

Petro-villages: Living through fossil fuel extraction in rural North of the Netherlands



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Petro-villages: Living through fossil fuel extraction in rural North of the Netherlands

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Abstract

Fossil fuel extraction is a controversial field in the context of Dutch energy policy. In the mainstream Dutch narrative, oil and gas are often portrayed as heroic entities that have contributed significantly to the country's wealth and history. However, communities living near extraction sites have direct contact with the company and can offer a counter-narrative which differs from that which is put forward by oil companies. In this thesis, I will focus on two small rural towns in the northern Netherlands that nurture two opposing narratives with respect to fossil fuel extraction. In both locations, extraction has affected the lifestyle of local communities, albeit in two different ways. My analysis took place in Schoonebeek and Appingedam; in the former locality people generally hold a positive view toward extractions, while in the latter many people protest to stop gas extractions. In order to understand these differences, the subjective experience of extractions and the social strategies implemented by NAM [Nederlandse Aardolie Maatschappij] must be analyzed. Using a multi-site approach, I will reflect on the different social strategies put in place by the company and analyze how these are intertwined with people's perceptions of extractions. Considering the direct experiences of the communities surrounding these extraction sites, this thesis aims to analyze the effects of these extractions, which are often not considered in official accounts.

Introduction: “Anthropology on the road” The train ride to Appingedam

We are good with NAM, before oil we were poor but now we are rich-

David (Schoonebeek, February 2022).

We did not take any benefit from this gas situation, we only got problems and every year it's getting worse and worse. We don't want them here; they have to stop with these extractions now!

Antonio, (Appingedam, February 2022)

I first went to Appingedam, a small city in the northeastern Netherlands, by mere chance, as often happens during fieldwork. On the train to Appingedam I could see the beautiful landscape out the window. I could see those immense fields, bright green in color. In my home country of Italy, I am used to seeing a drier nature, and in general everything appears more yellow. But along the path to Appingedam, everything was green. I could see many black and white cows—the ones you usually see on postcards of Holland—along with ponies and klompen (typical Dutch wooden slippers). In the distance I could see the gray smoke from gas extraction, something you would not see on postcards.

This thesis was inspired by my internship with Carbon.Culture.org, which investigates how fossil fuels, especially oil and gas, play a crucial role in shaping the Dutch culture and political order. The project aims at offering an alternative viewpoint on the history of energy than the one offered by corporations—a view of the rural Netherlands that one usually does not see on postcards. In a sense, my thesis flips the postcard over to show you stories and counternarratives of fossil fuel extraction by foregrounding ethnographic data collected from interviews with the inhabitants of two small energy towns in the northern Netherlands.

During the internship I often moved from one place to another. Being “On the road” taught me the importance of analyzing the impact of fossil fuel extraction in more than one locale. The social impact of extraction varies according to each place and community. By focusing on two different locales, this thesis argues that such differences between the lived experiences of communities matter and these distinctions deserve further attention if anthropologists aim to analyze the role of energy extraction in the making of individuals, communities, and societies.

Based on three months of fieldwork in Schoonebeek—in the province of Drenthe—and Appingedam—in the province of Groningen—this thesis provides an overview of the effects

of fossil fuel extraction in two rural towns located in the north of the Netherlands. These two communities have two opposing experiences of extraction in their areas. In Schoonebeek, one of the largest oil sites in the Netherlands, the residents generally share the narrative that extraction has brought wealth and new job opportunities for the community. In contrast, many Appingedam residents are trying to stop gas explorations, which for many years have weakened the ground to the point of causing earthquakes. The hardest hit areas are the towns surrounding the municipality of Groningen. Because of these environmental effects, some people have lost their homes while others are living in precarious conditions. The general overview in Appingedam is that the Dutch state benefits from these extractions while inhabitants of the Groningen area are severely impoverished due to gas explorations.

In both locations, the extractions have affected the lifestyle of local communities, albeit in two different ways. First and foremost, it is important to remember that fossil fuel extractions have first and in fact changed the relationship between residents and their land (Alliegro 2014), changed perceptions of environmental risk, and through their material presence (Rogers 2012), and the construction of new social structures and projects, reshaped social relationships (Veenker and Vanclay 2021). However, it is of fundamental importance to note that these extractions have not always had a positive effect on the well-being of inhabitants. In fact, when I focus on the case of Appingedam I will focus on the psychological damage that people have suffered as a result of the extractions. I will connect these kinds of psychological effects to the notions of slow violence (Nixon 2013) and Petro-violence (Watts 2001). However, I will also reflect on how extractions impact the surrounding environment and how these impacts are mediated through the company's social strategies (Veenker and Vanclay 2021).

In fact, the experiences of fossil fuel extraction are mediated by the social strategies performed by NAM [Nederlandse Aardolie Maatschappij]. NAM is a Dutch-based petroleum company founded in 1947. The company is a joint venture between Shell and ExxonMobil (Plets and Kuijt 2021), and also has financial relations with the Dutch State. NAM, represented in part by Shell, is closely involved in state decisions and the two regularly protect each other's interests. Indeed, the Netherlands can be considered a Petro-State, because the economy is largely dependent on and influenced by oil and gas explorations. The social strategies performed by NAM include compensation systems, NAM participation in social gatherings, and the construction of new infrastructure and facilities (Veenker and Vanclay 2021). In this thesis I will closely consider how NAM performs their social strategies in Schoonebeek and Appingedam.

As demonstrated by Rogers (2012), oil and gas companies legitimate their projects in society through their participation in social projects and through their involvement in the political sphere. Similarly, Gertjan Plets and Marin Kuijt (2021) argued that, through museum sponsorship, Shell as a company is writing the history of the Netherlands. Moreover, artistic productions on oil and gas also usually foster a positive narrative with respect to extractions. In my thesis, I will contribute to the literature on the materiality of corporations by focusing on how people have interiorized the relationship with NAM through art and souvenir production outside museums. Then, I will add to Rogers' examination of the materiality of companies by extending this analysis into people's private lives in order to comprehend how corporations impact people's social interactions and emotional spheres. Through artistic creations, this internalization can be shown. Because objects can also have emotional worth and can tell a story (De Nardi 2014), I take the viewpoint that it is crucial to examine material culture from both the perspective of corporations and communities. Nevertheless, in analyzing the impact of companies, and particularly NAM, it is important to look at their perception in local communities while remembering that the residents of the two areas I studied are not passive recipients of "corporate effects," but they are active agents in the way they respond to the companies and in the way they establish a mutual relationship with the company.

In this thesis I will contribute to the general field of corporate ethnography by introducing counter-narratives of fossil fuel extractions from these two small rural towns in the north of the Netherlands. While using a multi-sided approach (Marcus 1995), I will argue that the differing views currently existing in the two fields are mainly influenced by the different social strategies deployed by NAM. By exploiting local social mechanisms, the company has reshaped the economic and social life of communities living in the vicinity of extraction sites and, in some cases, contributed to social and economic inequalities. Through an analysis on the differences found in the two contexts, I will discuss what social strategies have been applied in the contexts of my fieldwork and on the kinds of impact they had on people. I will conclude that environmental considerations become more important when social strategies fail, whereas when they are successfully implemented, the environmental impact is much less considered.

Research context and population

Appingedam

Appingedam was not in my plans at the beginning of my fieldwork. I was originally supposed to stay in Groningen that day for research. However, after visiting the Groningen museum, I met a girl from Appingedam who said, "To really see what happens with earthquakes you have to go to small villages like Loppersum and Appingedam. You could go to my village, it is a nice place and I have some friends who can help you with the information you need." She gave me the number of one of her friends, Claudio. When I reached Appingedam station I called Claudio. As soon as he answered he said, "Hey, I know you want to talk to me but it's dinner time (6 p.m.), so why don't you come to my house for dinner? A friend of mine can pick you up at the station if you want." I waited there at the station until I saw Marco. He immediately gained my trust, though I cannot explain why. Marco (the Italian pseudonym I gave him) had long blond hair, a big smile, green eyes, and was one of the nicest people I have ever met in this country. Before entering Claudio's house, Marco took me to see the special feature of Appingedam: the suspended kitchens, hanging parts of buildings over the canals. Appingedam is full of canals, hanging kitchens and lovely little bridges. You can go through different parts of the city by crossing these bridges. The canals are very colorful, you can see flowers and small boats that the locals use to get around. It reminded me somewhat of Venice, with the only difference being that Appingedam is less touristy and therefore it feels more authentic to me. At one time I was also just a tourist, but now I know most of the shortcuts in the town. The first place I became familiar with was Claudio's house. It is located right in the center of town, and to get there you have to cross a white bridge. Claudio is younger than me, with fresh skin, blue eyes, he is a very energetic and welcoming person. When I entered in his house he immediately showed me the balcony. From there I could see the suspended kitchens. It was now evening, and the full moon was already visible. While pointing to the hanging kitchen Claudio told me: "You know, these old buildings might be torn down because of earthquakes. One day even the suspended kitchens might disappear too." I had to light a cigarette to hold back the bitterness I felt at hearing that sentence.



Appingedam from Claudio's balcony. Picture taken by the author

Appingedam has been hit by several earthquakes in recent years, starting in 2012 when a magnitude 3.6 earthquake struck Huizinge. These earthquakes are in fact caused by gas extractions. When the soil loses pressure, it creates what geologists call subsidence which eventually can cause various systemic events (Goossens, 2017). As a result of this, many houses became uninhabitable. Some people lost their homes, many others are living in precarious conditions or temporary houses. This situation was evident since my first visit to Appingedam. The cracks in the houses are immediately visible even when taking a quick look, and in addition, there are scaffoldings scattered all over the town.

In the morning of my second day in Appingedam, I saw a seismograph of the "Ons Laand Ons Lu" association. The logo outside is of the same color as the Groningen flag: blue, red, white and green. Outside, there is a large blackboard where all the earthquakes of the past three years are recorded. To my surprise, there have been many of them, more than one might expect. The association grew out of a collective project of the people of Appingedam to support

citizens who had experienced problems with their homes due to the earthquakes. The association was an important site for my ethnography because it provided many insights into how people were impacted by the corporations, and it allowed me to reflect on how residents responded to gas extractions. Every time I went to Appingedam I would stop at this association to chat with Antonio, the co-founder of the association. Another important place for my ethnography was “Jimmy's Appingedam Youth Association”. This association was important to me because it allowed me to collect information and artwork about the meaning young people give to gas extraction and earthquakes. There I met my gatekeeper, Marco, the person who introduced me to many of the people I will talk about throughout this thesis.

Schoonebeek

It was 9 a.m. on a cold morning the first time I went to Schoonebeek. My colleagues and I drove there with Gertjan, the coordinator of my internship project: Carbon Cultures. The trip took just over two hours. Throughout our journey, Gertjan often pointed out the window to direct our attention to the extractions. Even before we entered the village, we could see the pipelines at the river with the German border. In addition to the pipelines, the landscape was marked by oil pumps. They were everywhere. Gertjan told us that those oil pumps or "Jaknikker" were the symbol of Schoonebeek. When we reached the main square, we saw another oil pump that stood as a monument. As a first encounter with the town, I did not expect to find so many people so passionate about oil, but this was the first insight that inspired me during my interviews. The main question would be: What do these "jaknikkers" represent to you? Why are they everywhere? One of the first people I met in Schoonebeek willing to answer these questions was David. I met him in his clothing store in the main square. When he saw me, David gave me a big smile and was obviously surprised to see an Italian student in Schoonebeek. David is a middle-aged man with neat brown hair, blue eyes, and a bright, friendly look. When I entered his store he offered me a coffee, and although it was already my third, I decided to accept to sit with him. It was a good decision because we immediately liked each other. That was a very lucky day for me because David is very talkative and knows everyone in town. After meeting him he helped me arrange an interview already for the next day. David soon became my main gatekeeper in Schoonebeek.



The Jaknikker monument. Picture taken by the author

Schoonebeek is located in the province of Twente and has a population of about 4,000 people. Although the geographical area of Schoonebeek is rather small, the city has been very important in the Dutch cultural and economic context. In fact, Schoonebeek was the most important site for oil extraction, and created a major shift in the country's energy economy. The city is greatly influenced by extraction, and according to the historical museum we visited, the history of Schoonebeek is often associated with the history of oil. In addition, NAM has helped sponsor many infrastructure projects within the city, such as the NAM training center, as well as the many control buildings from which NAM employees can maintain control over the oil operations.

