

# “Problem or Resource?”

- An anthropological journey through, and with, oil -



By Robin Thorén

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University of Bergen,

Department of Social Anthropology

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*The picture on the cover page shows the constantly burning gas flare at Mongstad Refinery on an early October morning in 2021.*

*The quote is from one of the Greenspot representative.*

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## Abstract

This thesis explores narratives in and around the Norwegian oil industry, with a particular focus on the industrial park in Mongstad and based on multi-sited methods, brief ethnographic fieldwork stints as well as digital correspondence. More specifically, the thesis examines how the establishment of the industrial park has affected and changed the lives and livelihoods, neighborhoods and local environments in Mongstad, including the ways in which narratives of oil as Progress are being re-negotiated in the context of climate crisis. The thesis pays particular attention to discussions of the materiality and fundamental “leakiness” of oil to address subjects concerning an imagined future, environmentalism, and capitalism. Because of the modest amount of ethnographic data collected during the short stints of fieldwork the author decided to include autoethnographic accounts to tie it all together.

## Acknowledgements

This project was first and foremost made possible thanks to people I met during my fieldwork, thank you all for your participation.

A big thanks for the support that I have received from friends who put up with me ranting about all the troubles that writing this thesis entailed. They helped me by bringing me out on long walks and inviting me to the fantastical place known as *Leve*, a fictional world filled of whimsical roleplaying adventures.

I want to thank my family back in Sweden, who always answered when I called. Especially my brother who enabled my move to Bergen during the height of the pandemic by adopting the best dog in the world, Jelly.

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Finally, I want to send some love and thanks to the realm of the dead where my grandmother Gunvor now resides. She was a strong and fantastic woman who always inspired me, unfortunately she passed over suddenly last year, when I was conducting my fieldwork.

## Preface

*The dawn was just about to break but it was hard to tell because of the grey sky. I followed a foot path that took me to a sign with a big map of the whole area known as Mongstad Industrial Park, just next to the road that would lead me past the refinery and to my destination. I checked the time, realizing that I was about an hour early and decided to start walking slowly towards the place where I was supposed to meet up with a group of students and join their study visit to the Technology Centre Mongstad.*

In a sense I did not choose this project as much as it chose me. You see, I entered the scene of environmentalists in the early stage of my teenage years because of a rather obvious hint from a biology teacher I had back then. This hint did not make the whole classroom suddenly change their views, but it made someone like me, already kind of an outcast, reach out to who I thought stood at the frontlines of ecological defense back then: Greenpeace.

*During the walk I come across some sights that I thought was reserved for fairytales: Slightly to my left and far in the distance a gas flare illuminated the grey morning sky, and I could not help to imagine it as the Eye of Sauron seen in the Lord of the Rings trilogy.*

I was too young to join them (Greenpeace) and participate in their actions that I used to admire, but I could hand out flyers and other promotional things. I felt that I wanted to do more and only a few years later I joined the youth organization for the green party and worked with them for maybe a year or so before I became disillusioned. I was not even old enough to vote but I had already become disillusioned with changing the system from within, and yet I clinged on to what little hope I still had in that non-parliamentary actions could change the direction that global climate change was on.

*A tall fence with barbed wire surrounds the refinery to my left, and between the foot path I was following and the tall fence there is a quite barren landscape. Through that barren landscape a small stream cuts across with what looks like a black, highly viscous ooze. I thought about stepping off the foot path I was on but decided against it as I started to feel a few drops of rain on my face. Instead, I continued on and after only a few minutes I could make out my goal at the end of the road. Before I made the last turn towards the TCM office building, I could see a broken-down car next to the road. As I passed by the car, I imagined several reasons for why the car had been abandoned and chuckled to myself of the paradox if it had run out of fuel next to a refinery.*



As my hope started to dwindle, I began my university journey, I always knew that I needed to try to write about things related to the bane of our time: global climate change. In that sense this project kind of chose me and I expected a difficult project, but I felt prepared. I thought that since I had already lost most of my hope in the possibility for positive change, and that writing about it would not pull me further down, therefore the thought of immersing myself in an industry closely connected with causes of global climate change did not worry me. However, being confronted with the dire issues that human society faces everyday did affect me more than I could have predicted. What follows in this thesis is my exploration of narratives and ontologies, paradoxes and leakages, related to an oil industry through ethnographic accounts from Mongstad, Offshore Technology Days in Stavanger, and digital correspondence with several interlocutors from within the industry.

