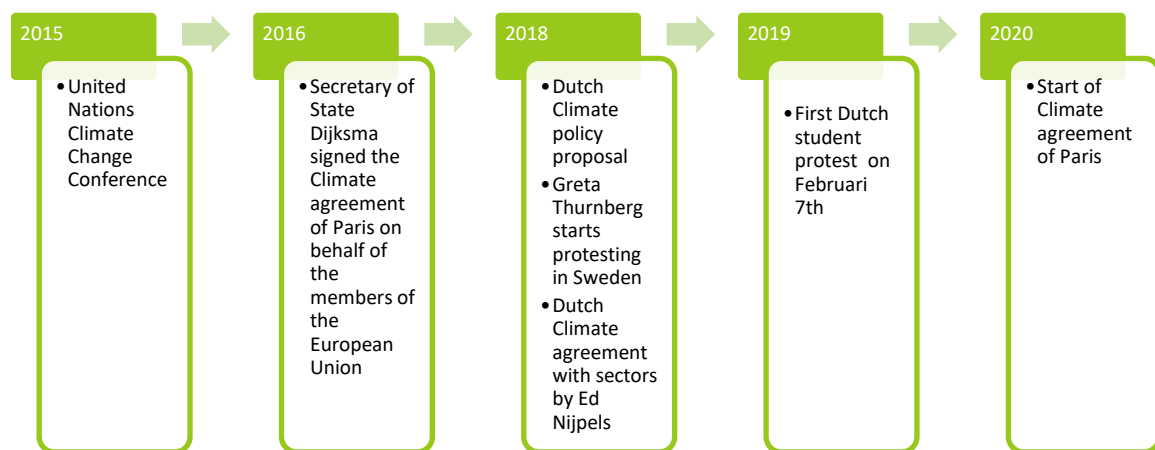
researched the scientific temper of published articles about climate change in India (2015), Ford and King did research about the framing of adaptation to climate change in newspapers in North America (2015), Gkiouzepas and Botetzagias studied climate change coverage in Greek newspapers (2015) and Han et al studied framing climate change in Chinese newspapers (2017). All these studies had as the main topic of climate change and framing in national newspapers but they all used a different point of views and emphasized other aspects of climate change coverage. Chetty et al, for example, researched a wide range of used frames, while Ford and King mainly studied different forms of the adaptation frame. Gkiouzepas and Botetzagias were, at their turn, most interested in the presence of the character of the 'polarized pluralist' in the Greek media system, while Han et al focused more on the sources of articles about climate change and searched for relationships between the coverage of newspapers and the financial sponsors which financed the newspaper. In the Netherlands, several framing and newspaper studies were carried out, such as a framing analysis in Dutch Newspapers about asylum seekers (2001) by d'Haenens and de Lange. This study, however, focused on another framing topic than climate change. The study of Dirikx and Gelders did focus on climate change coverage in French and Dutch newspapers during UN conferences (2010), but this research focused only on broadsheet newspapers, which gives a skewed picture of reality.

So there has already a lot of research been done on the topic climate change and framing in newspapers, but this study will add to the existing body of literature because it zooms in on the Netherlands and Dutch newspapers, and this has not been done before, which makes this research scientific relevant. Furthermore, the studies about framing that have already been done in the Netherlands, tend to focus on other topics than climate change. This study will also use a new approach by looking at a governmental top-down initiative, the energy transition of the Dutch government, and a social bottom-up approach, the Dutch student protests, to give a complete picture of the framing between newspapers and the framing within a newspaper. This makes this study special in comparison with existing studies on framing and climate change in other countries.

Underneath, in figure 1, a timeline can be found which gives an overview of the events relating to the student protests and the energy transition. The timeline starts in 2015, with

the climate conference in Paris. During this conference, the members of the United Nations made agreements about limiting global warming. Agreed is to limit this to 1,5 max 2 degrees Celsius. In 2016, the secretary of state Dijksma signed on behalf of the members of the European Union, the Paris agreement. In June 2018, the draft of the national climate policy proposal in the Netherlands was finished. This agreement had as goal to produce 95% less CO2 in 2050. With this agreement, the Dutch government wanted to give clarity to their citizens, and give guidelines to the business and industries located in the Netherlands. In September that year, the Swedish 16-year old girl Greta Thunberg, refused to go to school any longer. She was worried about global warming and climate change and started her school strike for the climate. At the end of 2018, the climate agreement with the sectors under the chairmanship of Ed Nijpels was published. In February of 2019, Dutch students decided to follow the example of Greta Thunberg's school strike, because they found the climate policy proposals and the climate agreement not progressive enough. They want to convince politicians with the school strikings of the necessity of stricter policies. In 2019, several student demonstrations were organized in the Netherlands. At last, in 2020, the climate agreement of Paris enters into force.

Figure 1 Timeline (Dutch) climate policy and student protests



(Rijksoverheid, 2019)

Based on the literature review, which will be discussed later in this paper, a research question could be made, which is as well descriptive as explanatory. The research question of this paper is *How do Dutch newspapers write about the governmental top-down initiative of the energy transition, and the social bottom-up initiatives of the student protests, in the Netherlands, and how do the newspapers relate to each other thereby?*

Four sub-questions were created in order to help to answer the research question. With the sub-question, *Which frames are used in the selected newspapers describing the energy transition or the student protests?* it will become clear which different frames the four newspapers use when they write about the top-down initiative of the energy transition and which frames they use when describing the bottom-up social initiative of the student protests. The second sub-question is *In what way differ the frames about the governmental top-down initiative of the energy transition and the social bottom-up initiative of the student protests?* The third sub-question is *Which sources are used and what is their role in the different identified frames?* This sub-question will look into the question if and how sources are used in different frames. The fourth sub-question is *How do the frames relate to each other within and between the newspapers?*

The analysis will be made based on the research question and the four sub-questions.

The research will begin with describing relevant literature about framing and research on climate change and newspapers which has been done in other countries before. During the literature review, frames that will be used in this study will be identified and described. After the theoretical framework is made, the method chapter will follow, which will describe the used methods and the operationalization of the research, the generalization of the data and, in the end, the chapter will present the threats and opportunities of this research. The following chapter is the analyses chapter. In this chapter, the collected data will be analyzed and presented. Following the analyses chapter, the presented data in the analysis chapter will be discussed in the discussion chapter. After the discussion chapter, a conclusion about the research will be made in which the research question will be answered in the conclusion chapter. The paper ends with references and appendixes.

Theoretical framework

Newspapers and frames are inseparable of each other. In order to write an article, a journalist uses, as well consciously as unconsciously, different frames, in the way an article is written and facts are presented. Gamson and Modigliani say about the presence of frames that these organize the world and make a situation understandable for as well journalists as readers. They call this an 'interpretive package that gives meaning to an issue'. Interpretive packages are the whole package of elements in an article which bounded together create a frame, such as metaphors, pictures, one-liners, etcetera (1989, p2). These interpretive packages or frames that are used by newspapers shape the public understanding about topics and in this case climate change. Therefore, in this thesis, research will be done regarding different frames that are used in articles about the student protests and the energy transition.

In this theory chapter, first the concept and theory of framing are discussed, second, different frames will be presented in order to give a complete picture of the possible frames that can be present during this research.

Dewulf et al, describe which different approaches of framing exist and what their assumptions are regarding the nature of frames and the subjects of framing. The different approaches of framing that are described in this article are a cognitive approach and an interactional alignment or co-construction approach. Dewulf et al describe this theory as 'cognitive frames as mental structures that facilitate organizing and interpreting incoming perceptual information by fitting it into already learned schemas or frames about reality' (Dewulf et al, 2009, p. 4). While studying frames in newspapers, this cognitive approach can be kept in mind, while identifying the frames because the information in newspapers is framed in a way that fit the normally learned schemas about the reality of the readers.

Van Hulst and Janow, present three distinctive acts of framing. This is framing as sense-making work, framing as the work of selecting, naming and categorizing, and framing as the work of storytelling. With framing as sense-making work, the authors mean that policy-relevant actors try to make sense of the policy-relevant situations. So this means that frames

are used in order to be able to understand the world and to predict the future, which can be quite useful for policy-relevant actors in order to write policies.

With framing as the work of selecting, naming, and categorizing the authors mean that framing can be used in order to categorize events. By selecting and naming, it becomes easier to categorize a specific situation or word combination.

The last form of framing that is identified, is framing as the work of storytelling. So through framing, all the elements can be bound together in order to make a coherent, understandable story. This frame is often used in politics to make a coherent story about history to underline a point or persuade the audience.

These three distinctive acts of framing are the basis in all the present frames. The frames that are used in the climate articles are used in order to make sense, select, name and categorize, and to tell a coherent story.

Frames in newspapers

When looking at framing in articles about climate change, ideological driven frames are important to recognize. These frames are driven by ideology, influence the public strongly, although they are often not based on facts or give a skewed image of a situation by presenting only one-sided facts. Environmentalists for example, often frame climate change related topics with a Pandora's Box frame according to Nisbet (2010). This frame is also called an apocalyptic frame by Foust and Murphy (2009). Blue (2015) mentions this frame as the imminent environmental catastrophe frame. This frame, according to blue, consists of the thought that humans risk destroying the earth by passing important thresholds. In this study, these three frames will be combined into the catastrophe frame.

The second frame that will be used during this study is the political frame. This frame remarks the responsibility for dealing with climate change of politicians. The government, countries and world leaders should work together in order to reduce climate change according to Chetty et al (2015, p. 6). So climate change is in this frame a political issue. Chetty et al use a table to describe all the used frames in their research in detail. This table can be found underneath as table 1. The majority of the frames in this table are also used in this thesis as a frame or combined with frames of other scholars.

Figure 2 Overview of frames

Frame	Key issues or themes raised or discussed in media coverage
Social progress	Efforts to curb emissions/tech solutions as part of broader steps towards more 'green', sustainable future, energy security (e.g. optimism regarding solutions, highlights responsibility and efficacy of the individual, lifestyle decisions, focus on 'human interest' themes). Alternatively, discusses adaptation to changing climate (e.g. town planning with rising sea levels or calls to action).
Morality	Climate change and efforts to curb emissions as moral/ethical issue (e.g. emphasis on risk/responsibility divide between developed and developing world, moral responsibility to future generations, to poor nations that will be affected most, 'doing our fair share as a country').
Politics	Climate change as a policy issue, places onus on politicians, governments, diplomacy for solutions (e.g. what individual politicians are saying/doing, what they should be doing, solutions lie in hands of politicians/governments). Alternatively, climate change as matter of political strategy/conflict (e.g. between politicians/politicians versus NGOs over climate policy, Emissions Trading Scheme, carbon taxes).
Scientific controversy	Evidence/Claims regarding Accident Compensation Corporation New Zealand as matter of dispute/controversy between groups or individuals (e.g. defines the case for climate change as scientists vs sceptics, the 'climate change debate'). 'Duelling scientists' scenario employed.
Science	Climate change as a scientific/technical issue, a matter of scientific expertise (e.g. focus on novel new research, new IPCC methods, research methods, scientific background—recapitulation of 'what is known vs unknown', emphasis on authority of scientists, experts).
Economic competitiveness	Potential solutions to climate change as boon/burden to economic competitiveness (e.g. carbon tax/ETS will cripple economy/encourage innovation. New Zealand potential to be innovation leader/threats to agricultural economy, risks to tourism, clean green brand, action on climate change).