In this town, the influence of NAM is very much felt. Most of the people I met in Schoonebeek were adults or seniors. Many told me that young people often leave Schoonebeek to study in larger cities. Since the town is very small it was not difficult for me to get in touch with my interviewees. Moreover, everyone here seemed to know each other. Therefore, I started with a small number of people and then expanded my data by meeting other mutual friends.

Problem definition and Research question:

Schoonebeek and Appingedam present two different and opposing narratives about fossil fuel extraction. Inspired by this difference, I have undertaken a multi-sided ethnographic research in two sites to analyze the social effects of extractions on the inhabitants of Schonebeek and Appingedam. I will look specifically at how people make sense of the extractions in their areas and what factors influence the inhabitants' perceptions. Following this pattern, I formulate the following research question:

How does fossil fuel extraction affect the lifestyles of residents in the Schoonebeek and Appingedam communities?

Methods

This text is the result of an ethnography made "on the road." During these three months of fieldwork, my colleagues and I from the internship team "Carbon. Cultures.org" often traveled from place to place in North Holland. Among the places we visited through carbon culture, I decided to focus on Schoonebeek and Appingedam. We would travel two or three days a week and stay for one or two nights at the fieldwork site. Although this kind of fieldwork did not allow me to be stable in one place, I could still conduct important interviews and attend various meetings on the topic of fossil fuel extraction. I defined my research as "multi-sited ethnography" (Marcus 1995). Among the positive factors of this methodology is that one can study the same phenomenon, in this case the perceptions and social effects of fossil fuel extraction, by observing two or more communities. As a result of this, I have been able to expand my network of contacts and I could connect with a wide range of people of different ages, sexes, and professions. In addition, I used a multiple perspective to include the voice of NAM employees as I felt it was also important to include their voices in my text. Furthermore I also consulted other scientist involved in the field such as the geologist Sam Gerrits, who explained to me basic theories in regards of the earthquakes.

To answer my research question, I used several qualitative methods. First, I used participant observation to familiarize myself with the spatial environment and get to know my interlocutors (Doody and Noonan 2013). I used this method especially when I visited museums to collect artifacts and artistic productions about fossil fuel extraction. When I was able to start planning interviews, I mainly used a semi-structured format because it allowed my participants to respond more freely (Ritchie et al. 2013). However, for the longer interviews I used life-story as a method. I asked the interviewees to talk more generally about their personal histories and then together we looked for connections about fossil fuel extraction. During these interviews, my participants would often show me pictures, artifacts, and artistic productions about fossil fuel extraction; this part was particularly useful in gathering more data about people's personal experiences and reactions to extraction. At this stage, I often used visual methods to support my discussion and give the reader a visual representation of the field (Edwards 2012).

Interviews were often made at home accompanied by informal interviews. Usually, the informality of the interviews was important for discovering new insights and especially for building rapport with my interviewees. Another place where I conducted interviews was within local associations, such as "Ons Laand ons Lu." To collect my data, I mainly engaged in notetaking rather than using a tape recorder. This was due to the tension I sometimes felt from my interviewees when in front of a tape recorder, especially when discussing sensitive topics such as earthquakes. Flexibility is as important for the researcher as understanding and respecting people's emotions. Emotions, as Ruth Behar argued (1997) were taken as valid data that guided my research and I thus allowed myself to feel "vulnerable" to their influence.

Ethics and Positionality

This thesis will be influenced by my subjective views and experiences. Firstly, my general view of the Netherlands has changed during this fieldwork. As the Netherlands is often portrayed as one of the most sustainable countries in Europe, I felt surprised to see the pitfalls hidden behind the mainstream narrative. Also, it is important to mention in my position statement that this thesis will be heavily influenced by my subjective experiences with my interviewees and my life experience as a 26-year-old person living on a highly polluted planet, where the threat of global warming seems an increasingly inevitable reality and where thousands of people die every year from air pollution-related diseases. Having come from this positionality, I cannot help but criticize oil companies like Shell and NAM for their

contribution to global warming. Nevertheless, I believe that criticizing these companies is not enough; it is also necessary to know them and to understand the strategies they use in order to have a greater awareness and sensitivity about how they act in society. During the course of this research, I spoke with many NAM workers, and I would like to thank them again for opening up to me. I have shared many of their concerns, and I think we are all responsible for what is happening to our environment, although the means for the change are not owned equally by everyone. To this day, I am firmly convinced that these companies could do more in the fight against climate change, just as I am even more convinced that these companies could do more for the people of Groningen. Therefore, this thesis cannot in any way be impartial in the face of current circumstances. In taking this position, I was inspired by the model of engaged anthropology proposed by anthropologists such as Nancy Sheper-Hughes, David Graeber and Ruth Behar, whose work has enlightened me during my career as an anthropology student.

To protect the anonymity of my interviewees, I used pseudonyms. In the case of NAM employees, I often omitted their position title and the location at which they worked. However, I adhered to codes of ethics (following the AAA guide on ethics 2012) and thus explained the purpose of my research and reassured my participants about anonymity and confidentiality. When discussing sensitive issues such as earthquakes, I often avoided asking direct questions to avoid the so-called "spectacularization of suffering" (Chouliaraki 2006). For this reason, I did not engage in these conversations unless people spontaneously talked to me about the topic.

Limitations

One of the most important limitations of this research is that the topic is very broad and I would have needed more time if I were to delve into all the implications I wanted to explore. Another major limitation is the fact that I am not a native Dutch speaker and often had communication problems. Nevertheless, my interviewees and I found many other ways to communicate and my gatekeepers helped me during translations. I encountered the same limitation in finding specific online resources on the topic I wanted to explore and it often was difficult to find articles or sources from NAM in English. However, I hope that these limitations will be alleviated through the use of resources from other similar case studies from other areas of the world.

Theoretical framework

Anthropology of corporations

Anthropologists have become increasingly interested in the role that companies and corporate actors play in society. Indeed, petroleum companies play an important role in contemporary economic and social systems. Whilst anthropologists previously had a liminal importance within the corporation environment, anthropologists are now often hired in order to implement the social strategies and the productivity aims of companies (Fitzgerald 2021). Various scholars such as Urban Greg and Kyung-Nan Koh (2013) suggested to implement an ethnographic approach to the study of corporations. They suggest to look at every-day practices in order to better understand the social life of corporations. The use of ethnography allows the reader to acquire an “emic” perspective on corporations, and this approach may in fact reveal further details on how these companies operate in the society. As Urban and Nan Koh (2013, 140) claimed: “Ethnographic research approaches modern business corporations from two directions: from the inside, as if corporations were analogous to the small-scale societies anthropologists traditionally studied; and from the outside, as actors affecting and transforming the world”.

Balch (2016) takes a more critical standpoint by arguing that anthropologists should also be involved in community resistance against the environmental and psychological harm caused by multinational corporations. In this thesis I will follow this approach by exploring the effects of multinational corporations in the two small towns of Appingedam and Schoonebeek. In both of these locations the extractions have affected the lifestyle of the local communities albeit in two different ways. With effects I have included an analysis of the psychological, economic and environmental impacts that these extractions have had on the context of my fieldwork. These different spheres are intertwined in the experiences of the inhabitants. However, as I mentioned earlier, these experiences differ from the kind of image about fossil fuels provided by the companies themselves; in fact, the direct experience of people living in the vicinity of these extractions is often devalued in official accounts as oil companies such as NAM often have the to obscure other opinions that do not belong to the mainstream. In this thesis I will contribute to the general field of corporate ethnography by introducing the types of counter-narratives about fossil fuel extractions from these two small rural towns in the north

of the Netherlands. In the next section I will analyze the role of cultural artifacts in energy debates while paying particular attention to the social techniques used by NAM/Shell.

Energy Studies and cultural heritage: reflections on CSR strategies

Notably, cultural and artistic heritage is a reflection of the social values guiding the society. Within current energy debates, it is of primary importance to consider the ways that petroleum companies legitimate their role in society and the kind of techniques they deploy to obtain a good reputation. Indeed, oil and gas companies may also rely on the financing of social and cultural projects in order to obtain legitimacy. In his study on energy, Timothy Mitchell (2009) shows the crucial correlation between fossil fuels, history, and democracy. According to Mitchell, the discovery and production of fossil fuels radically changed the way society and economy were conceived. The use of fossil fuels in fact encouraged urbanization. This lifestyle shift from the peasant labor to wage-earning facilitated the process of industrialization which could never have taken place without the use of coal and other fossil fuels. Consequently, industrialization has contributed to the increased manufacturing of commercial products which slowly replaced subsistence economy and favored the emergence of capitalist economy and consumer culture. The energy transition to carbon fuels led to a cultural transition in Dutch society. The new economy based on fossil fuels extraction has led to a period of economic prosperity that consequentially influenced the cultural Dutch identity. The Netherlands became one of the most important economic powers within the West and this has de facto reinforced national feelings and people's sense of belonging to the State. The use of fossil fuels allowed for the modernization of society and consequentially brought major changes to people's lifestyles.

Perceptions of democracy radically changed after the discovery of fossil fuels. The energy trade reshaped countries' economic and social relations. Nowadays, most international conflicts are regulated through the oil trade. Mitchell (2009) sustains that fossil fuels, oil in particular, may be either a source of conflict or a key factor in the establishment of collaboration from one country to another. In this way, fossil fuels are crucial players in the reshaping of global democracy projects.

However, Shell companies do not meet the sustainability challenge. On the contrary, Shell qualifies as one of the most polluting companies in the world (Guo and Munteanu 2011).

Nevertheless, the company is implementing various strategies to legitimize fossil fuel extraction, firstly through the implementation and the betterment of Corporate Social Responsibility (CSR) strategies and secondly through the financing of social and cultural projects (Plets and Kuijt 2021). Through financing and sponsorship, gas companies not only shape the economic process but also the country's collective memory. In a discussion of these issues, Rogers (2012) reflected on how oil and gas corporations in Russia often maintain control over the society through their influence on the material world. Many of these corporations are currently financing various artistic and cultural projects all over the world. Often, these projects are aimed at raising the awareness of local communities and above all to make them sympathize with the company. Part of the Dutch Shell strategy was indeed to implement the social aspects and corporate values as a response to their failure in the matter of environmental protection (Guo and Munteanu 2011). Indeed, these kinds of CSR strategies are what I categorized as a part of the dominant narratives proposed by NAM/Shell. Thus, in this thesis I will contribute to the study of CSR by looking at the social strategies applied by NAM in the context of my fieldwork whilst also reflecting on how those strategies are applied within the artistic sphere.

The work of Gertjan Plets and Marin Kuijt (2021), is mainly focused on how NAM/Shell influences Dutch cultural heritage through the creation of cultural artefacts. In their research Plets and Kuijt examined various museums and observed how these companies sponsored the creation of cultural artefacts. They noted how a pumpjack was presented in a museum and reflected on how these new artefacts were associated with the idea of progress that were displayed to represent a “heritage object celebrating the Dutch post-war oil and gas boom” (Plets and Kuijt 2021, 2). In essence, through sponsoring museums, these companies propagate the narrative of the “winners” in which oil is represented as a heroic agent (Hein 2018) which allows for the economic enrichment of the Dutch State and which corresponds to an increasing wealth for society. Especially in the Schoonebeek’s context, use of symbols such as the pumpjack were successful strategies deployed by NAM to create a sense of community and to ensure a peaceful relationship with local inhabitants (Veenker and Vanclay 2021).

Through these kind of material artefacts, companies such as NAM/Shell deeply affected people’s perception of fossil fuel extraction. In this thesis, looking at material culture such as the pieces found in the Schonebeek museum, I reflect on how oil and gas companies such as NAM permeate social life through material production (Rogers 2012). I also reflect on how the very narratives of wealth and well-being put forth by NAM are interiorized and become part of people's daily lives. Looking at material culture, such as the pieces found in the Schoonebeek

museum, perfectly embraces the idealizing vision that associates oil with the idea of modernization and economic development. In this way, oil companies blend seamlessly with cultural heritage (Plets and Kuijt 2021). Social strategies such as museum funding have thus allowed companies to obscure their environmental impact.