# Chapter 1 Introduction – Methodology, Literature and Positioning

The thesis proposes/argues that an exploration of the ontology of oil and narratives about its exploitation can throw (potentially useful) light on other-than-nonhuman entanglements in times of climate change.

The structure of this thesis is as follows: In Chapter 1 (this chapter) I provide the reader with an overview of the literature I have engaged with and, the methods which I leaned on. It also contains a section on the difficulties I experienced concerning access as well as a section on how I position myself in theoretical debates relevant to this project. Chapter 2 invites the reader to an ontology of oil that examines if it is possible to give oil agency without animating it. In Chapter 3 I provide a historical account of Mongstad, a site of oil refinery in a community on Norway's Western coast which I have paid particular attention to, exploring the effects that oil and industrial development has had on the community. The first five subchapters in Chapter 3 are a handful of meaningful events meant to paint a picture of the place while the last two look at a typical family in the Mongstad area in recent history and the mysterious culture associated with Statoil. Chapter 4 is largely based on a study visit to Mongstad Industrial Park as well as a conference in Stavanger called Offshore Technology Days. During these visits I got to meet many students that either studied petroleum related subjects or energy transition. The chapter digs into the guiding narratives of these students as well as the representatives they interacted with in order to see how (or if) their narrated futures align. In Chapter 5 I have investigated the paradoxes of the recent (2019) oil leakages at Mongstad, using this as a starting point to look closer at some of the terms associated with the oil industry as a whole before winding down the chapter with a somewhat pessimistic take on the possible implications of plugging<sup>1</sup> the industry. Chapter 6, or the conclusion, contains some reflections on the positions held by some environmentalists with respect to the global climate change and the future, as well as an epilogue commenting on the ebb and flow of

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<sup>1</sup> The practice of plugging entails the removal of any exterior structures and the placements of several plugs made from cement to prevent leakage from an abandon well (see [Intermezzo: Plugging the wells](#) for more information). In the sentence above I borrow the term plugging to point to the possible implications that plugging (preventing production and expansion) and abandoning the oil industry.

narratives concerning oil, and finally a somewhat experimental autoethnographic account in which I try to write myself out of this project.

## **1.1. Methodology**

A good anthropological thesis is based on the ethnographical data that the practitioner managed to collect during the fieldwork. My hope and aim as I set out to conduct my fieldwork were to do just that, but while I could have foreseen the difficulties of “studying up” (Nader, 2018) but the global pandemic, its consequences and restrictions was not something I could have prepared for. I wanted to conduct participant observation to a large extent but with the finished thesis in hand I can see that interviews became the method that I used most.

### ***1.1.1 My struggles***

To gain access to the field that I sought proved to be incredibly difficult, I contacted several people at both Mongstad and Equinor but only received a modest response. Those who did respond informed me that I could not gain access to the refinery or any other areas in the industrial park in the near future. One of my interlocutors told me that ever since the pandemic had begun, they had ceased to allow any non-essential workers on site and that I *might* be able to visit them within a year (contacted them in January 2021 and was allowed a visit in October 2021). It should also be mentioned that every trip I made to the area around Mongstad to just walk around required frequent and mandatory covid tests and quarantining upon returning to Bergen. I tried to re-organize my plans with this new information and tried to book as many digital meetings as possible and when the time for fieldwork had passed I had less than a dozen interviews and had email correspondence with a few more. If this was not enough, I had trouble with all and any follow-up questions since all my interlocutors stopped responding after they had their first meeting with me. I speculate that one of the aspects that contributed to the difficulties I had collecting ethnographic data may have been that in a sense I was studying up. Almost every single one of my interlocutors were in positions of power, and the ones who did not retain such positions held an equal social position to myself.