The third and fourth frame will be adopted from Chetty et al (2015, p. 6). This is the economic and the economic competitiveness frame. This economic frame focuses mainly on the negative economic effects that reducing climate change measures can have in the short term. The economic competitiveness frame remarks that these measures will decrease the economic competitiveness of the Netherlands relative to other countries. Dirikx and Van Gelder use the economic frame also in their research, but they call it the (economic) consequences frame. They unite in this frame as well as the possible economic consequences as another kind of consequences (2010, p. 3). However, in this research, there will be a division between the economic frame, the economic competitiveness frame, and the catastrophe frame.

The fifth frame is the science frame. This frame can be found in the article by Chetty et al. They describe the science frame as a frame in which scientists are the most important source. The authority of the scientists as experts is remarked and this makes the topic climate change a mainly scientific subject (Chetty et al, 2015, p. 6). The topic is mainly treated by the research that has been done by the scientists.

The sixth frame is the responsibility frame. This frame is present in the article of Chetty et al as the morality frame. This frame remarks according to Chetty et al the moral and ethical issues related to climate change. The social progress frame of Chetty et al is combined with the responsibility frame in this study because the social progress frame remarks the responsibility of individuals according to sustainable decisions as well as the responsibility frame (Chetty et al, 2015, p. 6). This frame can be recognized in articles where the sources or other actors talk about their own responsibility or about the responsibility of other actors outside themselves.

Sources

Besides the frames, the sources that are used in an article are also important to measure. This is inspired by the fact that Chetty et al, not only look at framing but also to the sources in articles because this is closely related to the frames. In a political frame, for example, are often politicians the main source, while in the science frame sources often work as scientists. When looking at the sources in an article, the frames can often be deduced of this information. Therefore, the sources of articles will be identified and categorized in this study. The categories that Chetty et al describe in table 2, were used. These categories are academic/expert, non-expert commentator/citizen, economist, independent research groups, politician, NGO, unnamed expert and no source. Examples of every source can be seen in the table underneath. The source skeptic is excluded in this study, because the skeptic source of Chetty is skeptic related to climate change and global warming, while this study is about the energy transition and the student protests. Therefore, skeptics will most likely not be present in the selected articles due to the fact that they are about a policy or events instead of the subject of climate change.

Figure 3 Description of sources

Source	Description
Academic/Expert	Individual climate scientists, university research group, academics (e.g. Jim Salinger, James Renwick, Mike Hulme).
Non-expert commentator/citizen	Citizens, celebrities, public figures with no scientific expertise (e.g. Sir Paul McCartney, Keisha Castle-Hughes, Lucy Lawless).
Business and industry	Business and industry groups, lobby groups, business representatives/figures (e.g. Greenhouse Policy Coalition).
Economist	Economists or economic institutions (e.g. Sir Nicholas Stern, Treasurers, Treasury spokesperson, Gareth Morgan).
Independent research groups	Unaffiliated/independent research groups (e.g. World Meteorological Organisation, Hadley Centre, Cawthron Institute).
Politician	Government, politicians, political elites, government officials (e.g. John Key, Nick Smith, Barack Obama).
NGO	Environmental organisations, non-governmental organisations (e.g. IPCC, WWF, Greenpeace, Oxfam, Unicef).
Sceptic	Actors noted as sceptics, well-known sceptics, sceptical lobby groups (e.g. Chris de Freitas, Ian Wishart, New Zealand Climate Science Coalition).
Unnamed expert	Expert quoted unnamed
No source	No source present

Writing style

Next, to the five frames that can be identified, the writing style of the articles will also be taken into account. The three possible writing styles are skeptic, neutral and approving. A skeptic article focuses on the controversy in the climate debate and especially on opinions that conflict with the status quo. Blue, for example, states that there is a concern in the existing literature about the influence of these climate denial movements that misinform the public. These movements use according to her a climate skeptic frame (Blue, 2015). Chetty et al identify this too but they name it the scientific controversy frame (2015, p. 6). Dirikx and Van Gelder mention a similar frame which they call the conflict frame. In this frame, there is room for individuals with a different opinion of the status quo. So in the existing literature, the skeptic writing style is mainly used as a frame, but in this research, it will only be labeled as a skeptic writing style. To allocate this label, an article should write skeptic about climate change or global warning, or about the student protests or the energy transition.

Framing in policy processes

Van Hulst and Yanow use three entities to describe framing in policy processes. They call these entities the substance of the policy, the policy process, and the policy-relevant actor identities. With the substance of the policy, they look at what is framed and what the policy contains. With the policy, process is a look given into the position of a newspaper or writer.

They comment on the policy process, or suggest how the process should continue. The relevant actor identities describe the actors that are relevant for the policy. In this way, all sides of the policy are lightened. In this research, a closer look will be given into these three entities of the two selected topics.

To sum up, in the theoretical framework, it appeared that framing is unavoidable when writing articles. Framing is the sum of pictures, word choice, metaphors and more, and this is called an interpretive package. There are different ways in which frames are used, such as the basis frames framing as sense-making work, framing as the work of selecting, naming and categorizing, and framing as the work of storytelling. However, there are also some in-depth frames which will be used during this study. These are the catastrophe frame, the political frame, the economic competitiveness frame, the science frame, and the responsibility frame. The writing styles in articles will during this study also be observed and labeled as skeptic, approving or neutral.

Expectations

A few expectations for this study arose while writing the problem background and the theoretical framework and selecting the theoretical concepts. These expectations will be discussed in this subchapter.

First, it is expected that a clear division between the tabloid and the broadsheet newspapers becomes visible. This division is expected to be seen in the use of frames and in the use of sources.

Second, it is expected that the tabloid papers will use more often the economic competitiveness frame than the broadsheet papers in their energy transition articles.

Third, it is expected that the broadsheet papers will make more often use of the science frame than the tabloid papers.

Fourth and last, it is expected that there is a difference within each newspaper for the two topics regarding frames and sources.

Methods

In this chapter, the collected data and documents will be presented. First, the methods that were used will be described. Second, the data generation and operationalization will be described.

In this subchapter, the generation and the operationalization of the Data will be described. First, in the data generation part, it will be described how the required data for this study was collected. Second, the operationalization of this collected data will be discussed.

In this study, there is chosen for meaning-focused research instead of a variable focused inquiry. This is decided because the study has rather topics than measurable variables. According to Haverland and Yanow (2012) 'interpretive researchers try to structure their research designs in ways that will avoid premature diagnostic closure, maximizing their ability to identify a wide range of interpretations that are relevant to the research setting or situation.' Haverland and Yanow state that interpretative researchers are less attached to their own theories and concepts. They have a more flexible way of doing research, in which it is possible to start with some theoretical concepts, but while doing the fieldwork it stays possible to adjust these concepts. This means that once the theoretical concepts are made, they are not so-called written in stone, but can be adjusted if necessary.

Therefore, for this study, there is chosen for an interpretive research method. In this way, the theoretical concepts could be flexible and adjusted during the study and instead of looking at variables a closer look could be given into the meaning of the concepts and the results.

Data generation

For the data collection, four Dutch newspapers have been selected. The choice for analyzing only newspapers instead of both newspapers and online news media was made because it is assumed that newspapers publish more in-depth articles in contrast to online media which publish mostly short news stories. During the selection of the newspapers, the number of subscribers and the target audience of the newspaper was the most important selection criteria. Four of the most selling newspapers of the Netherlands were selected, namely *NRC*, *De Telegraaf*, *Volkskrant* and *Algemeen Dagblad*. The *NRC* and *Volkskrant* have both, in general, a higher educated audience, and are known as so-called broadsheet papers, while

De Telegraaf and *Algemeen Dagblad* have, in general, a lower educated audience and are known as so-called tabloid newspapers.

During the research, two specific climate initiatives were identified. These two topics are the energy transition and the student protests about climate change. There is chosen for these two topics because they represent a bottom-up and a top-down initiative. The energy transition is a top-down initiative of the government. With the energy transition, the government tries to make the Netherlands more sustainable and less dependent on gas. The student protests about climate change are a bottom-up social initiative of students who try to move the politics to take action, in order to protect nature and prevent climate change. There is chosen for two different kinds of initiatives in order to discover if the newspapers write differently and make use of other frames in articles about a bottom-up social initiative and a top-down politic initiative.

A content analysis of these two initiatives in the four selected newspapers was done. For this analysis, the Saturday newspapers were analyzed over a time period of ten weeks. The Saturday edition of the newspapers was chosen because these contain more in-depth articles about a wider range of subjects. The time period in which articles were selected was January, February and the half of March, because these are the Saturday editions before the Provincial and Water Board elections (20 March 2019) in the Netherlands. In the weeks before these elections, newspapers are more eager to pay attention to in-depth articles about several election subjects, including climate change. Through the content analysis, all articles related to the two initiatives of this research are identified. The articles for the content analysis were selected via Lexis Nexis. Several keywords were used in order to collect the data. Because the articles came from Dutch newspapers the keywords that were used are also in Dutch. For the energy transition, the keywords that were used were *energietransitie*, *energie overgang*, *transitie*, and *klimaatbeleid*. The keywords that were used to find the student protest articles were *klimaatdemonstratie*, *klimaat jongeren*, and *klimaat spijbelaars*. The articles that were firstly selected were the Saturday articles within the selected time period. When the amount of three articles per newspaper per subject could not be met with these articles, also articles during the week in the selected time period were selected. Furthermore, all articles which consisted of columns or readers letters have been excluded from the study.

Data analysis

When all the articles were identified, they were coded in Atlas.ti. Initial coding, focused coding, and theoretical coding were used. This was done according to Charmaz approach as described by Bryman (2012, p. 574). During the coding process, the three forms of coding were also continually corresponding with each other. Because qualitative research was done by analyzing the selected articles, a qualitative interpretation of the data was needed. In order to interpret the data correctly, a narrative analysis approach was used as described by Bryman (2012, p. 589-593). The narrative analysis approach fits this research really well because the focus of the analysis lays on the purpose or intended effect of a specific event or situation and how people make sense of this. This fits well with the interpretive research method that is used in this paper. It should be possible to find the frames and the possible purpose of the frames during the data analysis in the selected articles. So, in the data analysis of this research, the most attention will go to the question of what differences could be found between the newspapers and the used frames, for the bottom up and the top down articles. This will be done on the basis of the research question and the sub-questions, which were presented in the part *research question*.

During the coding process, it was decided to complete the source list with two extra source categories. The categories 'student' and 'other' were added to the list. The source student contains opinions of youth younger than 21 that is used as a source and the source other is used for every source that was outside the other categories.

Furthermore, the research focused also on the writing style of the articles. Because writers often write an article in a certain way and give room to some critical opinions from an opposite view at the beginning of the end of an article, the articles will be divided into groups while keeping the whole article in mind. So if an article, for example, is in majority skeptical and only for a small part approving or neutral, the article will be labeled as skeptical.

The articles that were labeled approving, write in a positive way about the events or measures in the article. In a skeptic article, the writer uses skeptic notes in which it becomes clear that the writer does not approve the described events or measures that are taken. A neutral article is written by a journalist who does not give a value judgment. The article is neither skeptical nor approving.