However, in addition to the image of fossil fuel extraction represented by the company, I will also focus on how people have interiorized the relationship with NAM through art viewing and souvenir production outside museums. I will then contribute to the analysis of the materiality of corporations (Rogers 2012) by bringing this analysis further into the private sphere of people to understand how corporations affect people's emotional sphere and social relations. This internalization becomes visible through artistic productions. Objects also have emotional value and tell a story (De Nardi 2014), and that is why I believe it is important to analyze material culture from both the corporations' and communities' perspectives. While in Schoonebeek the material culture I found on fossil fuel extraction mostly supports the narratives proposed by NAM, in the case of Groningen objects have more of a critical value and are related to the negative experiences of earthquakes due to gas extraction. In the following section I will analyze oil and gas extraction in the Dutch context and, specifically, on the criticism on NAM and Shell.

Oil and gas extraction in the Dutch context

Contrary to the premise of richness and wealth proposed by oil and gas companies, the reality experienced by the communities living near extraction sites may be different. Although providing energy resources at a local and international level, both Nam/Shell faced criticism because of the company's environmentally unsustainable practices, such as gas exploration. Those critiques reached a peak in 2012 after the earthquake in Groningen. Before the earthquake, the company had always claimed that gas extraction posed no danger to local communities. It was only after the earthquake that struck Huizinge, a small village in the province of Groningen, that the company admitted to the correlation between earthquakes and gas extraction. The earthquake registered at 3.6 on the Richter scale, creating a major environmental disaster. As a result of this, many people had lost their homes while some others were placed in temporary houses. Both NAM and Shell faced several legal charges and had to pay a compensation to those civilians who experienced major damages to their households (Mouter et.al 2018).

These earthquakes are not caused by natural events but are the result of gas extraction. As previously mentioned, the extraction of gas eventually led to the lowering of the pressure of the ground which, consequentially, led to subsidence. The lowering of pressure is the main cause of the seismic events currently affecting the Groningen province. This process weakens the quality of the soil and may also pollute the groundwater in the area. In addition to its environmental effects, extractions have also a negative impact on the well-being of the communities living near these gas extraction sites. Willow and Wylie (2014) studied how these communities often experience feelings of displacement and detachment from their physical environments as these gas fields generally alter the relationship between local people and their territories as well as alter the relationship between humans and nature. Similarly, Simona Perry (2013) in her research on the Marcellus gas field in Pennsylvania documented the negative psychological effects observed within those communities living near these gas fields. Focusing on Groningen, Elianne Zijlstra and her colleagues (2019) at Groningen University conducted various investigations which revealed that the young people in the Groningen region have a growing propensity to experience stress, anxiety, and insomnia. They found that these trends were more prevalent in Groningen than the rest of the nation and, as a consequence of this, they deduced that it is possible to link the rise in health issues to the psychological effects of gas extractions.

Part of the narratives proposed by NAM argued that the extractions would have posed no harm to the local population (Mouter et al. 2018). This denial was in fact part of the dominant narrative supported by Shell by various means. Official evaluations of risks may often escape the reality of the people who inhabit the gas-fields areas. In fact, the earthquakes in Groningen caused severe political and social instability. As Molenaar (2021) has argued, the identity formation process in Groningen was influenced by the earthquake as it caused distrust towards both the institutions and the State. Many local inhabitants had developed a kind of aversion to the state and felt that it had left them without adequate compensation for the damage created by the gas extraction. This fact therefore reinforced the emergence of new and more regionally localized types of cultural identity (Molenaar 2021).

Although criticisms of NAM reached a peak after the Groningen earthquakes, the company had previously enjoyed a positive reputation. As demonstrated by Veenker and Vanclay 2021, NAM continue to hold a good reputation in Schoonebeek. The company in Schoonebeek has established a peaceful relationship with inhabitants through a strong system of social strategies including compensations, frequent meetings with the local community, and sponsorship of museums. All these practices have allowed the company to proceed with oil

extraction without many obstacles. On the other hand, most residents in Schoonebeek have a positive view of NAM because they think that oil extractions have brought wealth and prosperity to the village.

Overall, in this part of my theoretical framework I outline some of the main critiques on gas extractions. My goal in this thesis is to enrich these accounts by reporting the direct experience of the inhabitants of Appingedam, a more peripheral area of Groningen that has not received much attention in previous accounts. Similarly, I would like to report the experiences of the people of Schoonebeek to illustrate their point of view on oil extractions. As demonstrated by Troullouit (1997), some stories are often not mentioned or are forgotten in the historical mainstream. Similarly, Spivak (2003) argued that the voices of subalterns often go unheard because subalterns are rarely allowed to speak. Considering these studies, in this thesis I will report on the experiences on fossil fuel extraction within two small municipalities in the north of the Netherlands, which are "far away" from the Randstad, the economic center of the country. As a result of their distance from the main urban centers, these experiences often go unheard when discussing fossil fuels because they are not part of the mainstream. Nevertheless, the experiences of communities like these are instead more important to getting a fuller picture of how extraction affects people's lives.

Thesis Structure

In chapter one I will introduce the reader to the context of my fieldwork through a detailed description of the material culture I found on fossil fuel extraction. Following this, I will analyze the material culture I found in the museum alongside popular culture and artistic production related to the topic of my research. The aims of this chapter are to firstly understand how NAM permeates in the social tissue of society through materiality (Rogers 2012) and artistic production; and secondly, to analyze how people respond to or internalize the values of corporations through art in both the two contexts of my fieldwork.

In chapter two I will reflect on the NAM social strategies applied in the Schoonebeek context. I will conclude this chapter with a reflection of how these strategies helped the company to build a peaceful relationship with the inhabitants and, in turn, how this has mediated people's perception on fossil fuel extraction. To do so, I will briefly talk about the history of oil extraction in Schoonebeek and about how the lives of people has changed since the discovery of oil. Furthermore, I will briefly talk about the history of NAM in Schoonebeek and the kind of relationships which exist between the inhabitants and the company.

In chapter three I will be focusing on the history of gas extraction in Appingedam whilst giving special attention to the negative effects of gas extraction on its inhabitants. Thenceforth, I will analyze how Appingedam residents' lifestyles have changed after the earthquakes and explore the main negative impacts experienced by people. To do that, I will reflect on perceptions of risk, paying particular attention to the psychological impacts of the earthquakes. Towards the conclusion, I will discuss the negative experiences of the inhabitants with both NAM and the Dutch government as a form of slow-violence (Nixon 2013) and Petro violence (Peluso et. al 2001). I will argue that these forms of violence are not only visible in the physical cracks left by the earthquakes but also in the psychological stresses people had to endure because of them.

I will conclude this thesis with a brief summary and reflection about my writing and with a short reflection on the relevance of this case-study.

Chapter one: Entering in the field through artistic production

“The Jaknikker”

The first thing that caught my attention when I arrived in Schoonebeek was the old green pumpjack that stood like a monument in the center of the central square. From there I could see a bakery that also sold coffee. It was a bright day and so I thought I would sit for a while to enjoy my espresso in the sunshine. When I took my cup of coffee, I saw an image that immediately caught my attention. I noticed that the image imprinted on the complimentary cookie represented the same pumpjack in the square. I then decided to pluck up the courage to go inside and ask the baker to explain why they made pumpjack cookies, and she replied, "The 'jaknikker' is the symbol of Schoonebeek." As the conversation continued, between interruptions by other customers, I asked her to tell me more about Schoonebeek's history and she replied:

"Did you see the oil pumps on your way here? They are now part of the landscape and we don't even notice them anymore. The big pump in front of this store is the first pump installed in Schoonebeek and it still works. They are part of our history and that's why we make cakes and cookies with the pumpjack mold. They are our symbol."

-Stella (pseudonym), February 2022, Schoonebeek.-



Cookies from the bakery. Picture taken by the author.

In this chapter, I will analyze the connection between fossil fuel extraction and identity by examining the material culture in the two places of my fieldwork. While supporting the idea that every object and image tells a story, I will argue that objects can also detect the kind of stories and points of view that residents in both places have about fossil fuel extraction. However I will also provide a link between personal stories and NAM. In this section I will start with an overview of the symbols on fossil fuel extraction in Schoonebeek, in particular I will analyze the symbolic and cultural value of the pumpjack. In the second sub-chapter I will instead focus on how the shared experience of the suffering of earthquakes has reshaped the identity of the Groningers. Furthermore, by looking at the popular culture I have found in Appingedam, I will reflect on the unequal power relations between the Groningen region and Den Haag. In the latter, I will notice how personal objects and stories merge with oil extraction in Schoonebeek.

Many people interviewed in Schoonebeek have a positive view of oil extraction. Positive views on fossil fuel extraction are generally supported by the artifacts and souvenirs I encountered during fieldwork. The quote I have reported is a short excerpt from an interview I had with one of the first people I met in Schoonebeek. Stella, she works in a bakery in the

center of Schoonebeek where they make various souvenirs depicting pumpjacks and other images of oil extraction. This represents the kind of deep relationship between Schoonebeek and oil extraction. The pumpjack or "Jaknikker" has become the symbol of Schoonebeek (Veenker and Vanclay 2021) and is its historical heritage (Plets and Kuijt 2021).

The relationship between the people of Schoonebeek and oil extraction has its roots in the early part of the 20th century. In 1935 and 1943 several small oil fields were discovered near the German border. The most important discovery was made in 1946 with the "Schoonebeek oil field" which enabled large-scale commercial oil production. Initially, operations in Schoonebeek were managed by Bataafsche Petroleum Maatschappij, and later by NAM [Nederlandse Aardolie Maatschappij], a joint venture between Shell, ExxonMobil and the Dutch state (Veenker Vanclay 2021). Since its inception, NAM has always been in close relationship with the Dutch state¹. The relationship between these two parties has certainly influenced cultural productions about fossil fuel extraction and the perceived legitimacy of extraction. It is important to remember that the Netherlands is considered one of the most powerful "Petro-States" in the European context. "Petro-State" refers to a scenario in which the state's economy is primarily based on the extraction and export of oil and gas. Fossil fuel extraction also has an impact on local populations. In the case of Schoonebeek, the relationship between the local community and NAM has always been positive and, in fact, the extractions have never been considered a problem by the inhabitants.

Since the first explorations, NAM has established a good relationship with the people of Schoonebeek. Among other factors, NAM contributed to the city's economy and introduced new technologies and infrastructure that radically changed the population's lifestyle. In essence, NAM helped to transform the city from an agriculture-based economy to a more modern city (Veenker Vanclay 2021). Several buildings in Schoonebeek are connected to NAM, including the NAM training center from which engineers and managers can supervise the extractions. Furthermore, many people who work in the oil fields are also Schoonebeek residents. Hence, NAM is an integral part of the village social and economic life. The most obvious symbol of oil extraction is the jaknikker. The relationship between Schoonebeek residents and oil extraction is materialized through these jaknikkers. They have become a part of the landscape and hold enormous symbolic value for this small town.

¹ <https://energy-oil-gas.com/profiles/nam-2/#:~:text=For%20over%2070%20years%2C%20NAM,the%20Dutch%20oil%20field%20network.>

Initially, oil was extracted through the classic pumpjack, such as the one installed in the main square. Today, oil is extracted by the vapor injection method, in which water is mixed with other chemicals and is injected into the ground as vapor to make the oil less viscous and thus easier to extract (Havermans 2022). This method allows for greater productivity, as more oil can be extracted in less time. However, the old jaknikkers are still a major attraction in the city. The symbolic value of the jaknikkers can be seen both inside and outside the museums. Plets and Kuijt (2021) noted how Dutch oil and gas companies, through funding and sponsoring museums, promote a narrative that furthers their legitimacy and ends up influencing Dutch cultural heritage. Generally, the promoted narrative is about the importance of fossil fuel extraction and how it contributed to the postwar period of economic prosperity. In the Dutch cultural-historical context, oil is often portrayed as a "heroic cultural agent" (Hein 2018:887) and as a means of regulating democratic relations between different countries (Mitchell 2009). The vital link between fossil fuels, modernization and democracy is demonstrated by Timothy Mitchell (2009). He argues that the discovery and development of fossil fuels radically changed the way society and the economy were conceived.

In fact, industrialization was facilitated by the use of fossil fuels. The process of industrialization, which would not have been possible without the use of coal and fossil fuels, was aided by the shift from the peasant lifestyle to that of wage laborers. All of these factors contributed to the modernization of Dutch society. The same narrative is repeated in the Schoonebeek Museum, where the town's history is closely linked to the discovery of oil. Moreover, the city's agricultural roots seem to have been swept away after the discovery of oil. The discovery of oil is often associated with modernization, and so, as I will explain in later chapters, the changes and wealth generated by oil were experienced as a privilege by the local people of Schoonebeek.