### ***1.1.2 The successes I had***

If I wager the expectations I had for what kind of data and access I had hoped for with what I actually got I would almost consider my fieldwork a failure. However, I still had a few wins or successes, like when I was able to join a group of energy transition students for a visit to

Mongstad Industrial Park. That visit later proved to be one of the highlights of my sporadic and multi-sited fieldwork together with my visit to the Offshore Technology Days in Stavanger where I got to immerse myself in an event where I got to observe hundreds of oil workers as well as students wanting to enter the oil industry.

### ***1.1.3. Autoethnography***

As a result of the struggles that I came across during my fieldwork I decided to adapt more of an autoethnographic approach supplement the ethnographic data I managed to collect.

Autoethnography uses the author's personal experience to analyze cultural encounters more freely and favors a more artistic approach. It also pinpoints the tension between an etic and emic perspectives as the ethnographer often inhabits both most of the time (Adams, Holman Jones, & Ellis, 2015). However, there is an inherent issue with resorting to autoethnography, an issue that the final text ends up focusing too much on the other author himself/herself/themselves rather than other people or the theme itself. With this in mind I am fairly certain that this text did not step over that line, or at least I hope I did not.

### ***1.1.4. Ethical Concerns***

The people who have participated and helped me produce the ethnographic data that act as the foundation of this project were almost all professionals from within or adjacent to the oil industry and sometimes their opinions and beliefs did not align with that of their employer. Because of this I have gone as far as I possibly could to anonymize them by creating characters based on not one but several interlocutors that I use to make sense of my findings. These characters have not received any names but are instead referred to by an occupation like the Engineer, the Scientist, the Politician, and they will represent a few typical stories that I came across during my fieldwork.

It should be noted that it appears as if studying oil critically or from an outside perspective has become a controversial theme of late. I can only speculate why this has become the case, but I would consider the likelihood of it having to do with the link between the effects of global climate change and ecological degradation, and the consequences of the producing energy with fossil fuels. Another speculation of mine is that controversies such as "frackademia" might have stoked the flame by exposing how corporate interests influence higher studies to provide favorable narratives for the fossil fuel industry (Ladd, 2020).

## 1.2. Literature Overview

Before diving into the overview of literature I need to acknowledge that I have used extensive non-anthropological sources to write this project. The reader will notice references to philosophers, chemists, engineers, etc. because I find it necessary and interesting to embrace interdisciplinary aspect of anthropology.

For this project I have first and foremost tried to get an overview of the anthropology of oil as well historical accounts of Mongstad and of the history of Statoil/Equinor. Michael Cepek gave some insights into how people live with oil in their vicinity through his fieldwork among the Cofán in Amazonia (Cepek, 2018). I read selected parts of Fernando Coronil's *The Magical State* (Coronil, 1997), and *Crude Domination* (Behrends, Reyna, & Schlee, 2011) but did not find comparisons that I wanted to include in this text. Instead, I found comparisons from Hannah Appel's accounts from luxurious oil compounds in Equatorial Guinea (Appel, 2012), Ranghild Freng Dale's Ph.D. thesis on petroleum and performance in northern Norway by the Barents Sea (Dale, 2019), as well as from Hanne Müller's observations from earlier days of the Norwegian oil adventure (Müller, 2005). To understand Mongstad better as a place I looked for historical descriptions in books written by people who grew up in the area, books like *Mongstad – bygda som var* (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016) and *Mongstad: frå utkantbygd til industristad* (Kolstad, 1999), which both provided great historical accounts. As for learning more about the history and current state of Statoil/Equinor I found *De Beste Intensjoner* (Sæther, 2017), *Giganten* (Borchgrevink, 2019), as well as few texts by Helge Ryggvik (Ryggvik, 2018; Ryggvik, 2002), to be great sources and in addition to that I also read stories and reports provided by Statoil/Equinor themselves.