Threats and opportunities

A potential threat in this research design is that not all articles can be identified or coded in a correct manner. This can be countered by paying extra attention to the selection and coding of the articles. Therefore, the articles were coded using Charmaz approach as described by Bryman in his book social research methods (Bryman, 2012, p. 574). According to this approach, all articles were coded using initial coding, focused coding, and theoretical coding. Before coding the articles a coding manual, based on Bryman was made. This coding manual can be found in Appendix 2. After all, articles were coded, a coding schedule was made (2012, p. 293-298). The coding schedule can be found in Appendix 3.

Another potential threat that is mentioned by Dirikx and van Gelder, is the fact that only a small number of articles can be analyzed through qualitative content analysis. This makes it hard to generalize data and statements (2010). This threat is also present in this research due to the fact of the small number of articles which can be analyzed per newspaper and topic. This is an unavoidable threat because it is not possible to analyze more articles due to the limited time period. However, this study will still be done because a qualitative content analysis, even if analyzing only a few articles, will give an interesting overview on which further research could be based.

An opportunity for this research is to understand the relationship between the newspapers and their position towards climate-related topics better.

Guarantee of the quality of the study

In order to guarantee the quality of this research, the three interpretive design elements of Schwarts-Sea and Yanow (2012) were used during this study. These interpretive design elements are trustworthiness, systematicity, and reflexivity. Schwarts-Sea and Yanow remark that these interpretive design elements are 'checks on their own sense-making' and function as the standards and criteria which help to guarantee the quality of interpretive research. The first of the three interpretive design elements are reflexivity, the self-awareness of the researcher. The researcher should be aware of the fact that the research can be influenced by specific circumstances and the own ideas or prejudices. So the researcher should be aware of the fact that the own characteristics and social environment, (un)consciously, can impact the research that is carried out. The researcher will otherwise, in this way, subjectively interpret the data. Reflexivity is, according to Schwarts, especially

important when doing research with participants. Though this study focused on newspaper articles and did not have interactions with participants, reflexivity is still an important quality criterion. It can also be used to reflect upon the elaboration of the researcher's ideas during the study and to eventually revise the research design when issues arise during the research. Another important part of reflexivity is transparency. This means that the researcher should be transparent and honest about possible events or choices that might have influenced the collecting of data process and so have affected the outcomes of the study.

In order to guarantee the quality of this study, reflexivity and transparency were used. An example of how this was used can be found in the method chapter about the generation of data. There, the collection of data was extensively described. In this section can, for example, be found that it was impossible to collect three articles per topic per newspaper when selecting only the Saturday articles in the set time period. There is, through the use of transparency, clarity given about in what way the data is collected. Through the reflexivity, it became possible to broaden the selection criteria during the study and so almost all the required data could be collected.

Reflexivity and transparency are also important parts of systematicity. By giving openness about the process, the systematicity of a study can be checked and in this way guaranteed. Systematicity is important for research because it shows that the study is done, and those possible conflicting findings were handled, in a disciplined and systematic way. So by giving openness about how the study was conducted and which methods were used, the systematicity of a study becomes clear and this guarantees the quality of the study.

Through reflexivity and systematicity, the study becomes more trustworthy. Schwartz-Sea and Yanow describe trustworthiness with the metaphor of a puzzle that should be solved. The research that is done is the puzzle that needs to be solved. However, a researcher is always biased, that is unavoidable, and therefore the researcher should be aware of the trustworthiness of the research. To guarantee this trustworthiness other ideas and theories opposing their own should be used to check the correctness of the outcomes of the research (Schwarz-Sea & Yanow, 2012).

In this research, the trustworthiness of the study is among other things guaranteed by researching several factors, or so-called sources. The study focuses not only on the frames

that could be identified but also on the writing style and the presence of sources. Conflicting interpretations can, through using different data collection sources, be found and used during solving the 'research puzzle'. This means that, if evidence is found that might contradict with the expectations of this research, there should also be room to discuss these findings in the analysis and discussion section of this study. In this way, a balance can be created and a nuanced picture of reality can be given.

Through using the three interpretive research design elements, reflexivity, systematicity, and trustworthiness, the quality of this study can be guaranteed.

Analyses

In this chapter, the data and documents that are collected in this research will be analyzed. The data will step by step be presented and analyzed. This begins on the basis of the three entities, namely the substance of the policy, the relevant-actors identity and the policy process. After discussing these three overarching themes, the sub-questions will be discussed and answered.

The substance of the policy

In this subchapter, a description of the substance of the policies of the two main topics will be given. The main topics of this research are the top-down governmental initiative of the energy transition and the bottom-up social initiative of the student protests. Underneath, a description of the substance of the policy about these two topics can be found.

Energie transition

Three articles about the energy transition, which is part of the Dutch climate policy, were selected per newspaper for this analysis. Unfortunately, only one article about the energy transition could be found for the AD within the selected time period. The substance of the Energy transition or climate policy is described in the following citation of an article of NRC.

For years the climate was primarily a theme for the enthusiast, but last year it steamed from the fringe to the mainstream. The weeks of the persistent heat wave of July 2018 turned lawns into yellow plains and allowed dogs to burn their paws on the asphalt. At the end of December, the Cabinet presented the draft Climate Agreement, after which concerns arose about the costs for the citizen.

(Bos & Rusman, 2019).

So, the Dutch citizens were at first not interested in climate and climate change policies. After the first signs of climate change could be noticed in the Netherlands, during a hot summer period, newspapers, and their readers became interested in this topic. The Dutch government made a new climate policy plan, with among other things the energy transition. The idea of the energy transition, in short, is to replace fossil forms of energy more and more with sustainable energy, like solar or wind energy. After announcing these plans, politicians and newspapers became afraid of the costs of this plan. Therefore, articles about the energy transition highly economize the subject and the question of how much the

transition will cost is often asked, and who will pay for this, is very important for newspapers.

The Volkskrant describes in an article about Ed Nijpels, which belongs to the transition articles, where the policy of the Dutch government originated. It started with politicians who asked for an action plan for the climate. Ed Nijpel became appointed as chairman of the so-called five sector tables meetings. These five sectors consisted of electricity, industry, agriculture and land use, mobility and the built environment. The meetings were attended by civil society organizations and the business community. During the meetings, the action plan, which would protect the climate, was draft and this plan was presented on 21 December 2018. The action plan contained over six hundreds of measures to which all sectors would contribute. After this agreement was made, the Central Planning Office (CPB) of the Netherlands calculated the costs of the plan (Van Lieshout, 2019). From this article, the substance of the policy becomes clear. It appears that many parties, organizations, and points of views were taken along while drafting the climate policy for the Dutch government and the Dutch citizens. However, as already appeared in the citation of the NRC, most parties and newspapers focus on the economic measures that will be necessary to reach the goals of the climate policy. So writes the Telegraaf in one of their transition articles that normal Dutch people feel like their opinions and interests were not leading in the policy. Also, many people and political parties are, according to the Telegraaf, afraid about the costs of climate policy (Timmer & Vink, 2019). This article is a good example of how the substance of the policy economizes.

So, the substance of the climate policy of the Netherlands and the energy transition as part of this policy is broad, but the main focus of newspapers lies with the part in which the costs of this policy are divided. This means that the most common angle or dimension that is used to describe the substance of the climate policy is via an economic angle. Another angle related to this economic angle, is a responsibility angle, via the question of responsibility. In the transition articles are repeatedly the questions asked who's responsibility climate change is, what the role of the Netherlands relative to the rest of the world is, and what the industries share in financing the policy will be. The main question who is responsible, leads also to the economic angle, because the person, party or country that is responsible has also the responsibility to pay for the climate policy. Therefore, there is a strong link between the

economic and the responsibility angle, as can also be seen in the article about the sector tables from the Volkskrant. They write that the environmental NGO's and the trade unions, who were present at the sector table meetings, refused to sign the agreement at the last moment. They found that the draft agreement divided the costs not fair enough between citizens and the industry. Their point of view is that the biggest polluters have to pay the biggest costs (Van Lieshout, 2019). So in this article, environmental NGO's and trade unions are mentioned specifically, because they refuse to sign the draft climate policy. This is a strange action, keeping in mind that milieu organizations always try to push politicians for better climate policies and to take as much responsibility as they can. However, despite that the government takes the responsibility, they refuse to sign the policy due to the fact that, in their opinion, the industry does not contribute enough in the concept policy. So this article is also an example of the responsibility angle and the economic angle and how they are related to the substance of the climate policy.

Another important angle of approach of the substance of climate policy is the political angle. This can be seen back in the transition articles in descriptions of quarreling politicians who can not agree on the substance of the policy. In a transition article of NRC, this is described. They write that Thierry Baudet, for example, the leader of Forum for Democracy is skeptic about climate change and global warming. Therefore, he started a climate skeptic movement in Dutch politics. Because of this, the substance of the climate policy became more and more subject of discussion. De Telegraaf is also against the plans, mainly due to the high costs, and campaigns against the draft agreement. This leads to the polarization of the climate debate. They write the following.

The cultural struggle shifts to the climate debate, in which the pompous Tesla rider takes on the steak-loving normal man.

(Bos & Rusman, 2019).

The skepticism about global warming, climate change and, mainly, the division of costs, can be seen back in the articles of the newspapers about climate policy and the energy transition. So the political angle is also a dimension in the substance of the climate policy.

Student protests

Three articles about the student protests were selected per newspaper for this analysis. In order to understand the substance of the student protests, a look will be given into the beginning of the student protests in Sweden. The Volkskrant dedicated a whole article to the founder of the student protests. They describe how the sixteen-year-old Greta Thunberg started to protest every Friday in front of the Riksdag. The Riksdag is the Swedish parliament which is in Stockholm. Thunberg stated that she will keep protesting until Sweden will implement the climate agreements of Paris. Thunberg discovered during class how much climate change is happening and she cannot understand that politicians do not take drastic measures to limit climate change. Therefore she started to skip classes, to show that it is reasonless to go to school when the future cannot be guaranteed due to climate changes, to the Swedish parliamentarians. In a few months, her protests were picked up by media all over the world and this caused a movement under students who followed Thunberg's example (Van den Outenaar, 2019). All over the world, but mostly in European countries, students started protesting for better climate policies of their government. The AD described the position of the Dutch students in an article about the protests. They wrote that the students protest because they are disappointed in the politics and in the climate policy of the Dutch government. The Dutch students want to influence the climate policy that is currently drawn up by the Dutch government. They want the government to take drastic measures in order to stop climate change and to meet the agreements of Paris. The students want the policy to be stricter and better. The students argue that this policy will define their future and that it, therefore, is important to strike for a better policy (Rosman, 2019). The Dutch students have united in an organization, Youth for Climate. Via this organization, protests are organized, the policy is made and interviews are regulated. The prime minister of the Netherlands invited after the first protests, the leaders of this youth organization to talk about their demands and to motivate them to go back to school. However, this visit only encouraged the students to keep protesting as appears in a student protest article of the Telegraaf. They described in this article how Youth for Climate organized a new protest after the meeting with Prime-minister Mark Rutte and minister Wiebers, the climate minister of the Netherlands. The students were dissatisfied with the meeting and the made promises and decided to organize a new march on the 7th of February in The Hague (Hiel, 2019).