It is clear that both jaknikkers and oil extraction are inextricably linked to the concept of what it means to be from Schoonebeek. One can find souvenirs of oil extraction everywhere in the village. Even in the local grocery store, I could spot a sausage with a stamp attesting to the presence of a jaknikker. Aside from the immediate feeling of surprise that ensued, I believe that the material found during my fieldwork provides a visual representation of inhabitants' views on oil and the reciprocal relationship that was established between residents and NAM employees.



Sausages with pumpjack in Schoonebeek. Picture taken by the author

Unlike Schoonebeek, the material and artistic representations I found in Appingedam aim to portray a highly critical narrative about gas extraction. The identity of Groningers seems to have been strengthened after negative experiences related to gas extraction. In the next section, I will analyze the material culture and artistic production I saw in Appingedam by reflecting on local identity and the way experiences about extraction are told through art and material culture.

Art, suffering and identity in the Groningen region

In Groningen the kind of artifacts and artistic-popular images I found mainly represent criticisms of gas extraction. The Groningen gas field continues to be one of the most intense energy debates in the Netherlands. Initially, extraction began in 1959, when the Slochteren field in Groningen was discovered by NAM. Currently, the Groningen field is the tenth largest gas field in the world and is a major resource for the economy of the Netherlands. Since the first extractions, the Dutch government has relied on this resource firstly to supply gas to the entire country and secondly to sell it as an export product. However, in addition to its economic benefits, the community living near these extractions has experienced serious health and safety problems. Discontent in the Groningen region began in the 1980s, but the situation escalated in 2012 when a 3.6-magnitude earthquake struck the village of Huizinge. At this point it was no longer possible for the company to deny the relationship between earthquakes and gas extractions and, after this series of events, the company's reputation was severely affected (Mouter et al. 2018). After experiencing the negative consequences of the earthquakes, the people of Groningen lost trust in the institutions and NAM. Even today, some people are still waiting for compensation for property damage, others are living in dangerous conditions, and some residents have had to relocate entirely because their previous homes were torn down. These shared experiences of suffering have provoked a strong reaction against fossil fuel extraction in local communities.

Disappointment with the state has led to acts of resistance based on community solidarity, including public demonstration against the extractions. Some acts of community resistance also involved artistic production, especially as a form of critique of the power structures imposed by multinational corporations. Both artistic production and acts of community resistance facilitated the creation of what Elizabeth Molenaar has called "oppositional identity" (2021:21).



Picture taken from the book: Een veilig huis een veilig thuis:

There are a lot of problems with the renovation and the move, so quite a few people have left us for that reason. And it's also quite difficult because they don't keep quite a few appointments. And it is also very annoying because um we are in a busy period and now we have to move because of those cracks and that is quite annoying. [mine translation]

Both the drawing and the caption are taken from the book, "Een veilig huis een veilig thuis: Tekeningen en brieven van kinderen en jongeren uit het Gronings gaswinningsgebied"²[A safe house a safe home: Drawings and letters by children and young people from the Groningen gas extraction area]. The book is a collection of children's drawings about their perceptions and experiences with gas extraction. The drawings were inspired particularly by focus groups and interviews with children between the ages of six and twelve and other young people between the ages of twelve and eighteen. They are all residents of the municipalities of Appingedam, Loppersum and Delfzijl, which are the main earthquake-sensitive areas. During one of my trips to Appingedam, Marco took my colleagues and I to a youth association called Jimmy's Appingedam, where he currently works as a social worker. Marco was my main gatekeeper in Appingedam; because of him I was able to contact several associations and conduct numerous interviews. During one of our visits to this association, Marco's co-worker gave us this book. The moment I started flipping through all the pages, I immediately became aware of how the experience of earthquakes has affected people's daily lives.

Through the studies conducted by Elianne Zijlstra (2022) and her colleagues at the University of Groningen, it was found that the young generation and teenagers in the Groningen area shows an increasing tendency to suffer from stress, anxiety and insomnia. According to their studies, these trends are higher in Groningen than in the rest of the country, and thus it is possible to associate the increase in health problems with earthquakes. The authors noted a common and generalized sense of uncertainty in all participants. Some of them reported having nostalgic feelings about their old home and felt very stressed after moving (Zijlstra et al. 2022). Young adolescents, on the other hand, harbored feelings of distrust toward the Dutch government, similar to the older generations. From the interviews I had with younger people, many of them confirmed these theories by claiming that institutions have not done enough to solve the earthquake problem in Groningen; although some of them, including Claudio, reported that the problem is not just about earthquakes but about the way the government manages environmental resources and social inequalities.

The gas situation has also contributed to the worsening perception of inequality between Groningen and Randstad. While the Randstad region is the economic center of the

² Zijlstra, Elianne, Mileen Cuijpers, Mijntje ten Brummelaar, Wendy Post, Inge van Balkom, and Boudien Flapper. 2019 "Een veilig thuis?". Rijksuniversiteit Groningen.

Netherlands, the Groningen region is seen more as a distant rural province. Not surprisingly, the negative attribute given to Groningers is "boeren" which means farmer and is indeed a stereotypical conception of the people of Groningen. One of my interviewees stated that: "The train from Groningen to Amsterdam is always faster than the train that goes from Amsterdam to Groningen." When I asked him to explain more about the meaning of this expression, he claimed that everything seems to work better in the Randstad region and that Groningen residents often feel isolated from the rest of the nation. He explained to me that people in the Randstad are wealthier, while Groningen seems to be a more isolated and poorer area. Whilst discussing these issues, Elisabeth Molenaar stated:

This province, even though it was once part of the Hanseatic League, developed very differently and quite apart from the densely populated and rich political and economic centre of the country in the west, called the Randstad. Instead, it remained a mostly agricultural province. Groningen province currently houses some of the poorest people of the Netherlands. Social hierarchies developed based on this geography of wealth and power, exhibiting centre–periphery and rural–urban antagonisms – within the province between city and Ommelanden and nationally between Groningen and the Randstad. (2021:135)

As noted by Dipesh Chakrabarty (2009) in "Provincializing Europe", as Western countries are the center of the world economy often Southern countries are perceived as mere peripheries. There seems to be a cross-cultural tendency to neglect peripheries, which usually lack good labor infrastructure, social services, and public transportation. These factors contribute to increasing inequality and economic imbalances between centers and suburbs. Using Chakrabarty's theory, I argue that these inequalities are also present in the Netherlands, despite being one of the richest countries in Europe.



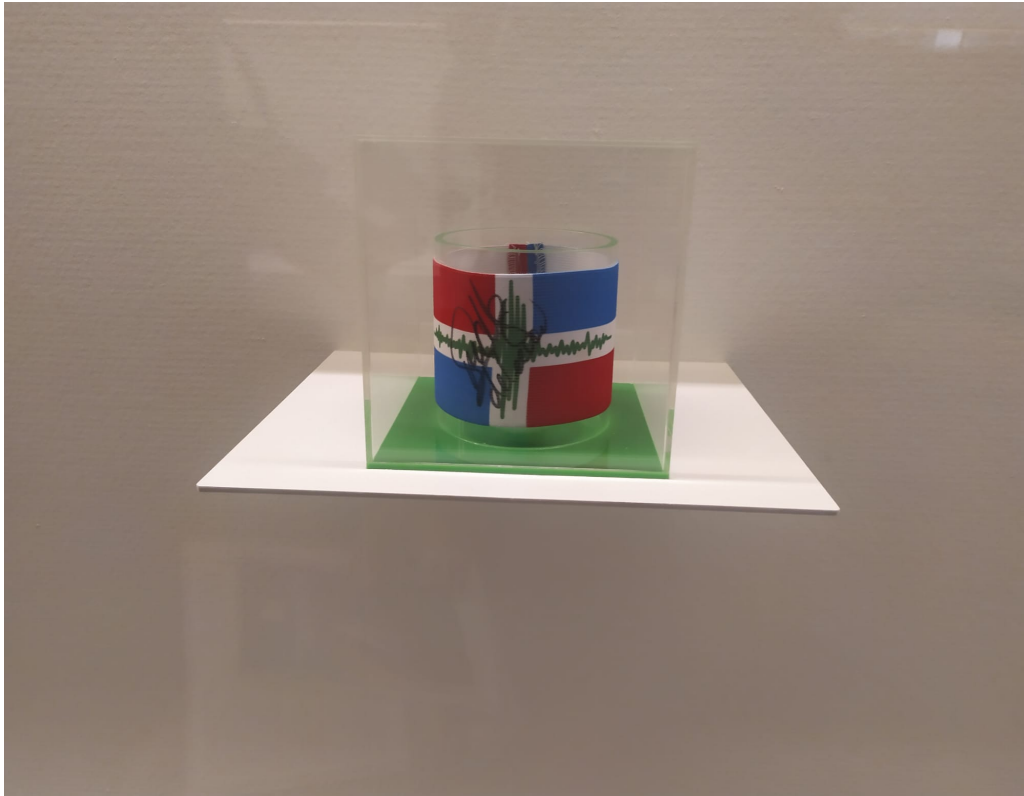
Image taken from the journal: "Groninger Bodem Beweging". Picture taken by the author

This caricature I found in a local library in Appingedam represents the unequal power relations between Den Haag and Groningen. Another important element of the image is the exploitation of gas resources by politicians, represented by the man in the suit and tie. Often, during my fieldwork I heard many comments about the differences between the Randstad region and Groningen. Indeed, the North of the country is home to the poorest population in the Netherlands (Molenaar 2021). These differences have been exacerbated by gas extraction. In the cultural materials I have collected during my research, resource exploitation by Den Haag politicians is often a recurring theme. Some Appingedam residents reported to me, "If this [earthquake] had happened in Den Haag, I am sure that the government would have solved it immediately." In her case study on Groningen, Elisabeth Molenaar often reflected on the relationship between the Randstad region and Groningen and stated:

“The earthquakes have aggravated previously developed feelings of marginalization, of disenfranchisement and of being governed by far- away and uncaring leaders.” (Molenaar 2009: 137)

Especially after the earthquakes, national energy policy has become an increasingly pressing issue. Many people in Groningen are still struggling for safe housing and financial compensation and essentially feel abandoned by the institutions. This feeling of abandonment has fostered the creation of an oppositional identity as a form of resistance (Molenaar 2021). For this reason, people in Groningen prefer to use their regional flag during national celebrations rather than the Dutch flag (Molenaar). Behind this symbolic behavior, one can observe a more complex struggle that involves feelings of belonging and identity. The experience of suffering in relation to the earthquakes helped to strengthen their regional identity and reshape it in more unexpected ways (Molenaar 2021).

During my fieldwork in Appingedam, I saw many Groningen flags hanging everywhere, outside houses, in people's kitchens, or outside bars and stores. As I explained earlier, Groningers already perceived Groningen as a separate entity from the Dutch state mainly because of the economic and geographical distance separating them from Randstad; the earthquakes and all of the negative consequences that followed exacerbated these feelings of separation. Therefore, just as the Groningen dialect and *bitterballen*- a typical dish of the region - are fundamental components of regional identity, so is the shared experience of suffering in relation to earthquakes. The change in identity must be considered one of the population's responses to oil extraction and can be seen as one of the direct results of the negative experiences of the inhabitants of those areas.



Groningen flag with the symbol of the earthquake. Picture taken by the author

In this sub-chapter I analyzed how fossil fuel extractions change perceptions of identity in Appingedam. Especially, I reflected on how these unequal power relations are reflected in the material cultural production. In the next section instead I will discuss about how often the values proposed by the company are propagated through the use of material culture and, furthermore, I will analyze how some residents in Schoonebeek have internalized those values in their daily life. While looking more closely at objects and art production, I will explore how the relations between NAM and residents is incorporated on a personal level.

“I am a proud Nammer”

The second interview I did in Schoonebeek was with Giovanni and Marianna. They are a married couple on their seventies and have two sons and three grandchildren. Giovanni is an ex-NAM worker who likes to spend his free time making artwork such as paintings, coasters, and miniatures refiguring oil pumpjacks. Before meeting with him, I had casually seen his artworks in one of the most popular clothing shops in Schoonebeek. In this shop the owner used Giovanni's artwork as decoration, and so I asked him to provide me with further information on the person who had created the artwork for him. The town is very small, thus it was not difficult for me to get Giovanni's contact information. A few days later, I arranged an interview with him in one of the local shops in the main square. When I arrived, Giovanni and his wife Marianna were both already there waiting for coffee. As soon as I saw them I immediately liked them, perhaps because their white hair and kindness reminded me of my grandparents in Italy. I really appreciated the tenderness they had for each other. Every time one of them would stop talking, the other would finish the sentence. For me, it was simply beautiful to witness their harmony. As soon as I sat down, Giovanni immediately pulled out some presents for me from his backpack. These gifts were small miniatures of pumpjacks. The passion Giovanni had for his work is clearly visible in the details and care he put into these miniatures. They look exactly like the pumpjack that stands as a monument in the central square of Schoonebeek. His wife proudly said: “He spend lots of time with that, every small detail he did it by himself”. The most impressive craftwork he showed us was another bigger miniature that could move and could make the sound of the pumpjack. Moving from one object to another, Giovanni shared his memories and recollections of his four decades of service to NAM. During one of our talks, he said: “Ik ben een trotse Nammer” [I am a proud Nammer].



Miniatures of pumpjack.
Picture taken by the
author.



Talking to Giovanni was another confirmation of the kinds of close relationships held between NAM and Schoonebeek, and the importance that the “jaknikker” plays in the formation of the identity for the people in Schoonebeek. Symbols in general are fundamental elements in the formation of cultural identity of a determined social group. Giovanni, like many other people from NAM I have talked to, was born and raised in Schoonebeek. As reported by Veenker and Vanclay (2021), the company provided many services and infrastructures to the inhabitants and, furthermore, NAM workers could benefit from many other extra facilities such as swimming pools, football fields, and tennis courts. Besides reinforcing ties among workers, many of my interviewees involved with the company reported that they used to leave their kids playing together at the swimming pool made for NAM workers. For them, that represented a safe space where people with the same background could share similar activities and eventually spend time together with colleagues and family. Therefore, the social environment and community values became part of the feeling of shared identity that Giovanni defined as an integral part of being a "Nammer”.



“Bierviltje” designed by Giovanni. Picture taken by author

These shared values were integrated into the work sphere to strengthen the feelings of identification and sense of belonging, which are indeed important for the stability of the

company. In his ethnography of Sheffield industry workers, Massimiliano Mollona (2009) reported how important informal moments are in reinforcing relationships and ties between workers, and argued that often informality is not only important for workers' social relationships but also for reinforcing the relationship between workers and companies.

Social relationships in general play an important part in shaping labor relations. As demonstrated by Richard and Rudnykyj (2009) in "Economies of Affect", social values contribute to the firm's economic well-being while facilitating the subjectification of workers to the company. In a similar vein, Kathleen Millar (2014) described the work circumstances of catadores in Brazil and wrote about "relational autonomy". Essentially, she interpreted the concept of relational autonomy as the people's freedom to arrange their work and timing according to their family's needs. In the case of the catadores in Brazil, their work, besides providing them an economic income for their families, also allowed them to sustain their social relationships. I associated this theory to the words I heard during the interview with Giovanni and Marianna. In Giovanni's case, his work at NAM allowed him to provide to his family with economic stability and a safety network within the town. In addition, he could also enjoy some of the privileges provided by the infrastructural developments NAM did in the town. During the interview even Marianna confirmed how important Giovanni's employment was for their family's wellbeing. She often said that the salary at NAM was very generous and that thanks to Giovanni's work they could afford higher education for both of their children.

"One of my children is now a doctor in Amsterdam, the other works for a famous tech company. Especially in the old times, we could afford to have a good quality life thanks to the NAM's salary. Maybe NAM it's not that good in Groningen, but in here we cannot complain about what they gave it to us. Before oil this town was very poor. After oil we became wealthy...if you wanted a big car, you could buy it!"

The account I have just provided from this interview is an example of the personal and positive experiences that people like Marianna and Giovanni have had with NAM. Because of these positive experiences, the cultural and artistic heritage created by NAM is widely disseminated in Schoonebeek even outside of museums. However, in Giovanni's case, these "jakkickers" also represent his personal life story. As reported by Sarah De Nardi (2014), objects can also have sentimental value. In her analysis, she focused on the memory narrative of Italian and British resistance activists during World War II. In her texts, she focused on how objects and emotions are linked by a "mutually constitutive symbiotic relationship" (2014:445)

in a personal narrative. Adopting this point of view, I observed pump-jacks as objects that may also have affective as well as economic value.

In Giovanni's case, his miniatures represent his personal memories from his time of service at NAM. The effort and time he put into these miniatures is related to the attachment he has toward his work. During the interview, he told me about working for many years at the Schoonebeek oil pumps. His eyes were full of emotion and nostalgia when he talked about the past. From his words I could also see the kind of devotion he had for his work. Mette High (2019), analyzing the case of gas workers in Colorado, studied the subjective motivations for workers to apply for energy companies. The author examined workers' basic motivations and discovered a number of connections between energy and ethics. By analyzing workers' personal statements about their occupations, she then discovered a substantial association between workers' ethics and their devotion to the task versus the task they were performing within the organization. She pointed out that some of the reasons why people join a company are related to their inner motivations and religious views. This multiplicity of factors certainly affects the way people perceive their work and their relationship with companies. In this case, as I will explain further in later chapters, the relationship between the people of Schoonebeek and NAM is the result of a dialectical process that has lasted many years and has been built by both sides. Through its interventions in the social, artistic, and economic spheres, NAM has ensured a good relationship with the local people that has allowed the company to continue its oil operations without any complaint from the local population. This, together with social projects and compensation, has allowed the company to have a good reputation.

Conclusion

In this chapter, I reflected on how fossil fuel extractions affect the cultural and historical identity of communities living near extraction areas. I discussed these factors through an analysis of artistic productions related to oil extraction in order to bring the reader into the context of my ethnography. In addition, by looking at the creation of objects, I reflected on how people internalized their relationship with NAM through the production of material culture. In the case of Schoonebeek, artistic production is linked to a positive image about the extractions, while in the case of Groningen, as I will further explain in the next chapter, art and popular culture are linked to the negative experiences related to the earthquakes caused by gas extractions.

Chapter two: Corporations remaking the social: Schoonebeek's perspective on oil extractions

From a farmer village to a modern town

“Before the oil we were only farmers... poor people. Now Schoonebeek is one of the richest villages of the Netherlands and we are proud of that. What should I tell you more?! My dad worked for NAM for many years. NAM did many things good in here, we had the swimming pools, football grounds, schools. As a child of an ex-Nammer I can tell you that we had everything we needed, and that NAM has been good to us and to Schoonebeek”

-Luna, Schoneebeeek, April 2022-

In this chapter I will reflect on the company's social strategies implemented by NAM in Schonebeek and their social and environmental implications. First, in this sub-chapter I will examine how NAM has changed the social structure of the city through infrastructure projects that have both improved Schonebeek's connections with the outside world and which, above all, contributed to the modernization of the village. Furthermore, these projects such as those included in "De Boô " have certainly changed the way of life of the inhabitants and allowed them to access services they had never seen before. In the second section, I will instead reflect on how the face-to-face relationship has helped the company to establish good relationships with the inhabitants that have proved beneficial to both parts, especially in view of the continuity of the extractions. In the last section, however, I will examine how the perception of environmental risk is influenced by the relationships that the inhabitants have with the company and how this relationship sometimes obscures the real environmental problems behind oil extraction.

Like Luna, many residents interviewed in Schoonebeek have a positive attitude toward NAM. I met Luna in one of Schoonebeek's flower stores. She is now on her forties and she was born into a family of "Nammers". Therefore, her views about NAM were strongly influenced by her subjective experience as the daughter of a NAM worker. Her father worked in the oil fields and so she could often take advantage of the tennis courts and swimming pools provided by the company. In essence, NAM is linked to the positive memories of her childhood. In the excerpt above she claims that "NAM is good here" and, although she is aware of the gas situation in Groningen, she still thinks that NAM in Schoonebeek has done "everything right." This kind of double view of NAM is a topic that will recur often in this text.

During interviews, we discussed the changes made by NAM and how they affected the lifestyle of the people of Schoonebeek. The village underwent some major radical changes after the discovery of oil fields; in fact, since then, the villagers grew wealthier and the town became more connected to the rest of the country. The production of oil also grew stronger after World War II; new infrastructures were installed to facilitate the oil trade and new jobs were created to support large-scale oil production (Veenker and Vanclay 2021). In addition, local citizens were able to benefit from new NAM-sponsored infrastructure and services, including "De Boô." In 1949, "De Boô" was the recreation center for NAM employees. At this recreation center, NAM employees could take advantage of various company-sponsored facilities such as swimming pools, playgrounds, and schools (Veenker and Vanclay 2021). Schoonebeek residents saw this kind of infrastructure as the premise of modernity (Nikhil et al. 2018) and perceived them as a privilege. The swimming pool, for instance, was a recurring theme during my fieldwork. Many Schoonebeek residents would get nostalgic while remembering the old times when whole families could go and enjoy their days at the pool. One middle-aged gentleman told me with a smile, "Sometimes I pretended to be the son of a NAM worker to get in, no one ever kicked me out. In those days I had the best time of my life". This sentence is another demonstration of how important these projects were in people's daily lives. These new facilities represented people's ideal of the "good life".

Today, De Boô is the NAM training center. It is a very bulky building on the outside and, like the main church in Schoonebeek, is one of the most important venues in the country. The building is white and gray and it is surrounded by glass. On the surface this building looks impenetrable, and indeed it is, at least for an anthropologist. To get inside you must go through two doors and you can only enter if the chief director approves. NAM has sponsored many infrastructure projects in the city such as the NAM training center, new houses, and educational centers. Even today, NAM is very much involved in the city's infrastructure organization. There

are many visible buildings in the city from which NAM engineers can control oil operations. To outside eyes, they look like control towers. The first time I entered one of them was because I was escorted by one of my interviewees. Both the towers and the pumps have become the main attractions in the village.

Over the years the company has changed not only the physical appearance of the village but also the economic and social aspect. Companies act upon society and local communities in many ways. Through their material presence and sponsorship of social projects they permeate the various spheres of society and are able to reshape the lifestyle and values of communities (Rogers 285). Through material production and participation in social projects, those petroleum companies can gain legitimacy for their projects. Importantly, NAM has also ensured a regular presence in the city through sponsorship of museums. Therefore, the company is practically integrated into the daily lives of Schoonebeek residents in every aspect of life.

The discovery of oil changed people's lifestyles and certainly improved Schoonebeek's connection with the outside world. This was mainly due to the construction of new roads created to facilitate the transportation of oil (Veenker and Vanclay 2021). In this way, from an isolated farming village, Schoonebeek became one of the most connected and wealthy villages in the Netherlands (Veenker and Vanclay 2021).

However, NAM not only contributed to infrastructure relations and the creation of good connections but also reshaped people's social relations. NAM, through the creation of new schools, playgrounds, and housing projects, created a network of social relations that proved useful for the company to build peaceful relationships with local residents. As I will discuss in the next part, the oil workers have become increasingly involved in the community and have successfully merged with local residents. These social relationships, as I will explain, have proved effective for the company to obtain the social license to operate in the territory.

The importance of face-to face relations in the building of social strategies

"We understood each other, there were no problems. If there was a problem, we would call a meeting with us and people from NAM to discuss it. We had regular meetings and could easily solve things. I had a friend who worked there for many years and we are still very close friends. "

Ciro, Schoonebeek, March 2022

NAM used to meet regularly with the local inhabitants to discuss issues related to oil extraction. These regular meetings, alongside NAM's direct participation in social and infrastructure projects such as new schools, houses, and other facilities, sponsorship of local museums and especially the compensation system, are all part of the social strategies implemented by NAM (Veenker and Vanclay 2021). In most cases, these strategies help to avoid friction with local communities and gain legitimacy. However, the effectiveness of the social strategies was implemented by the face-to-face relationships established between the people working in the company and other residents. This excerpt is the result of an interview I had in the home of a 70-year-old farmer in Schoonebeek. He told me that he was also one of the members of an association in Schoonebeek called H.C Sheltens. In this association, he represented farmers at public meetings with NAM. He and members of the association were often invited by NAM to these public gatherings, which would usually take place six times a year. During the interview, I asked him to tell me about his experience with NAM and he told me about the positive experiences he had during the years he was involved with the association. Among the factors we discussed, he told me that during these public-meetings they would discuss the compensation farmers were supposed to get from pumpjacks being installed on their land. During the interview, he often reiterated how efficient NAM had been in ensuring that there were no disputes between people. Specifically, he was keen to specify that *"Everyone would always get the same amount of money"*.