This fact makes the substance of the student protests interesting, the demands of the students are high and clear, but it is not likely that politics will adopt their views. An important part of their demands is namely a reduction in the CO² emissions and this is entangled with multiple interests, as can be seen in the article about the student protests of the AD. In this article, the researcher Aalberts is quoted, who, summarized, tells that CO² interests are huge in the fossil industry, the air force, and the meat consumption industry. It would cost these parties billions when stricter regulations are made. Aalberts thinks that when the political parties who try already to change the rules not succeed, these student protest will not change anything (Van Dongen, 2019). So, according to the AD, the interests of different parties are too high and this makes it impossible to change the regulations.

Concluding, the students of Youth for Climate intend to skip school until there is better climate policy. However, due to the huge interests that are entangled with stricter CO² emissions, it is an extremely sensitive subject for the Dutch government.

Policy-relevant actors identity

Many policy-relevant actors could be found in newspaper articles. In this subchapter, a closer look will be given in these actors and their identity. Firstly, the policy-relevant actors in the articles of the Energy transition will be discussed and secondly the policy-relevant actors in the articles about the student protests.

Energy transition

In the articles about the Energy transition, multiple policy-relevant actors could be identified. The actors can be subdivided into three general groups. Namely, politics, business and industry, and independent persons/research groups. These four groups will one by one be discussed in the following part.

Politics

Firstly, the government of the Netherlands and of the European Union are policy-relevant actors. In a transition article of NRC, the problems that the energy transition causes in the harbor of Rotterdam is described. Rotterdam wanted a large company to come to its Harbor, but the harbor was not able to persuade the company. The harbor wants to implement the energy transition but is dependent on subsidies of the government and of the European Union. Also, it is bound to companies which decide to come to the harbor of Rotterdam or to another Harbor as Antwerp. All these factors cause a lot of frustration by Rotterdam (De

Kruij, 2019). So a policy-relevant actor is the Dutch government. As well the local, as national, as the European governments can give subsidies and make policy about the climate policy and the energy transition. Another political policy-relevant actor is politicians. They have a huge influence on the climate policy of the Dutch government. A good example of this was the Forum for Democracy leader who started a climate skepticism movement in Dutch politics (Bos & Rusman, 2019). Because Baudet is skeptic about climate change and the costs of climate-related measures, he wins a lot of votes. This influences other political parties too, who do not want to lose their voters to Forum for Democracy and become more skeptic about the costs of climate measures. Therefore it becomes difficult to make an agreement. So this article is an example of how politicians can influence public opinion and so influence the climate debate. Therefore, politicians are policy-relevant actors. However, although the parties influence each other, every politician and party has another identity, due to their different opinions. Thierry Baudet, the politician in the article which was described above, is for example known for his climate skeptics, while a party as Groenlinks has a whole different point of view and identity.

Business and industry

Business and industry is an important policy-relevant actor in the energy transition. Almost all businesses will be influenced or affected by the climate policy of the Dutch government and because of that, the interests of the business and industry are enormous. While some businesses try to influence the policies in their own benefit, other companies are already working on the energy transition, as can be seen in the energy transition article of the AD. This article is about problems between the grid operator and electricity companies. The company Rooftop Energy wants to build a new solar power plant in Emmen and has all official details arranged. The only thing they are waiting for is a connection with the network. However, this is according to the grid operator at the moment impossible, due to oversupply. The network should first be made ready for this extra capacity before they can connect the new solar power plants. The companies are irritated over this course of events because they say that everyone could have seen, the extra capacity that will be produced, coming (Van Dongen, 2019). So the company Rooftop Energy, in the article of the Algemeen Dagblad, already is working on the energy transition. However, the company is limited in their work by the grid operator, which causes unnecessary delays in carrying out the energy

transition. The companies blame the government for the lack of communication about the energy transition.

Another example of a policy-relevant business actors are the fishermen in the article of the Telegraaf. These are fishermen who fish in the North Sea. In their fishing area more and more windmills are built. This decreases their fishing area. Especially when there is a hard Brexit, their fishing area will decrease even more. Therefore, they are concerned about their future and how everything will work out. The chairman of Visned, Pim Visser, made a report to remark the points of the fishermen and represent them in the political debate (Van Harskamp & De JongAmsterdam, 2019).

The fishermen in the quote above, are limited in their work by windmills, which are part of the energy transition, that are built in the sea. Because of these windmills and their corresponding forbidden areas, their fishing areas become smaller and smaller. Therefore, they are afraid that the energy transition will result in the building of more windmills which will limit their fishing area even more.

Independent persons/research groups

Ed Nijpels is the chairman of the so-called sector tables, which drafted the concept of climate agreement. Nijpels, according to the Volkskrant, is an independent person who functions as chairman of the sector tables. As chairman, he tries to draft up agreements and bring different parties closer together. This resulted in more than six hundred measures in the concept of the climate agreement.

More information about the identity of Ed Nijpels can be subtracted, on the basis of his CV. Nijpels is not only the chairman of the sector tables in the Netherlands, which were founded following the Paris climate agreement in 2015, he has also an impressive CV filled with chairmanships and climate-related subjects. He worked for example as chairman for the Ronald McDonald children's fund (Van Lieshout, 2017). Nijpels has the difficult job to unite the Dutch parties, the citizens and the industry. The Volkskrant articulates that in the following cite.

It shows that as chairman of the climate agreement, Nijpels must constantly compromise between parties, not to say: It is not good or it has no virtue. A green VVD member is distrusted by left and right.

(Van Lieshout, 2017)

So, Nijpels has to move very carefully between the opinions of all the different parties in order to let his climate agreement succeed. After the concept of the climate agreement was draft up, the CPB (The Centraal Plan Bureau of the Netherlands) calculated all the agreements that were made, in order to be able to present a realistic financial picture of the intended measures. This makes the CPB another important independent research actor in the energy transition process. After the process of calculating and the presentation of the numbers, there was a lot of hassle about the outcomes. Different parties and media called the outcomes wrong or incorrect. The Volkskrant dedicated an article to this subject. In the following citation, they describe the importance of an independent plan bureau.

This article is a textbook example of propaganda disguised as journalism. It also – unintentionally – illustrates the importance of independent research institutes such as the three planning offices. They conduct policy research whose outcomes – thanks to their legally-established independence – cannot or much less be directed by the client (usually a ministry, with a politician as the person ultimately responsible).

(Hoffs, 2019)

So according to the Volkskrant, an independent research organization is highly important to calculate the true costs of policies. Therefore this is an important actor in the energy transition process.

Student protests

The articles about the student protests contain less policy-relevant actors than the energy transition articles. There are two general stakeholders, namely the students and politicians. Another somewhat smaller stakeholder is The Dutch department of Greenpeace. And at last, a missing stakeholder is the business and industry sector. These stakeholders will be described in the following part.

Students

In the last few months, thousands of students started protesting all around the world. In this subchapter first a closer look will be given in the main characters of the protest, namely the

Swedish founder Greta Thunberg and the Dutch student leader Stein Warmenhoven, and second, an overview of protesting students will be given.

Firstly, Greta Thunberg is, as described before in the chapter substance of the policy, the founder of the idea of skipping school for the climate. In an article of the Volkskrant here identity is described. In the summer of 2018, Sweden had the hottest summer ever which made climate change visible. Thunberg saw that politicians did not take adequate measures and therefore she decided that she would wake them up. She started her school strike to move the government to implement the agreements of Paris. She sat every day for the governmental building until the Swedish elections. Then she moved to the Parliament, to sit there every Friday (Kester, 2019). From this article, it appears that Thunberg is serious about the climate and that something has to change. She is persistent with her school strike and so she is an example for other climate activists. Cause Thunberg, became with her message, founder of the student protests all around the world. The Volkskrant described in an article her fast popularity among students. They call her a sort of poster girl for the climate. Newspapers and media all around the world want to interview Thunberg and write articles about her and her message (Van den Outenaar, 2019).

Thunberg inspired in this way many peers in other countries around the world among whom the Dutch Stijn Warmenhoven, who on his turn, founded Youth for Climate in the Netherlands. The Volkskrant wrote an article about the international meeting of the climate students and in this article more information about the identity of Warmenhoven and Youth for Climate can be found. Warmenhoven organized with some peers the student protests in the Netherlands (Bouma, 2019). So the Dutch students, who want to follow the example of Thunberg and move the Dutch politicians to write better climate-protecting policies, are united in Youth for Climate. Furthermore, the article of the Volkskrant describes Warmenhoven as a pragmatic climate activist. Warmenhoven does not want to strict measures or policies. He is for example for eating less meat instead of eating no meat at all. He would also not have mind when other climate students had taken the plane for the international meeting due to the long travel time when traveling by the train. Some of the students had to skip the meeting because of the travel time. He thinks that it is sometimes necessary to use the plane because it is other ways impossible to set up a global climate movement. Also, Warmenhoven does not value the meeting with the European Parliament

because he knows that the politicians who invited them already agree with them (Bouma, 2019).

So it appears that Warmenhoven is more pragmatic and less strict than his example Greta Thunberg. He does not want too strict rules but tries to make people and the government more responsible for their own actions. This is an important characteristic of Warmenhoven because it clarifies the demands that he has for the Dutch Youth for Climate organizations and their student protests.

Another remarkable part of the identity of the students is the fact that they are highly professional. The Volkskrant described in one of their articles on how and why the students became so professional. They describe in the article how the mother of the Dutch student Lilly Platt a ten-year-old girl, collects all the nasty comments that are placed on social media about her daughter. She makes screenshots and collects so proof to show at the police. The girl is among other things compared with Goebbels, who was in World War II the propaganda minister of Adolf Hitler. Other students are also pointed out by the media on their own climate-related shortcomings and are often ridiculed on social media (Bouma, 2019).

Politicians

An interesting group of relevant policy actors is politicians. This actor is surprised by the size of the student protests and the fact that these students are so determined to change the policies. Some politicians and political parties try to make use of the student protests to promote their own party opinions and win votes. In an article of the Telegraaf, Stijn Warmenhoven tells that Youth for Climate does not want free riding politicians. The organization refuses consciously to associate with a political party. He tells that all left parties outside of the cabinet talked to Youth for Climate but that they still do not want to be associated with one specific party (Timmer, 2019). Politicians who try to use the success of the student protests are also seen in Belgium. Joke Schauvliege, the minister of Environment, Nature, and Agriculture said that she felt supported in her policy by the student protests. However, Belgium, students answered that they do not support the current policy. They find that this policy has a lack of ambition (Van Assen, 2019). So, some politicians try to convince the students to promote their policy or viewing points but the

students refuse to let politicians make use of their protests, mainly because they find the policies not ambitious enough.

An important politician as a policy-relevant actor is the Prime Minister of the Netherlands Mark Rutte. The prime minister decided to talk with the leaders of Youth for Climate about their demands and the climate policy of the government. However, he was not able to convince the students to stop their protests (Hiel, 2019).

Another politician that is a relevant actor identity in the student protest article is the minister of Education, Arie Slob, who invited some students to listen to their concerns and demands (Sluis, 2019) but who also remarks that the students should protest when school time is over (Vriesema, 2019).