Face-to-face relations largely facilitated the creation of relationships of trust, while conversely, bureaucratic impersonal systems can possibly increase the distance between people (Koch 2014). In the case of Schoonebeek, the distance between NAM

and the residents was reduced due to the fact that NAM was able to penetrate throughout the social fabric of society. In essence, local people knew and experienced NAM through their relationships with its representatives.

Although the current situation is somewhat different than what it was in the past, even today people may know a neighbor or family member who works for NAM. This proximity has increased the friendly relations between the two. The formal and informal relationships that have been established between residents and NAM are also part of the business strategy implemented by the company to gain acceptance from local people (Veenker and Vanclay 2021). This trust-building process is related to the concept set forth by Wolf (2001) in his definition of "instrumental friendship." While he did not exclude the existence of real kinship relationships, he noted how kinship systems are often used to satisfy economic purposes. In essence, he argued that the absence of conflicts can facilitate economic exchanges and that the existence of friendship relationships can prove convenient for both companies and customers.

To avoid conflicts with local inhabitants, NAM implemented many social strategies. The company was fully aware of the needs of the population and acted accordingly. For instance, Schoonebeek is known as a religious community and hence NAM stopped its operations for at least a few hours during Sunday morning to allow people to go to church. Most importantly, it provided compensation for those who had oil reserves on their private fields (Veenker and Vanclay 2021). As I mentioned earlier, the company firstly made sure that the compensation was divided equally among everyone and, secondly, to ensure a lasting and peaceful relationship with the inhabitants, the company decided not to buy the land from the landowners but preferred to give compensation for rent and monetary loss (Veenker and Vanclay 2021). Despite the very high compensations, this strategy proved to be useful in avoiding public discontent. One of my interlocutors told me that some Schoonebeek residents use compensations as their main source of income. The exact amount of money received is not yet clear to me³.

However, as Mauss (2002) noted, gifts are never given casually, and always need reciprocity. Focusing on the case of Schoonebeek, it is important to remember that while it is true that the residents can benefit from high compensations, it is also certain that the company,

³ An interviewee reported that his brother receives annually 3000 net per year by NAM. However I could not find further information on that.

by avoiding people's discontent, can benefit from a good reputation that has allowed it to operate more freely and obscure the negative environmental side of extractions.

While in this section I have examined the kind of social strategies implemented by NAM and the type of positive impact they have had on the people in Schoonebeek, in the following section, I will analyze some of the negative consequences of this relationship of trust and describe in detail how oil extractions affects the natural environment.

Relationship of trust and environmental implications

The compensation system is part of the company's social strategy (Veenker and Vanclay 2021). Those social strategies were indeed connected to the need to obtain legitimacy from the local population. Nevertheless, it can be argued that social strategies not only help the reputation of the company with local societies, but they also contribute to the company's financial reputation.

To follow the corporate social responsibility (CSR) protocol, which includes shared values, social and environmental concerns, and human rights⁴, can only be beneficial for the company's reputation (Tianjing Dai 2013). Reputation is indeed important to avoid possible competitors and also to ensure a better image for the company (Aggarwal and Kadyan 2014). Certainly, those are key factors to facilitate the economic growth of the company (Price & Lawson 1992). The companies that pollute the world most, such as Shell, Ferrero, and Rio Tinto, seem to employ extensive CSR strategies to reduce the impact they have on the environment. Nonetheless, despite the application of CSR strategies, companies such as Shell have been criticized worldwide for their polluting effects.

CSR strategies might obscure the kinds of negative effects such companies have on the environment. This claim was demonstrated by Anthony Anagboso (2011) in his case study of Shell in Nigeria, in which the company, despite the application of CSR strategies, has contributed to environmental degradation and the increase of social inequalities among the

4

European Commission .2011. 'Recommendations to the European Commission by the subgroup on "CORPORATE SOCIAL RESPONSIBILITY" of the Multi-Stakeholder Platform on the Implementation of the Sustainable Development Goals in the EU'. Available at: https://ec.europa.eu/info/sites/default/files/recommendations-subgroup- corporate-social-responsibility_en.pdf . Accessed: 10-11-2021.

local population. In that case, the company acted through specific and localized social strategies. Firstly, the company gained legitimacy from the local government and religious associations by engaging in various volunteering projects, and secondly, it incorporated local values into staff training. In essence, Anagboso emphasized how CSR strategies and company values are reshaped according to the local context and cultural worldviews. This shows the company's reliance on the social and cultural sphere.

In the case of Schoonebeek, NAM's social strategies have allowed the company to continue drilling without major disruptions. At the same time, those strategies obscured the effects that oil extraction could have on the environment. A notable example of the efficiency of this relationship of trust occurred when, in 1976, a serious accident occurred during which a well valve ruptured due to high pressure. The well valve could no longer handle the pressure, and a "splash" caused a large explosion and, subsequently, the dispersion of oil on the ground (Van Gool 2016).

Ottavio, one of oldest men I met in the village, described the moment of the accident and stated: *"In those days the village was all covered up of black smoke. NAM cleaned everything up in a few days and we didn't have to worry about anything anymore"*. Although he said that they could not leave their house for many days, he could foresee people from NAM "working hard" to "repair the damage". According to most of the people I interviewed, within three months the spill was removed and everyone affected were properly compensated by NAM (Van Gool 2016). At that time, NAM had already ensured a stable trust-relationship with the inhabitants which allowed the company to avoid complaints from the rest of the population (Veenker and Vanclay 2021).

Apart from minor harms such as the one described, the main environmental problems in relation to oil extractions lie in the chemicals used for extraction. It is important to remember that most of the chemicals used to separate oil from water—such as hydrogen fluoride, hydrochloric acid, methanol, and benzene—are highly polluting (Havermans 2022). This set of chemicals is used to make oil less viscous and thus facilitate the extraction process. According to the people I interviewed at NAM in Schoonebeek, the injection of wastewater from the oil fields cannot take place in the vicinity of the oil fields as it would mix with the oil again and create disruptions to the operations.

Most of the wastewater from Schoonebeek is transported by pipeline and injected into empty gas fields in Twente, which is in another region somewhat distant from where the Schoonebeek field is located (Keukenkamp 2022). This has caused a reaction in the local communities of Twente, where the activist group from "Stop Afvalwater Twente" [Stop

Wastewater in Twente] has been protesting since many years against these re-injections claiming that the dirty water is polluting their land. However, the general perception in Schoonebeek is that oil extractions are per se not problematic to the surrounding environment. This idea is highly influenced by the fact that residents do not experience the bad side of extractions in their everyday life and, moreover, these issues are far away from them. In assessing the risks of the extractions they first and foremost take into account their personal experience with NAM, which, according to the data I collected during my research, has mostly been positive.

In Schoonebeek, they do not consider the risk of oil energy because they have never experienced any major problems due to fossil fuel extraction. Their relationship with NAM has partly obscured the broader side effects of oil extraction. Speaking to a recently retired NAM employee about the risks of wastewater he said, *"You can make a fuss about a lot of things, but today these environmental activists are against everything.... There are only a few people in Twente, but they have created a big problem."* To my question about what would happen if they re-injected the chemicals in Schoonebeek, he said that in the past they re-injected them in the village, near citizens' homes, and that there were no problems. Toward the end of the interview he said, *"People are afraid for nothing.... But the risk is 1.99 percent. Here we see that things are working well so we believe everything is fine."*

As he explained earlier, Schoonebeek residents are not generally wary of oil extraction; on the contrary, they perceive it as positive. While NAM employees have a positive perception of extractions, residents in Twente say they are very concerned about the polluting effects of wastewater. Chemicals and wastewater are usually discharged into unused gas fields. This process, however, can have serious effects on both people and the environment; in fact, both soil and groundwater could be at risk of contamination (Keukenkamp 2022). Added to these risks are those of accidents.

In past years, several leaks have been discovered in underground pipelines, the last one occurring last year in a pipeline near Rossum-Twente (Keukenkamp 2022). In NAM's report from 2021⁵, the causes of the incident are attributed to a pipe deformation due to unexpected pressure, however, this incident is not described as a serious accident that can cause an

⁵ Location Rossum-Weerselo-2 Well integrity investigation of well ROW-2
https://www.nam.nl/news/2021/nam-response-to-findings-sodm-research-row-2/_jcr_content/par/textimage_2039554955.stream/1624877297291/fa5d51227c360f0bbdf7f52342f45aabf83cd374/row-2-well-integrity-investigation-may-2021.pdf

environmental disaster. In fact, the report explains the dynamics of the accident and that the water injection occurred deep in the saline layer, so the leakage could not have had a major impact on the environment. Although the risk of groundwater contamination is minimized by the fact that injection takes place below the clay and sand layer (Medimurec et.al 2020), there are still other risk factors that deserve consideration such as ground breaks and soil subsidence (Gambolati and Teatini 2015). This factor was confirmed by both the geologist I spoke with and an interview with a NAM employee, who admitted that it is not possible for humans to predict ground movements.

"If there is a gas or oil spill on the surface you can see it, but underground you can't predict what happens underground. I have seen many leaks, and I can assure you that not all of them are dangerous, especially if they are handled properly. But I can also tell you that you cannot completely predict risk; risk is basically the sum of the probability of certain consequences multiplied by the severity of those consequences, and that's how risk works. If I drive on the highway at high speed, there is a higher percentage of risk that something bad will happen. In this case, the consequence is much more serious, and this is part of the risk that can be determined in advance. On the other hand, there are other things that cannot be calculated. Banks can pretend that they have risk models with which they can calculate the probability of something bad happening, but that is not true because the future cannot be known with certainty.

However, these kinds of concerns have never surfaced in the Schoonebeek community, and overall, NAM has ensured an increasingly high standard of living, which is why the company is so popular in the village. As a result, environmental issues in this context have become secondary. The social strategies have worked so well that many people trust the company to the point that they do not doubt its operations. This is the main reason why most of the residents did not question the company in terms of environmental issues. Although these problems were present, NAM has been efficient in covering them up and, more importantly, in giving large sums of compensation to the people of Schoonebeek who, in some cases, have used it as their first source of income. Moreover, the informal and personal relationship established between NAM and the villagers has greatly influenced the way people think about the pros and cons of fossil fuel extraction. Although many people I interviewed said that the

Dutch government should invest more in sustainable energy, they still see oil as part of an inescapable future precisely because it plays an important role in their daily lives (Hein 2018).



Pipelines at the German border in Schoonebeek. Picture taken by the author

Conclusion

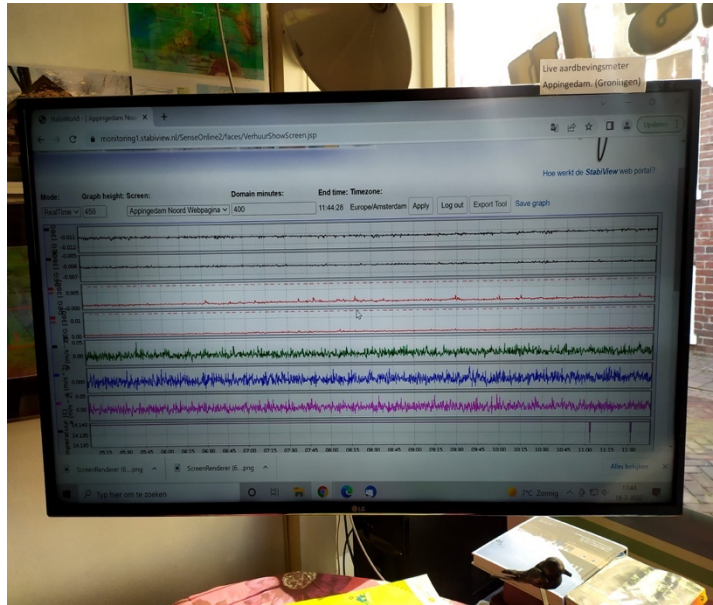
This chapter has discussed how company engagement in the social and economic life of the town has ensured a peaceful relationship with the inhabitants of Schoonebeek. Through social strategies (Veenker and Vanclay 2021), such as compensation systems, and through the sponsorship of museums and new infrastructures, NAM ensured a peaceful relationship with the inhabitants of Schoonebeek. Those strategies are always accompanied by face-to-face relations; people from NAM often hold public meetings with local associations and NAM workers are also often themselves inhabitants of Schoonebeek. This “personal” relationship between the two parts, the company and the inhabitants, became beneficial for the wellbeing of the company. Furthermore, I described how the face-to face relationships in Schoonebeek have facilitated the legitimization of oil extractions. The peaceful relationships between NAM and Schoonebeek inhabitants are mutually constitutive, and they were built over time by both sides. These social relations, however, can often obscure the environmental impact of petrol-companies. The inhabitants of Schoonebeek are generally satisfied with NAM and they do not see any problem with the extraction. Therefore, their personal experience with NAM allowed them to form a positive overview of fossil fuel extraction and most of the people I interviewed do not feel the need to protest against it.