Environmental NGO

The students are supported by the environmental NGO Greenpeace. Faiza Oulahsen of the Dutch department of Greenpeace says that they are inspired by the student protests in Europe. They help the Dutch students with information about the draft climate agreement (Timmer, 2019). However, the students in the Netherlands are not part of Greenpeace, they are only supported by this NGO.

Business and industry

A large missing stakeholder in the articles is the business and industry sector. It is to be expected that they would be part of articles about the student protests, due to the fact that one of the main demands of the students is a CO² reduction and this sector has high interests in this area, but they are not once mentioned. So the business and industry sector is a stakeholder, but they are not represented in the articles about the student protests. This can be explained by the fact that the student protest articles mainly descriptive are written. The articles document the events that are happening but hardly deepen the question of how the demands of the students should be carried out. This indicates that the newspapers do probably not expect the protests to be so successful that stricter policies will be made and the business and industry become affected in this way.

Policy process

The policy process is sometimes discussed in the newspapers, although journalists often withheld their personal opinion and describe mostly the opinions of their sources. However,

some newspapers make suggestions about the policy process. An example of the policy process in an energy transition article is the article about the central planning bureau (CPB) of the Volkskrant, which was described earlier. They wrote the following.

This article is a textbook example of propaganda disguised as journalism. It also – unintentionally – illustrates the importance of independent research institutes such as the three planning offices. They conduct policy research whose outcomes – thanks to their legally-established independence – cannot or much less be directed by the client (usually a ministry, with a politician as the person ultimately responsible).

(Hoffs, 2019)

The Volkskrant takes here a clear position relative to the independence and reliability of the CPB. They state in the article that the CPB is reliable and that parties who deny this often are blinded by their own interests. The Volkskrant even goes as far as calling this ‘propaganda disguised as journalism’ and writes about the policy process that the calculations of the CPB are often right and therefore should be leading the opinions and statements of the politicians, instead of being questioned.

Another example of the policy process can be found in an article about the student protests of the Telegraaf. They have a more subtle way of describing the policy process. They write in the article about the hypocrisy of some of the protesting students. They ask the students to question their own lifestyle and their own ecological footprint. In this way they found out that some of the students take the plane on holidays, take long showers or use their money preferable for necessary things as studying instead of for electric cars (Sluis, 2019). So with these questions and presenting the answers in this way, the Telegraaf seems to suggest that the students should first make their own lives more sustainable and should live in a responsible way before they start protesting. They should, according to the Telegraaf, start with improving their own lives to reduce climate change.

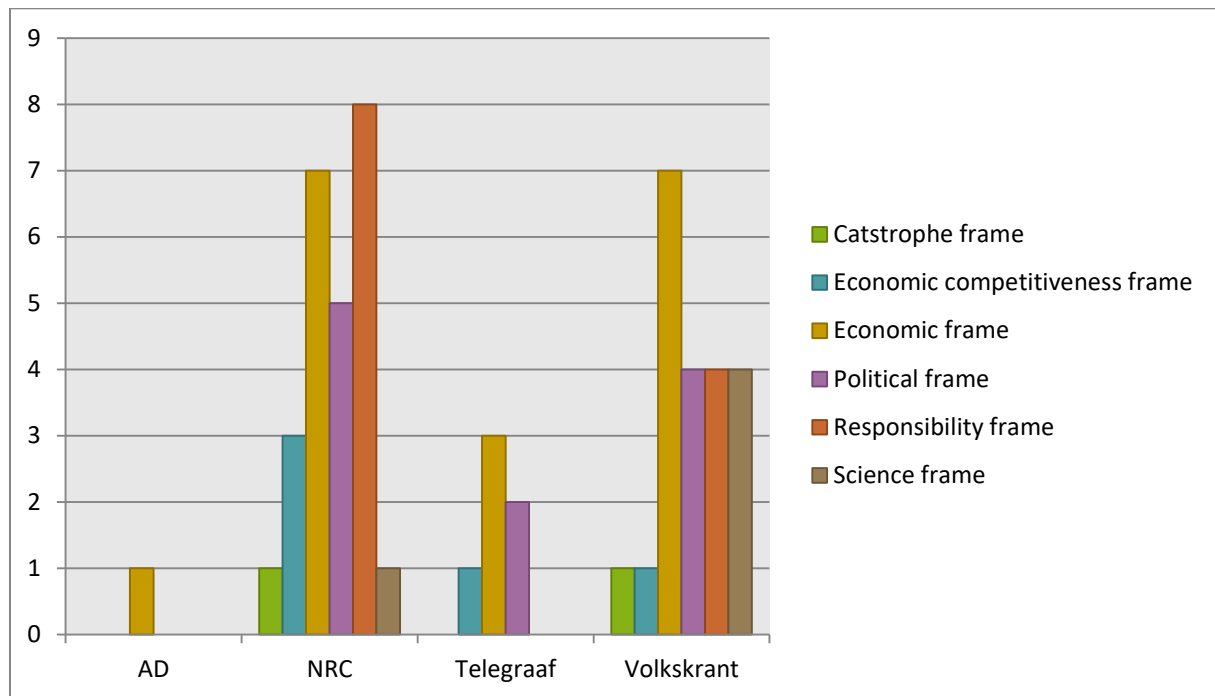
Frames per newspaper

In the selected articles of all four newspapers, a framing analysis was done. In this subchapter, firstly the frames that could be identified in the energy transition will be presented and secondly the frames that could be identified in the student protest articles.

Energy transition

In graph 4, the specification of all the frames that could be identified in the articles about the energy transition can be found. The x-axis is sorted per newspaper. The y-axis indicates how often a specific frame was present in the articles of a specific newspaper. The political frame, for example, could be found five times in the NRC articles, two times in the Telegraaf articles and four times in the Volkskrant.

Graph 4 Frames in Energy Transition articles



The frames, as described in the theoretical framework, could all be found in the selected articles about the energy transition. However, while in some newspaper all the frames could be identified, in other newspapers only a few were found. In the AD, for example, was only the Economic frame found in the transition article. Although it has to be remarked, that there was only one article of the AD selected instead of three. In the NRC, on the other hand, all frames were present in their articles. This also applied for the Volkskrant. All the frames were also present in their articles. In the Telegraaf, however, only the Economic (competitiveness) frame and the political frame could be identified.

The Volkskrant and NRC had more frames than the AD and the Telegraaf. The frames that were present in the AD and the Telegraaf, remarked also mostly the (negative) economic consequences of the climate policy. However, in the energy transition articles could

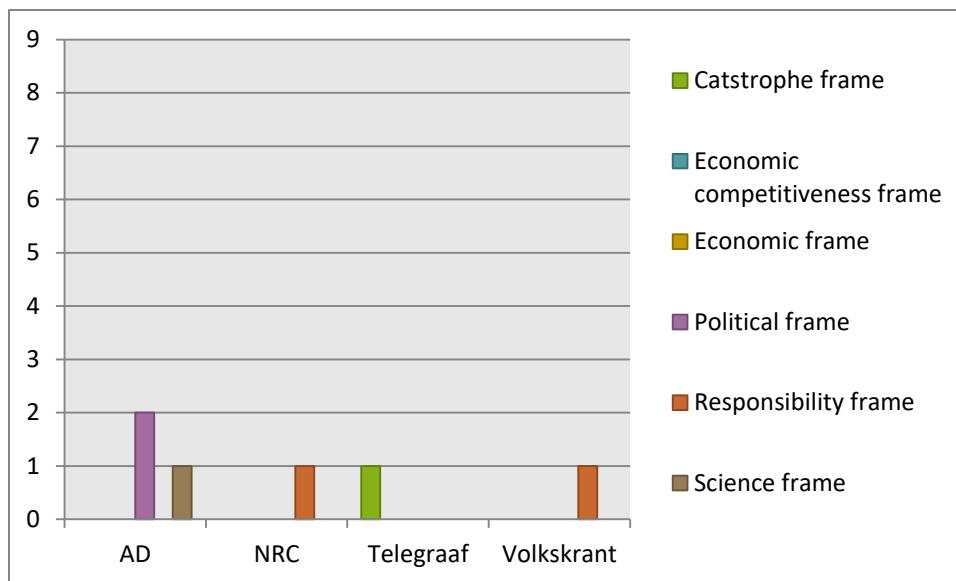
frequently the economic frame be found, and the question ‘who will pay for the climate policy of the Dutch government?’ is the most prominent question that is discussed. As can be seen in the graph above, the economic and economic competitiveness frames are even the most used frames in the energy transition articles. In the articles of NRC and the Volkskrant, these frames could mostly be identified. An example of the economic frame can be found in the article of NRC about subsidies for electric cars. This article described this subsidy policy but also pointed out the fact that the subsidies mainly went to citizens of the higher income groups who buy expensive cars and remarked the costs of this policy for the citizens of the Netherlands (Kalse, 2019). This frame was also found in articles of the Telegraaf. In one of their energy transition articles, The Telegraaf writes that the citizens have to pay for the climate policy but that they cannot decide about the content of this policy. They write that the Dutch citizen does not feel represented in the climate agreement (Timmer & Vink, 2019).

So, in articles about the energy transition, in all four newspapers, often the economic or economic competitiveness frame can be identified.

Student protest

For the student protests, three articles per newspaper were selected. These articles displayed another range of identified frames as can be seen in graph 5. It appears that in the student protest articles only a few frames could be identified. The graph shows which frames and the number of these frames that could be identified per newspaper.

Graph 5 frames in student protest articles



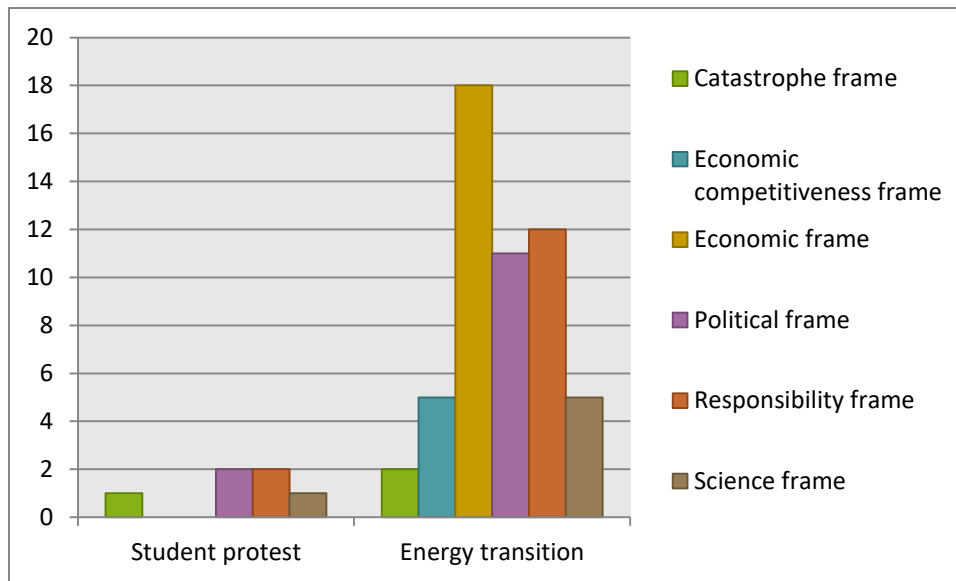
The graph shows that the AD used the political frame and the science frame. The NRC used the responsibility frame. The Telegraaf used the Catastrophe frame and the Volkskrant used the responsibility frame.

NRC and the Volkskrant used both the responsibility frame, but furthermore, there is no overlap between the frames and the newspapers. An outstanding point is that in none of the newspapers all the frames could be identified in the selected three articles. This was the case with the energy transition articles, but it is not applicable for the student protest articles. A last remarkable point is that in none of the articles the economic or economic competitiveness frame appeared. The graph shows how many times a frame could be identified per newspaper. The responsibility frame is, for example, one time identified in an article of NRC and one time in an article of the Volkskrant.

Overview of frames

In the following graph, the frames that were identified in the energy transition articles can be compared with the frames that were identified in the student protest articles. It appears that in the transition articles more frequently frames and more diverse frames could be identified than in the student protest articles. It is remarkable that the economic and the economic competitiveness frames were frequently present in the energy transition articles but could not be found in the student protest articles.

Graph 6 frames per topic



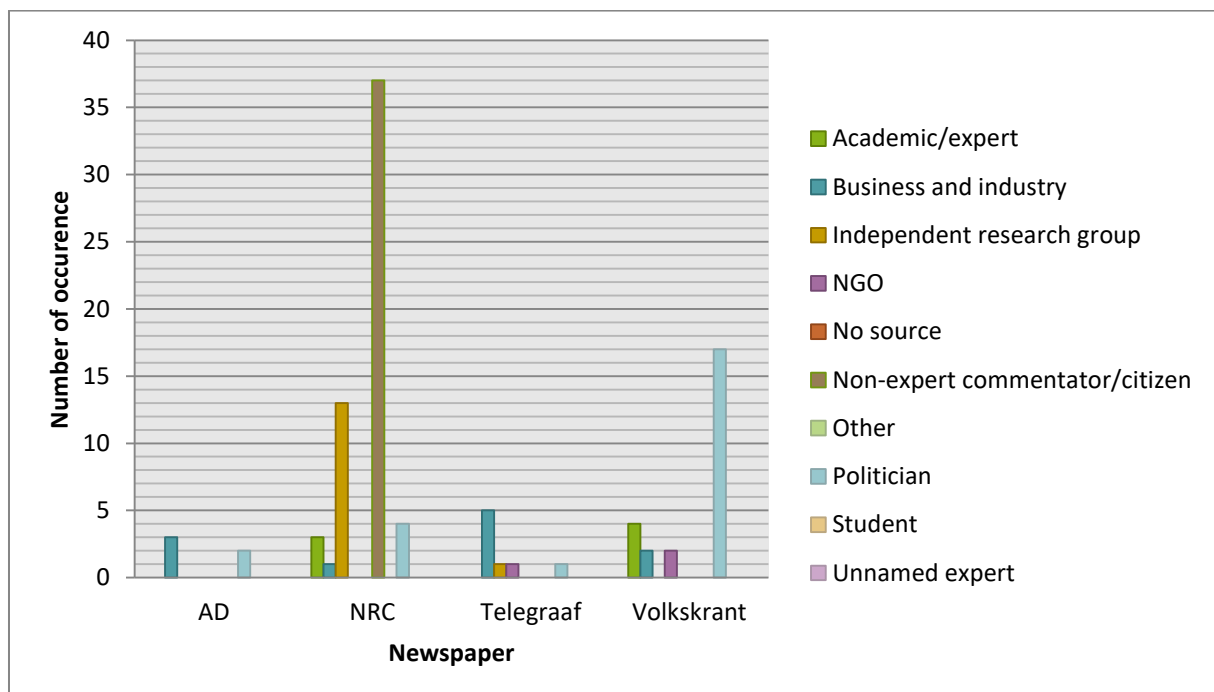
The role of sources

All the sources in the articles were documented. First, the sources of the energy transition will be discussed and second the sources of the student protests.

Energy transition

In graph 7, all the sources that were identified in the energy transition can be found. The sources are structured per category and per paper.

Graph 7 Energy transition sources per newspaper



In the one article of AD about the energy transition, the sources that were used were business and industry, and politician sources. This combination of sources indicates often an economic frame. The economic frame could then be found in this particular article about the overcapacity on the electricity network. The AD wrote about the difficulty of solving this problem because it would cost hundreds of millions and could take three to ten years (Van Dongen, 2019). So the energy transition is mainly seen through an economic frame which points out the costs and impossibility of extending the capacity of the Dutch electricity network. The problem in the article is described on the basis of political and business and industry sources. This combination of sources appears often when an economic frame is used. The business and industry sources tell something about the probable (negative) economic consequences and a (local) politician gives a response to the problem.

NRC used several sources in their articles. Namely Academic/expert, business and industry, independent research group, non-expert commentator and politician sources. A large number of sources corresponds with the several frames that were found in their transition articles.

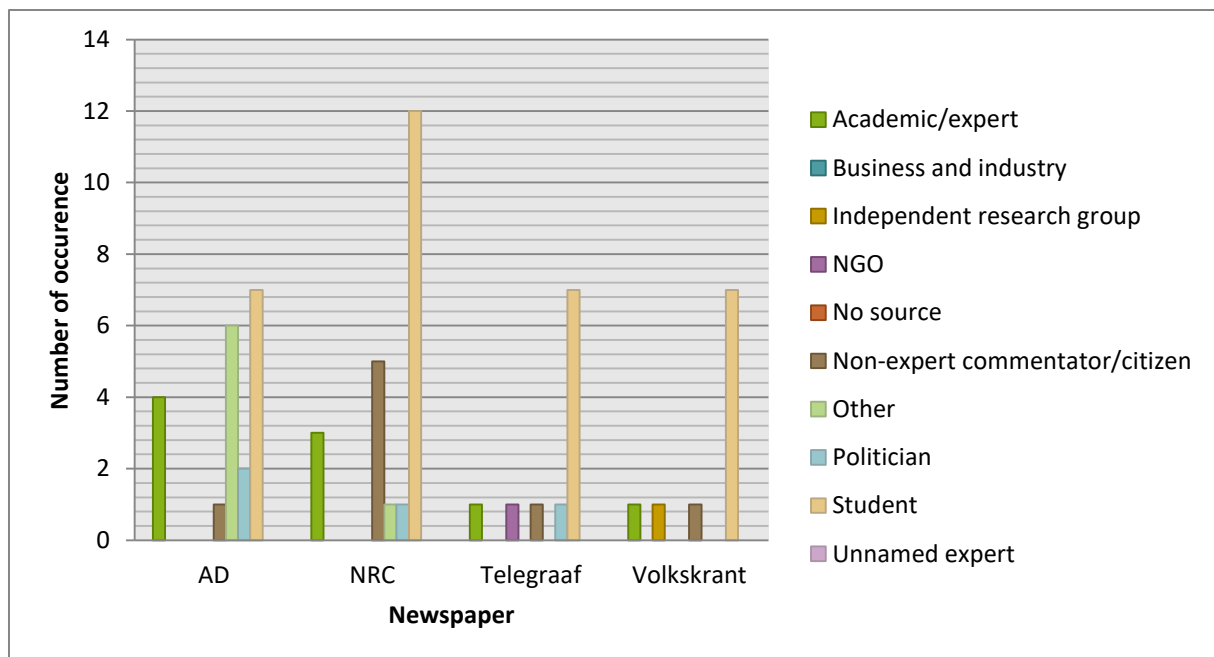
The Telegraaf used mostly business and industry sources, but also an independent research group, an NGO and a politician as the source.

The Volkskrant used no less than seventeen politicians as the source. Furthermore, they used academic/expert sources, NGO's and business and industry sources.

Student protests

In graph 8, underneath, an overview of all different sources for the student protest articles per newspaper can be found.

Graph 8 Student protest sources per newspaper



In the student protest articles that were selected of the AD five different sources could be identified. These were the academic/expert, the non-expert commentator/citizen, other, politician, and student as the source.

In the NRC, academic/expert were several times used as a source, but the most used source were students. NRC used also politicians, other and non-expert commentators/citizens as the source.

The Telegraaf used mostly the same sources as the other newspapers. Academic/experts, non-expert commentators/citizens, politicians, and students could be found as a source in their articles. However, the Telegraaf is also the only newspaper that used an NGO as a source in one of their articles.

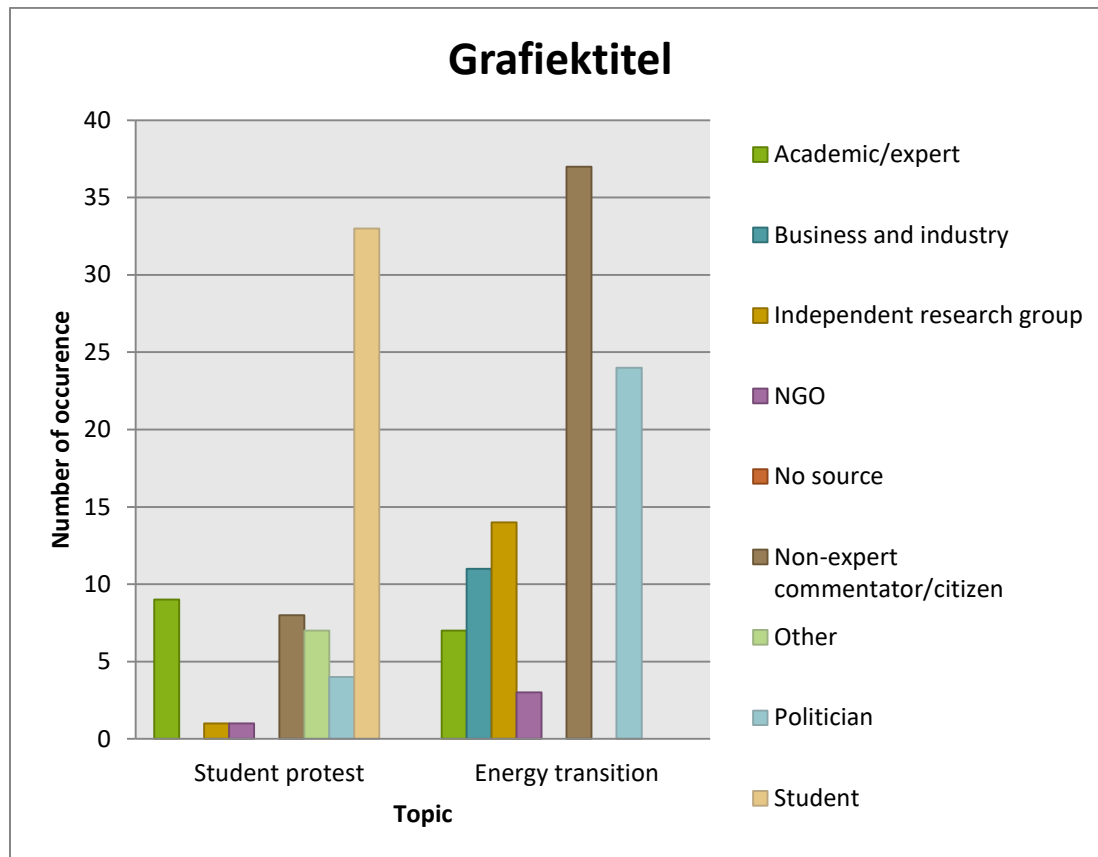
At last, Volkskrant used academic/expert, independent research group, non-expert commentators/citizens and students as a source. What strikes out is the fact that in these articles no business and industry sources were used. Also, it stands out that all articles are based on sources and all the sources are named.