Although, as previously discussed, companies such as NAM and Shell are the most pollutant companies in the world. In contrast, the gas extraction situation in Appingedam is radically different from that in Schoonebeek. In Appingedam, residents have stated that they are disappointed and, more importantly, feel dispossessed of the resources of their land by both NAM and the Dutch government. Unlike Schoonebeek, where the fossil fuel industry has brought wealth and job opportunities for society, fossil fuel extraction in Appingedam seems to be far removed from the promises of modernity and economy. Therefore, Appingedam residents are against the extractions and are responding to it through many different acts of resistance, as I will unpack further in the next chapter.

Chapter three: Perception of risk and Petro-violence in Appingedam

“Ons Laand Ons Lu” (*Our Land, our people*) against corporate knowledge

The first interview I did in Appingedam was fairly casual, I began by interviewing Antonio, an ex-police officer and one of the founders of a local association called 'Ons Laand, ons Lu' [Our Land, our people in Groningen's dialect]. He then showed me a seismograph and said: “You see, there is constant movement in here, before gas only water was moving.” But, when I asked who bought the seismograph, he replied: “The people of this association, we bought it ourselves. We don't want money from Shell or from the government because then we are tied to their hands”. Antonio is a proud Groninger who has always lived in Appingedam. This year his house will be torn down because of serious damages brought on by the earthquakes. “My house is thirty years old and now is going to disappear within a few months, and that it's my house it's not the house of the government or NAM, it's my house! I have been working hard to build it... My children grew up there”. Despite the situation, his voice was very calm and still. On the other side, it was impossible for me not to feel moved by his story. He went on to say: “You know this is not a government for the people, in here it's all about money...The soil is rich but we are not because the money all go to Den Haag ...If they want to continue extracting gas because of the situation in Ukraine then fine, but at least they have to give us what we deserve.”



Seismographer . Picture taken by the author

In this chapter I will reflect on the various forms of violence by NAM. In particular, I will focus on the kind of violence suffered by the residents of Appingedam, who besides the adverse consequences of the earthquakes had to deal with the denial of the institutions in regards to their suffering. Essentially, they felt abandoned and alone in dealing with the suffering and damage left by the earthquakes. As I mentioned earlier, some citizens had to change their homes, while others are still waiting to receive compensation to make their homes safe. In the absence of an adequate response from institutions, some residents of Appingedam have united against the presence of gas companies in their territories. In this section, I will discuss precisely the resistance enacted by Appingedam residents while focusing on the example of the Ons Laand Ons Lu Association. Next, I will discuss the perception of risk and violence as a result of the extractions. In this regard, I will focus particularly on the psychological consequences of earthquakes. In the third part of the chapter, however, I will mainly discuss how, after the gas extractions, residents' conception of their own territory changed. Molenaar (2001) introduced the concept of "resource colony," precisely because in Groningen people felt dispossessed and exploited by the gas industry and by the State. In the last part, however, I will discuss how the social strategies adopted by the NAM proved to be a failure in the context of Appingedam. Reflecting on this, I will discuss how the inhabitants felt deluded by the initial ideas of modernity and wealth.

Ons Laand ons lu is a non governmental association founded by several residents of Appingedam to help people cope with earthquake damages. In Appingedam, members of the association decided to raise their own funds to monitor ground movements, and above all, they decided to rely on their own knowledge to defend themselves and their homes against the threats posed by the petroleum companies. Now, people like Antonio can read seismographs and can predict earthquakes. During my fieldwork, Antonio told me that there would be a strong earthquake soon. A few days later, while I was returning to Utrecht, a 2.7 magnitude earthquake hit the Groningen region, with its epicenter in Loppersum, just 10 kilometers away from Appingedam⁶.



Ons Laand, ons lu from the outside and earthquakes records. Picture taken by the author.

⁶ <https://www.world-today-news.com/earthquake-with-a-magnitude-of-2-7-in-loppersum-sound-of-a-heavy-explosion-update-2/>

These earthquakes are not caused by natural events but are the result of gas extraction. As mentioned above, gas extraction led to the lowering of ground pressure, which consequently led to subsidence (Gossens 2017). The lowering of pressure is the main cause of the seismic events currently affecting the province of Groningen. The geologist I interviewed explained me the principle of subsidence by saying: *"Imagine that there is a balloon under Groningen that, as it deflates and loses air, causes the ground to lower"*. Because of this, all the buildings in Groningen were affected by the lowering of pressure and became unstable.

The first earthquakes occurred in 1986. At the time the government denied the correlation between these events and gas extraction (Mouter et al. 2018). Scientists like Meent van der Sluis had already predicted the long-term consequences of gas extraction before the first earthquakes occurred. Nonetheless, he was labeled as a fantasist and his scientific findings were considered as "assertions" by NAM (Van Gool 2019). Both the Dutch government and NAM paid little attention to these criticisms and decided to continue with extraction anyway. Only when an earthquake registered at 3.6 on the Richter scale in 2012, and houses became uninhabitable due to damage, did NAM have to take responsibility for what was happening. Before this earthquake, the issue had never been taken seriously by NAM (Mouter et al. 2018).

Scientific knowledge is never completely objective, and more importantly, the dissemination of scientific knowledge cannot be separated from power dynamics, especially if corporate interests are involved (Pelkmans and Rhys 2011). This argument is well captured by Alliegro (2014) in his book "Black Totem" – in reference to oil- , Alliegro makes a distinction between corporate and academic science. He wrote about a case-study in Basilicata, a region in southern Italy that is now at the center of many recent debates about oil extraction in the country. The region is known for its scenic beauty and ancestral towns such as Matera. However, the discovery of oil made by ENI—an oil company based in Italy—in Viggiano, Basilicata, has led to major changes in the lifestyle of communities living in the area. Many pastoral lands have been purchased by ENI to be used for oil explorations (Alliegro 2014). To justify its actions, the company implemented various social strategies and propagated the kind of scientific notions that emerge from what Alliegro called "corporate science." In essence, scientists and geologists employed by ENI often gave speeches during social gatherings to convince the local population of the "Val D'Agri" of the benefits of these extractions (Alliegro 2014). Similarly, in Appingedam, workers paid by NAM often went to inspect the damage to assess whether it was caused by the earthquakes or whether it resulted from structural problems

already present in the house. Antonio showed me some of the damage assessments done by NAM in Appingedam and said:

"You know, these kinds of picture books and everything else cost even more than the actual repair of the damage.... I know a family in Appingedam with two children, twins of seven years old; NAM sent someone out to fill out reports to assess the damage and guess what, they said the house was already too old and that the children were probably jumping so hard on the floor that the underneath soil was ruined. Or they said the children were using the bathroom too much and that's why the floor was damaged, can you believe it! Of course, they will never say the truth because they are not just ordinary engineers but they are paid by NAM and Shell."

Antonio.

As it can be observed from this excerpt, "corporate science" has once again prevailed over the interest of the people of Groningen. The residents of this region, particularly of Appingedam, have suffered various kinds of violence from these corporations. First, they have had to endure the denial of the environmental effects of gas exploration, and second, people's experiences of suffering have not been adequately acknowledged by institutions. Regarding resident's perception of the effects of gas extraction, I felt it was of fundamental importance to understand the perception of risk while considering people's lived experiences on the extractions. While speaking with residents of Appingedam, many people spontaneously talked to me about the earthquakes. They first began to describe the kinds of bodily sensations they experienced during earthquakes. Maria, co-founder of "Ons Land ons Lu" and Antonio's wife explained to me: *"With earthquakes you feel like a boom in your body. It's as if the earth explodes under your feet."*

In this optic, the body is a receiver that through direct experience can detect risk in the surrounding environment. Risk often has to do with natural consequences and with a feeling of uncertainty (Beck 1992). Nevertheless, people experience risk and respond to it in a variety of ways. At "Ons Land Ons Lu," volunteers had to acquire geological knowledge by themselves that allowed them to predict the movement of the earth and therefore to navigate the risk of earthquakes. According to my interlocutors, NAM did not properly notify the population in case of impending earthquakes, therefore, the people from "Ons Land Ons Lu" became responsible for keeping track of the earthquakes and eventually notifying the local population in case of earthquakes. In reference to the Fukushima nuclear disaster, Sternsdorff-Cisterna (2015) argued that during this time of crisis, people autonomously generated a set of scientific

knowledge that was separated from the scientific information supplied by the state, a process which he calls scientific citizenship. In the Fukushima nuclear disaster one of the nuclear plants exploded due a violent earthquake that triggered a tsunami. Consequentially, the plant released a large quantity of radioactive contaminants that affected the entire population of Fukushima. Cultivations, food, and the old houses located close to the plants were therefore no longer safe. Sternsdorff-Cisterna (2015) argued that the state did not provide the population with the right protection to safeguard them from radioactive waste. Sternsdorff-Cisterna (2015) describes how these people reacted to it by putting their knowledge into practice by circulating nutritious, non-toxic food. To manage the amount of poison in their diet, people planted their own vegetables and learned radiation science on their own. These independent groups had greater faith in themselves than in the government and their response to the crisis was independent of government intervention. By drawing on Sternsdorff-Cisterna's (2015) analysis of the Fukushima case, it is possible to identify many similarities to the case of Groningen, in which many people came together and invented their own survival strategy in response to the neglect they experienced from the institutions.

Experiencing violence

The risk of gas extraction is not only limited to the immediate physical sensation derived from the earthquakes. As I previously stated in the methodology section, the analysis of the social impact of the extraction cannot only be confined to the precise moment of the earthquake, but it must also involve a deeper analysis of the long- term consequences of gas extraction in the territory. On this matter, Simona Perry (2013) argued that people living close to gas fields may experience a variety of problems involving psychosocial factors such as chronic stress and depression. In her ethnography of Pennsylvania's Shale gas field she noticed how the extractions have had an impact on the community's health outcome at large. Her writings have been particularly stimulating for me when reconsidering the perception of risk as a key factor for my research. Perry, considering the lived experience of people, introduced the analysis of psychological factors as key elements in researching the effects of fossil fuel extraction on local communities. In my data collection, I treated the emotions of my interviewees as valuable data that have allowed me to reflect on the subjective experience of extraction. On this matter, I will report an excerpt from an interview I had with Anita, a young woman I casually met during one of my coffee breaks. She stated:

“This gas situation and the earthquakes are just draining us all. In our community seven people committed suicide in the last three years. This is a great number for such a small community like this one.”

Considering that suicide is a very complex topic involving a multiplicity of factors, it is difficult to try to understand the actual motivations that lead to suicidal actions. Nevertheless, it has been shown that the immediate results of and exposure to significant earthquakes can lead to stress-related health symptoms such as nausea, chest pain and musculoskeletal disorders (Dückers et al. 2021). Although these psychosomatic symptoms are usually temporary, the long-term psychological effects have been underestimated in research on the Groningen gas field. However, suicide rates in the Groningen region have been shown to increase after the first earthquakes, even though this trend has changed over the years (Dückers et al. 2021). Although a significant analysis of the correlation between suicide rates and gas extraction in Appingedam is beyond the scope of this thesis, it is still important to consider these general patterns when analyzing the long-term effects of fossil fuel extraction.

Increased stress levels can result due to a variety of factors. In this discussion, it is critically important to consider the other consequences of the earthquake and essentially what follows. For example, many people in Appingedam and surrounding villages had to leave their old houses because they had to be renovated following the earthquakes. Therefore, most people had to go to temporary housing provided by the government. It is important to note that in the Loppersum area, which is less than 10 kilometers from Appingedam, more than 60 percent of the houses were damaged (Dückers et al. 2021) and many people had to leave their homes for safety reasons.