Overview of sources

In graph 9, underneath, an overview of the sources per topic is given. The articles about the student protests contained a total of 63 sources and the articles about the energy transition

contained a total of 96 sources. The figure shows to which group of sources these sources belong.

Graph 9 source per subject



The type of source that is used, is remarkable, when looking into the sources for the different kind of articles. The transition articles mostly make use of politicians, Independent Research Groups and citizens as the source. Also, Business and industry sources are allowed to speak. However, when you look at the student protest articles it is striking to see that most of the sources are a student and younger than 21 years old. This is of course logically explained by the fact that the students protest mainly consist of youth, but it also remarks that the youth does indeed have an opinion on the climate policy of the Dutch government. However, this is only visible in the articles about the student protests. In none of the analyzed papers were students used as a source in the articles about the energy transition and the climate policy of the Dutch government. Although, in these articles, the opinion of non-expert commentators/citizens is pictured, the opinion of younger people is often not described. This picture can be nuanced a little by the fact that in three of the four papers that were included in this study, non-experts/citizens were not used as a source. Only NRC

used 37 times non-experts/citizens as a source but none of these sources was younger than 21 years.

Frames between and within newspapers

The frames that were identified in the articles differ per newspaper and per subject. An overview of the striking points will be given in this subchapter. In table 10, underneath, an overview table can be found showing all the frames that were found in the newspapers per topic.

Table 10 frames per newspaper per subject

	AD		NRC		Telegraaf		Volkskrant		Totals
	SP	ET	SP	ET	SP	ET	SP	ET	
Catastrophe frame				1	1			1	3
Economic frame		1		7		3		7	18
Economic competitiveness frame				3		1		1	5
Political frame	2			5		2		4	13
Responsibility frame			1	8			1	4	14
Science frame	1			1				4	6
Totals	3	1	1	25	1	6	1	21	59

*SP = student protest and ET = energy transition

When comparing the two types of articles it appears that in transition articles more frequently frames are used than in climate protest articles. In particular, the amount of use of the economic (competitiveness) frame is striking. In articles about the energy transition, this frame is used more than twenty times, while this frame does not appear in climate protest articles. A division between the broadsheet and the tabloid newspapers can be seen when looking at the frames. NRC and the Volkskrant use both all the types of frames in their energy transition articles while the Telegraaf and the AD stay behind in the amount of different used frames. Furthermore, it is interesting to see that in student protest articles the newspapers make less use of frames. Both the Volkskrant and NRC use only the responsibility frame for this topic. Also, the Telegraaf and AD use both other frames than that they used in their energy transition articles.

Writing style

The articles that were selected for this research often gave away a subtle or hidden value judgment of the described events or measures. These value judgments can be found in the way that events are described, the way that facts are presented or in the word choice of the journalist. In this way, the value judgment of the journalist or newspaper shines through. Therefore, the articles in this research are divided into three categories according to their writing style, namely approving, skeptic and neutral.

In graph 11 the outcomes of these groups can be found. The graph shows the division between the two subjects into the three groups. What strikes out is the fact that nine of the ten articles about the energy transition had a mostly skeptical writing style. The articles about the student protests meanwhile are more equally divided between the three groups.

Graph 11 writing style per subject

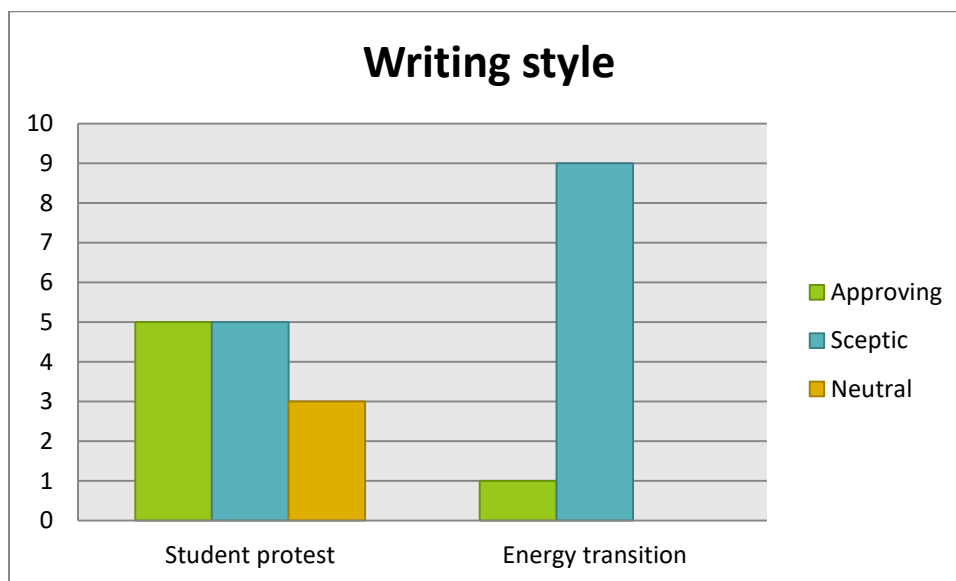


Table 12, which can be found underneath, deepens the information of figure 11. In this table, for every newspaper, the subject and the writing style is shown. The Volkskrant, for example, has three articles about the student protests written in an approving style and for the energy transition articles, it has one article written in an approving style and two articles written in a skeptic style.

Table 12 writing styles per newspaper per subject

	AD		NRC		Telegraaf		Volkskrant		Totals
	SP	ET	SP	ET	SP	ET	SP	ET	
Approving	2						3	1	6
Neutral	1		2						3
Skeptic	1	1	1	3	3	3		2	14
Total	4	1	3	3	3	3	3	3	23

*SP = student protest and ET = energy transition

The statistics of the Telegraaf are interesting to see because it appears that they only used a skeptic style of writing for both the student protest articles and for the energy transition articles.

Discussion

The Discussion consists of X parts, that each will look into and discuss a different topic. The first topic for the Discussion is the expectations which were made before the research and the question to which extent these became true. After discussing these expectations, the framing of the policy process will be discussed. Based on the data analysis and the first part of the discussion, the sub-questions, which were described at the introduction of this paper, will be discussed and answered. Thereafter, the methodological challenges of this research will be discussed, limitations of this study will be described and possibilities for further research are suggested.

Expectations

Some expectations for this research were drawn up at the beginning of this thesis. In this subchapter of the discussion, the expectations and the question of the expectation were right, will be discussed.

The first expectation that was made, was that a clear division would become visible between the broadsheet and the tabloid papers. The division was mainly expected to be seen in the use of frames and in the use of sources. For the articles about the energy transition, this was hard to see due to the fact that there was only one article of the AD included in the selection of the articles so that meant that there were fewer articles of tabloid newspapers than of broadsheet newspapers. However, it still appeared that the broadsheet papers had all the frames present in their selected articles while this was not the case for the tabloid papers. In the articles about the student protests, fewer frames could be identified. However, the tabloid papers used here more often a skeptic approach in their articles about the student protests than the broadsheet papers. When looking at the sources it appeared that the broadsheet papers used more politician sources in energy transition articles than tabloid papers, but more clear differences between sources in broadsheet or tabloid papers were not present. Concluding, there became indeed a division visible between the tabloid and the broadsheet papers in the frames that could be identified and the use of sources in this research.

Second, it was expected that the tabloid papers would use more often the economic competitiveness frame than the broadsheet papers in their energy transition articles. This expectation appeared to be unjust. However the economic frame and the economic

competitiveness frame were one of the most used frames of tabloid papers, the frame was more frequently present in broadsheet papers. This may have to do with the fact that the articles of broadsheet papers were in general longer and therefore there could be more frames identified. Besides, the economic frame and the economic competitiveness frame were only visible in the energy transition articles and from this topic, there was only one article of the AD selected in this research.

Third, it was expected that the broadsheet papers would make more often use of the science frame than the tabloid papers. This expectation became true. Not only used the broadsheet papers the science frame more often, but this frame was also not present in all analyzed articles of the tabloid papers.

Fourth and last, it was expected that there would be a difference within each newspaper for the two topics regarding frames and sources. This expectation was met. For the different topics could different combinations of frames be identified for all the newspapers. This could mostly be seen in the fact that in the energy transition articles more frames could be identified. Also, in the student protest articles, the economic frame was not used. The used sources differed for each paper and each subject too. This was mainly visible in the use of students as a source.

Framing the policy process

During the analyses, the entities substance of the policy, policy-relevant actors identity and policy process were used to analyze the data. This data gave a picture of the top-down initiative of the Dutch government and the bottom-up social initiative of Dutch students. The picture that could be created by collecting this data could be used as a basis for further analysis.

From the analysis of the energy transition articles, the substance of the policy could be deduced. The division of the costs of the new climate policy and the energy transition is a recurring theme in all the newspapers. It was remarkable that almost all articles used a skeptic writing style. This indicates that all the newspapers are negative about the execution of the governmental top-down initiative. The newspapers seem to see the energy transition and the climate policy of the government as a wicked problem. They write about incomplete and contradictory knowledge regarding the need for, and the costs of, the policy. The

newspapers describe several parties that are involved with all other opinions and interests, which are often incompatible. Furthermore, the division of the costs and the economic burden that the policies will cause are extensively discussed and the relationships with other problems, as worldwide climate change, losing a competitive position, etcetera, are often remarked. So by describing the top-down initiative of the government in this way, and by presenting it as a wicked problem, the newspapers seem to suggest that there is no perfect policy and solution of this problem possible.

While describing the substance of the student protests, it appeared that the newspapers wrote mainly in a contemplative way about the events instead of about the content of the student's demands. Furthermore, the newspapers described in general the demands of the students and the impossibility of these demands keeping the huge interest and costs of the business and industry sector in mind. This indicates that the newspapers are critical about the chance that the demands of the students are granted by the government.

In the relevant actor analysis, it was discovered that while industry and business sources played a large role as a source in the articles about the energy transition, these sources were completely absent in the articles about the student protests. The fact that none of the four newspapers asked industry or business sources for their opinion about the student protests indicates that the newspapers are not expecting the student protests to actually influence the policies of the government, which at their turn would influence the business and industry sector. Meanwhile, in the articles about the energy transition, business and industry sources are frequently used, which indicates that the newspapers believe that their opinion about the climate policy and the energy transition of the government will influence the final policies.

Furthermore, the number of policy-relevant actors in the energy transition articles was larger than the number of policy-relevant actors in the student protest articles.

The policy process was a few times described in some of the articles. This element was mainly visible in some of the articles about the student protests. Some of the newspapers were critical about the own sustainable choices, regarding the climate, of the students and they seemed in this way to suggest that the students should improve their own lives first

before they would take part in the protests and demand changes of the Dutch government. In this way, some of the newspapers were skeptic about the social bottom-up initiative.

Subquestions

At the beginning of this research, four subquestions were formulated. These subquestions can be answered on the basis of the collected data which was presented in the analysis chapter. In this subchapter, the subquestions will be repeated and the results that were presented will be discussed in order to be able to answer the sub-questions.

The first sub-question of this research was *Which frames are used in the selected newspapers describing the energy transition or the student protests?* It appeared that in the articles about the energy transition of the Volkskrant and NRC, the broadsheet newspapers, all described frames could be identified. In the articles about the energy transition of the Telegraaf and the AD, the tabloid newspapers, mainly the economic (competitiveness) frame and the political frame could be identified. The reason for finding mainly economic driven frames in the Telegraaf and the AD could probably be clarified by these newspapers readers populations. Tabloid newspapers are known for having a lower educated with a lower income class readers public. Furthermore, these two newspapers always used a skeptic writing style in the energy transition articles. This indicates that these two newspapers are skeptic about the energy transition and that they are therefore also skeptic about the costs. With this frame, the newspapers are responding to their readers, who are often skeptic about climate change and have tighter finances, but the readers are also responding to the papers, by strengthening their own beliefs and building their own filtered bubble. So they reinforce each other. It is quite possible that these group of the population will pay relatively more of their income to the new policy while they are not able to benefit optimally of the new policy and the related subsidies for individual sustainable investments. Therefore, it is not surprising that the main frame that could be found in the tabloid newspapers was the economic (competitiveness) frame.

The frames that could be identified in the articles about the student protests in all newspapers were the political frame, the responsibility frame, and the science frame. The small number of frames that could be identified is especially interesting. This could be clarified by the content wise writing style that was often used by the newspapers when

describing the student protests. Mainly events were described and mostly the opinions and demands of the students. Therefore, few frames were present in these articles.

Furthermore, this content wise writing style might indicate that the newspapers do not expect that the student protest will influence the policies. The social bottom-up initiative is in the articles mainly approached as a newsworthy event which has to be described instead of as a conversation between the youth and the government which has a change of succeeding.

The second sub-question of this research was *In what way differ the frames about the top down and the bottom up initiative?* When comparing the governmental top-down initiative of the energy transition with the social bottom-up initiative of the student protests, it appeared that the difference in the number of frames and the type of frames that could be identified, between the two subjects, was large. This is probably related to the fact that the articles about the student protests were more contemplative than the articles about the energy transition. So during this study, it appeared that newspapers write in a different way about a governmental top-down and a social bottom-up initiative. While the newspapers dive into the top-down policies, articles about the bottom-up approach are more contemplative and less detailed. Events are described and policies are only discussed in general. Also, politicians are less used as source and when they are used, in general, they do not give content related comments. This fact too indicates that the newspapers are not expecting the student protests to influence the politics or the drafted policies. Concluding, when fewer frames are present, a newspaper is likely to write less content wise and more contemplative. But the fact that fewer frames were present in the bottom up initiative remarks the difference between the social bottom up and the political top-down initiatives in presenting and writing style. So in the articles about the governmental top-down initiative about the energy transition, the newspapers wrote more skeptic and from several different points of views, while this was limited in the articles about the student protests.

The third sub-question, which was asked during this study was *Which sources are used and what is their role in the different identified frames.* During the coding process, it appeared that the coding of sources helped to identify the frames because specific sources are often related to a specific frame. In the analysis, it appeared that in the articles about the energy

transition mainly politicians and business and industries were used as a source. In the student protest articles were many students used as a source but this group could not be found back in the energy transition articles. This is an interesting difference between the top down and the bottom up initiative. It indicates that the opinion of youngsters under 21 years old is not valued by the newspapers or that the newspapers do not expect of such young people to have an opinion about the subject climate. However, the articles about the student protests prove that the youth indeed has an opinion about this topic.

The last sub-question that was asked in this research was *How do the frames relate to each other within and between the newspapers?* In the analysis, it appeared that some comparisons between the newspapers could be seen. It was, for example, interesting to see the difference between the frames that could be identified per subject and per newspaper. So was a large difference found in the frames that could be identified in the energy transition articles. In the broadsheet newspapers, the Volkskrant and NRC, could all frames be identified, while in the tabloid papers, the AD and the Telegraaf, only a few frames could be identified. This is an interesting difference between the tabloid and the broadsheet papers. When in a paper or article several frames can be identified, this often means that the subject of the article is presented from different points of views. This probably makes an article more reliable because several different angles are taken into account. When in a newspaper only one frame could be identified, the article would give a skewed picture of the reality due to the fact that the article only highlights one perspective of the story. If an article only looks at the economic consequences of climate measures in the articles, for example, the reader will be influenced and it is possible that this reader in the future a climate-related theme will approach more often from an economical point of viewing.

Furthermore, it appeared that more frames could be identified in the articles about the energy transition than in the articles about the student protests. This applied to all four newspapers. These differences can be caused by the fact that the articles about the student protests are often more contemplative than the articles about the energy transition. In the articles about the student protests, different writing styles were used, but frames were often left behind. The topic is in this way highlighted from two sides, but the standpoints of the protesting youngsters are not deepened in detail. The articles are more descriptive and

contemplative. Through this writing style, fewer frames are used. This applied as well for the broadsheet as for the tabloid newspapers.

Methodological challenges

During the selection of the newspaper articles, some problems arose. It was unfortunately impossible to select for both subjects five articles for every newspaper. Therefore, it was decided to reduce the number of articles per subject, per newspaper back to three. However, it appeared that some newspapers did not have written three articles on Saturdays in the selected time period for each topic. Therefore, the missing articles were complemented with week articles within the selected time period. The extra articles that so could be found, were randomly selected to reach the goal of three articles per newspaper per subject. In this way, for all newspapers, three articles could be selected for each subject, except for the AD, for this newspaper even with the extended criteria only one article could be found about the energy transition within the selected time period.

Limitations

A large limitation of this research was the short time-period. Because of the short time period, the articles that could be coded and analyzed were minimal. The study would be more reliable when more articles could be included. Furthermore, the limited time period as selection criteria was a limitation. Through this selection criteria, it became impossible to collect three articles about the energy transition of the AD.

Further research

It is recommended to research the use of frames in articles with climate or climate policies as the main subject over a longer period of time. In this way, more articles could be included and a broader picture could be made about the newspapers in the Netherlands over some years instead of months. Furthermore, the relationship between a newspaper and the reader's opinion about climate-related topics could be measured. In this way, the relationship between the framing of a newspaper and the influencing of the readers could be researched and an estimation could be made to predict what the opinion of a reader is, related to the reader's newspaper.

Conclusion

In this research paper, a closer look is given into framing in four Dutch newspapers in articles regarding climate-related topics. Articles about the governmental top-down initiative of the energy transition and the social bottom-up initiative of the students protests were analyzed and compared between the newspapers.

Concluding, the aim of this paper was to answer the research question *How do Dutch newspapers write about the governmental top-down initiative of the energy transition, and the social bottom-up initiatives of the student protests, in the Netherlands, and how do the newspapers relate to each other thereby?*

Six frames were used to analyze the selected articles and answer this research question. These were the catastrophe frame, the economic frame, the economic competitiveness frame, the political frame, the responsibility frame, and the science frame. In the articles about the energy transition, a clear division between the broadsheet and the tabloid papers became visible. While all the frames were present in the articles of the broadsheet papers, only the economic and the economic competitiveness frame could be found in the two tabloid papers.

In the articles about the student protests, it was remarkable that only a few frames could be identified. Those were the political, responsibility and science frame.

By analyzing the sources that were used in the articles it became easier to identify the frames. In the energy transition articles, it was striking that mainly politicians and business and industries were used as a source. In the student protest articles were many students used as a source, but this group could not be found back in the energy transition articles. This indicated that the four newspapers did not be aware of or value the opinions of the youngsters.

During the discussion, the comparison between the governmental top-down initiative of the energy transition and the social bottom-up initiative of the student protests was made. The difference in writing style, the presence of frames and the use of sources were notable. The articles about the governmental top-down initiative of the energy transition approached the climate policy of the Dutch government as a wicked problem. Furthermore, these articles

appeared to be more content-oriented while the articles about the social bottom-up initiative were mainly contemplative and descriptive. This applied to all four newspapers and indicates that they are not expecting the student protests to move the government to change the climate policy.

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Appendix 2 - Coding manual

For the coding manual, eight dimensions were created. Namely, newspaper, subject of the article, identified frames, identified sources, writing style, policy process, substance of the policy and policy relevant actors identity. All these dimension are subdivided into categories. The dimension and their categories can be found underneath. The dimensions are bold and the categories are numbered.

Newspaper

1. NRC
2. The AD
3. The Volkskrant
4. The Telegraaf

Subject of the article

1. Energy transition
2. Student protests

Identified frames

1. Catastrophe frame
2. Political frame
3. Economic frame
4. Economic competitiveness frame
5. Science frame
6. Responsibility frame

Identified sources

1. Academic/expert
2. Non-expert commentator/citizen
3. Business and industry
4. Economist
5. Independent research group
6. Politician

7. NGO
8. Unnamed expert source
9. No source
10. Other
11. Student

Writing style

1. Approving
2. Skeptic
3. Neutral

Policy process

1. Present
2. Not occurring

Substance of the policy

1. Present
2. Not occurring

Policy-relevant actors identity

1. Present
2. Not occurring

Appendix 3 - Coding schedule

In the coding schedule underneath, all the codes that were used during this research can be found. The codes are divided into dimensions and the dimensions are subdivided into categories. The categories are indicated by the numbers in the table.

Article number	News paper	Subject of the article	Identified frames	Identified sources
1	1	1	3 – 6	1 – 5 – 6
2	1	1	2- 4 – 6	1 – 3 – 6
3	4	1	-	3
4	4	1	3	5 – 6
5	4	1	2- 3 – 4	3 – 7
6	3	1	2 – 5	1 – 3 – 6
7	3	1	1 - 2 – 3 – 4 – 5 - 6	1 – 3 – 6 - 7
8	3	1	2 – 3	4
9	1	1	1 - 2 – 3 – 4 – 5 - 6	2 - 5 - 6
10	2	2	2	1 - 11
11	2	2	2	2 – 6 - 11
12	2	2	-	10
13	2	2	5	1 – 6 – 10
14	4	2	1	1 – 11
15	4	2	-	6 – 7 – 11
16	4	2	-	-
17	3	2	-	5
18	3	2	-	2 – 11
19	3	2	6	1 – 11
20	1	2	-	1 – 6 – 10 – 11
21	1	2	-	2 – 11
22	1	2	6	2 – 11
23	2	1	3	3 – 6

Article number	Writing style	Policy process	Substance of the policy	Policy- relevant actor identity
1	2	2	2	2
2	2	2	2	1
3	2	2	2	1
4	2	1	1	1
5	2	1	2	1
6	1	1	1	1
7	2	2	1	1
8	2	2	2	2
9	2	1	1	1
10	1	1	1	1
11	1	2	1	2
12	3	2	2	1
13	2	2	1	1
14	2	1	1	1
15	2	2	1	1
16	2	2	1	1
17	1	2	1	1
18	1	1	2	1
19	1	1	1	1
20	3	2	1	1
21	2	2	2	1
22	3	2	2	2
23	2	1	1	1