During my research, I met several people living in temporary houses, and I personally saw some people busy with moving. In addition to the direct experiences in my interlocutors' homes, during my internship I participated in meetings with local associations. During one of these events, my internship coordinator Gertjan Plets held a meeting in one of the town's historical associations to discuss the history of fossil fuel extraction. The meeting was attended by about thirty people, both young and old from Loppersum and Appingedam. After the meeting, I had the opportunity to speak with a woman from Slochteren. She was a tiny figure with white hair and an elegant look. She immediately caught my attention because of the way she asked questions. She seemed very sharp, even though she was older in age. To maintain anonymity, I will call her Chavela. During our long chat she said to me:

"My daughter had to move house when she had two young children. She suffered from a bad burn-out and lost her job because of it, but no one notices. These are not visible damages like you see in homes, but they can still affect your life. She is better now, but some people never recover...."

Knowing how sensitive and personal the topic of earthquakes can be, I have always avoided asking direct questions. However, on that day Chavela wanted to share her and her family's stories with me. The types of physiological impacts left by gas extraction and earthquakes are now part of the cultural and individual history of every resident of Groningen. Even if gas extraction will cease, as stated in the official 2021-2022 report on the gas field⁷, the underlying soil is so damaged that earthquakes are likely to continue for many more years, as the geologist I interviewed confirmed during our talk. In addition, the same report states that many measures have been taken to repair the dams and that the region will contribute an amount of 50 million euros to resolve the deadlocks. The report states, "The most important measure remains the removal of the cause: the cessation of gas production."(2021:3) [mine translation]. However, the question of how the suffering of the people of Groningen will be paid for remains. The company will not be able to erase the past or the physical harm suffered by the people of Groningen.

This kind of violence, however, is a direct result of the failure of the social strategy and the reason why the local community was let down by NAM. In the case of Appingedam, the violence suffered by the citizens is not only characterized by the most obvious negative results of oil and gas extraction, but it also incorporates factors that are not always visible, as Antonio aptly confirmed during an interview: *"The cracks are not only those that can be seen, but also those inside the heart of the Groningers."*

These kinds of "side effects" from gas extraction experienced by the local population of Appingedam remind me of what Nixon (2013) has defined as "slow violence." In his definition he argued that slow violence is a violence that occurs "out of sight" (2013: 3) characterized not by spectacular events but by those which proliferate over a longer period of

⁷ Datum Betreft Vaststellingsbesluit Groningen gasveld 2021-2022
<https://www.rvo.nl/sites/default/files/2021/06/Ontwerp-Vaststellingsbesluit-gaswinning-Groningen-gasveld-2021-2022.pdf>

time. As an example of slow violence, Nixon talks about global warming and climate change, which end up having a greater impact on the citizens of the Global South and in general, on the poorest people worldwide rather than the global elite. In a similar vein, Michael Watts described Petro-violence as : “both ecological violence perpetrated upon the biophysical world and social violence-criminality and degeneracy associated with the genesis of petro-wealth.” (2001, 189).

This sense of degradation that both Nixon and Watts mentioned in their work is exactly what I encountered during my fieldwork, and I believe it peaks with the kind of violence associated with reparations. As I will explain in the next part of this chapter, compensations were a painful process for the people of Groningen. There have been several delays in the process, and NAM and the government have often denied claims.

The land is rich but we are not

The long-term effects of this type of psychological damage need to be analyzed over a longer period of time and not just in the immediate aftermath of earthquakes. Some of the most common problems, in addition to house displacement, come from stress related to compensation. Most of the people I interviewed said that compensation was not enough, or that the bureaucracy they had to deal with was long and wearisome. Many people interviewed said that the amount of paperwork they had to go through went on for months and sometimes even years before they could get compensation. Moreover, not all people are able to cope with this. Some people, for example, are elderly and may not be able to do the paperwork themselves. One of my interviewees, who is also currently employed in a gas company, said that from her perspective everyone received generous compensation and explained, *"Only those who are not capable or illiterate do not know how to handle these things."*

As this sentence shows, the compensation system has led to the exacerbation of social and economic inequalities. Appingedam residents also said that gas extraction destroyed community ties because individual compensation for property damage caused by the earthquake varied. This circumstance caused people to feel uneasy about the state and the company. In addition, this fact triggered rivalry and animosity among members of the same community. One of my interviewees, Anita, provided a persuasive illustration of this issue when she said, *"How would you feel if both you and your neighbor had cracks in your houses and one of you received 10000 to repair the house and the other 5000?"*

While the rest of the country can benefit from gas extraction, the people of Groningen have no rights to their land, and, moreover, the regional economy has been drastically impoverished over the past three decades. House prices have declined as well as job opportunities (Molenaar 2021). As a result, many young people are forced to go and look for work in the southern regions. This situation reminded me of the case study described by Allegro (2014) regarding the Basilicata oil fields in Italy. In his case study, Allegro described how the ENI oil company purchased a large percentage of land previously used by farmers. During public debates, ENI representatives argued that farmers should sacrifice their land for the "benefit" of their nation. Also, as shown in Allegro's book, the energy policies implemented by the Italian government have been beneficial to the nation's economy but at the same time have had a negative impact on the communities living near the extractions. The same situation has occurred in Groningen, where people cannot benefit from the resources of their land. One of the ways most of my participants understood this was through the mining law established after the Napoleonic Wars, whereby any ore found under the deep layers of soil is state property (Veenker and Vanclay 2021). For this reason, Elizabeth Molenaar (2021) called Groningen a "resource colony." The author argues that although the gas field helped boost the national economy, Groningers themselves did not benefit from it.

Failure of social strategies and disillusionment of modernity

As demonstrated in these subchapters, local people in Appingedam, and Groningers in general, are very dissatisfied with the way NAM and the government have handled oil and gas extraction. The reason for this has to do with the psychological trauma left by the earthquakes. In the case of Appingedam, NAM never integrated with the local population and people could only communicate with the company through impersonal and bureaucratic means that often ignored their needs. This fact undoubtedly led to a generalized sense of neglect and abandonment.

In contrast to Schoonebeek, the residents of Appingedam had no direct contact with NAM workers and representatives, and, in addition, gas extraction did not take place within the city. The only contact Appingedam residents had with the company was related to the negative effects of extraction. The failure of social strategies also had to do with the compensation system, which in Appingedam, unlike in Schoonebeek, was a painful and slow process that left people dissatisfied with the company. This dissatisfaction was directed at the institutions, and more broadly at fossil fuel extractions.

During one of the long chats I had with Chavela, a native of Slochteren—the first gas field ever discovered in the province of Groningen—she told me that when she was a child in school she was often told about this extraction and taught to be proud of it. At that time, she told me, the Slochteren gas field was considered something to be proud of. Again, the extractions have become part of the historical identity of Groningers, with the only difference being that the initial promises of wealth and prosperity have slowly been betrayed. As in the description of infrastructures in Peru by Penny Harvey & Hannah Knox (2012) where the construction of new roads was supposed to bring modernity to the country, in the case of Groningen the initial promises of modernity in relation to gas extractions have been disappointed by the reality of the situation.

Conclusion

In this chapter, I reflected on the perceived negative effects of gas extraction on the people of Appingedam. In the discussion, I have highlighted the psychological effects left by earthquakes and stressed the importance of the long-term effects occurring after the initial earthquake experience. Today, many people are still living in precarious conditions. Inspired by my interviews, I highlighted the sense of loss that people felt in relation to the extractions. In addition to the psychological trauma left by the earthquakes, residents felt a sense of abandonment by institutions that made them feel like a separate entity from the rest of the country. The initial denial by NAM, combined with the fact that many residents did not have easy access to compensation, was experienced as a form of violence. To discuss the psychological consequences of earthquakes, I used the concepts of Slow violence (Nixon (2013) and Petro-violence (Watts 2001) in order to talk about those invisible effects of gas extractions. This kind of “side effects” highlight the failure of NAM's social strategies, which did not consider local needs in the implementation of extraction operations. Unlike what happened in Schoonebeek, NAM never integrated with the population and there was never a face-to-face relationship between the two parties. As a result, NAM is considered an entity outside the local population and, consequently, gas extraction is no longer tolerated by local communities. However, the negative circumstances related to the earthquakes have inspired general reaction of resistance from the local community. Many residents have mobilized by creating associations and mutual support as a response to these forms of violence. For this reason, I interpreted those actions taken by the association "Ons Laand ons lu" as a form of

local resistance. In this context, it is important to emphasize the fact that negative experiences with NAM representatives negatively influenced public opinion in the Groningen region regarding gas extraction.

Final Conclusion

In this thesis, I analyzed how oil and gas extraction in the respective towns of Appingedam and Schonebeek affected the lifestyle of the residents. In the first chapter I described the first encounter I had in these places through the description and analysis of the objects and on the artistic production I found on fossil fuels. It is important to note that in Schonebeek most representations about fossil fuels depict a positive relationship between residents and oil extraction. This relationship is symbolically represented by the "jaknikkers," which represent an important part of Schonebeek's artistic and cultural heritage (Plets and Kuijt 2021). In the interviews I conducted, most of the interviewees confirmed the idea that oil extractions changed the inhabitants' lifestyle for the better, as they brought modernity and wealth to the city.

In contrast, the material found in Appingedam includes a very critical view regarding gas extractions. For the most part, the artistic and popular representations I found represent the negative experiences lived by the people of Groningen regarding earthquakes. Another factor visible from the material analyzed in Appingedam is the difference between the provinces of Groningen and Raanstad. It was clear from the results that the gas situation in Groningen has largely increased the social and economic inequalities between the two regions. This series of experiences related to the shared suffering left by the earthquakes also contributed to the creation of a separatist identity that Molenaar (2021) called oppositional identity. However, in both cases being described, the extractions changed people's lifestyles and their perception of cultural identity.

In the second chapter, I delved into the oil situation in Schonebeek by taking the perspective of citizens and that one of NAM workers. My findings first showed that NAM, from the beginning of its establishment in Schonebeek, has changed many infrastructural aspects of the country. For instance, in the village is possible to notice control towers, pumps scattered across the landscape and the former NAM recreation center-De Boô-which is now the NAM training center. From the beginning, however, residents have welcomed these changes as positive factors that have enriched the village. However, these changes were not

only involving the infrastructural side of the village but they also reshaped the social fabric of the village. In fact, facilities like the "De Boô" changed the way people related to each other and opened a common channel between citizens and NAM workers. However, NAM, in addition to creating infrastructure, also created other social strategies, such as the compensation system (Veenker and Vanclay 2021). Through their material presence in the social world, companies can indeed ensure legitimacy (Rogers 2012). All these strategies enabled NAM to have a good relationship with citizens. Residents, on the other hand, still have very positive feelings toward NAM, by arguing that the company has always been willing to listen to citizens' requests. However, this positive relationship between NAM and the citizens of Schonebeek has often obscured the negative implications that these extractions have on the environment, as demonstrated in the case of Twente. Overall, Schoonebeek residents are mostly satisfied with the extractions and say they have no problems with them.

In contrast to what happened in Schonebeek, residents in Appingedam are generally dissatisfied with the state and gas corporations. As I explained in chapter three, both social and economic inequalities were exacerbated by the earthquakes, due to gas extractions. My main focus on this chapter was on the psychological damages caused by the extractions and on the forms of resistance enacted by residents. I related these psychological repercussions to the concepts of slow violence (Nixon 2013) and petro-violence (Watts 2001).

However, in both cases described, the extractions have changed people's lifestyles and their perception of cultural identity. While in Schonebeek residents feel that their quality of life has improved as a result of the extractions, in Appingedam residents feel dispossessed by the wealth of their land and especially violated by the corporations. To understand those differences I analyzed the social strategies applied by NAM in both the two contexts.

In conclusion, the importance of this study was to understand how these oil and gas companies, such as the one described, act on society and what techniques they use. Through the study of social strategies, it is possible to understand how the companies relate to NAM; based on the outcome of these social strategies, people may have a negative or positive view of extraction. However, it is important to remember, as I wrote in my position statement, that these companies have undoubtedly harmed humanity through their actions, and we are still paying the consequences. Before understanding how these companies affect society, however, it is important to understand how they operate, especially at the local level. For future research, I suggest using a localized approach at other sites in the Netherlands in order not to see fossil fuel energy as a holistic reality but to understand what the important components of this whole are.

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