As for my understanding of the substance of oil, the escaping carbon dioxide, and practices that involve it I have read an assortment of texts. From Kvenvoldens retrospective account of organic chemistry and its first 70 years (Kvenvolden, 2006), to *Echoes of Life: What Fossil Molecules Reveal about Earth History* (Gaines, Eglinton, & Rullkötter, 2009), to several articles on Carbon Capture techniques (Lombardo, Agarwal, & Askander, 2014; de Koeijer, et al., 2011), and one article on P&A practice of offshore wells (Vrålstad, et al., 2019). The texts I just listed approach oil from the "hard science" perspective, for other perspectives I found inspiration in Stine Krøijer's perspective of oil as a leaky substance (Krøijer, 2019), Jane Bennet's book *Vibrant Matter* (Bennet, 2010), and Elizabeth Povinelli's *Geontologies: A Requiem to Late Liberalism* (Povinelli, 2016) to mention a few. For anthropological

perspectives on the carbon dioxide, I found Gökçe Günel's article on what and when carbon dioxide is very enlightening (Günel, 2016).

A few honorable mentions that I also explored ranged from classics like environmentalist *Silent Spring* (Carson, 1962), to Emilie Cioran's *On the Heights of Despair* (Cioran & Zarifopol-Johnston, 1996 [1934]) as an attempt to understand my own pessimism as well as the general pessimism expressed by many people I met. Anna Tsing's *The Mushroom at the End of the World* (Tsing A. L., 2015) has provided textual inspiration, and *Braiding Sweetgrass* (Kimmerer, 2015) has made me smile joyfully and reminded me of the beauty still on this planet.

### **1.3. Positioning**

#### ***1.3.1. The Anthropocene***

I had a feeling that I would not be able to position myself in the discussion about the Anthropocene and this will be discussed in more depth the [Chapter 5 – Paradoxical Leakages and the Terrifying Consequences of Plugging the Oil Industry](#). However, I feel obliged to inform the reader of my position in the current discussion. I am in agreement that the times we live in is dramatically different than what they used to be, and that this era calls for a name, even though I am hesitant to blame it on the Anthro. Blaming the human as a species (as the term Anthropocene suggests) generalizes the human species in a dishonest way when the reason for the mutation of the climate rests heavily on the urban and industrialized lifestyle. Moore (2017) argues that Capitalism is central to describing our times, and I agree to some degree because with Capitalism one can lay claim on all of the material world through a logic of economic equivalence. I also find Donna Haraway's speculations seen in *Staying with the Trouble* in which she uses monstrous science fiction entities to point out the tentacular links between the human and the non-human. She suggests that the slogan for what she calls Chtulucene (notice the different in spelling) would be "Make Kin Not Babies!" and stresses the necessity of kin-making (Haraway, 2016), which is something I can very much sympathize with. I would also like to point to the suggestion to call our current era a Plantationocene because of the consequences human-tended farms, monocultural agribusinesses, etc. have had on the planet. Alexander Dunlap and Jostein Jakobsen state that they are dissatisfied with the term Anthropocene (among other terms like climate change and crisis) and explore new framings by drawing upon Perlman's work (which I also do to some extent) to develop a new dissident alternative (Dunlap & Jakobsen, 2020). The only strong position that I hold in this discussion of our current era is that the biological creature called

human is not to blame for the demise of the planet, instead I see certain assimilatory and domineering cultures as the entities behind the dire consequences we as humans now face.

### ***1.3.2. Other-than-human agency***

For this project I have leaned on theories and thoughts that recognize or allow inanimate objects a sense of agency. This made my ontological explorations possible, in which I imagined oil as something agentic yet dead, a ghostly substance if you will. The position that I hold not only allows for other-than-human agency, but it also promotes it as a way to make kin with such as stones, the ocean, oil, or non-human animals. I hold the belief that to build a healthy society this kind of kin-making would be necessary and guide humans to not only assess the economic worth of their surroundings but rather reinhabit spaces in a more symbiotic way. By giving agency to other-than-humans one could be seen as attempting to level the existing hierarchies that facilitate the current domination by humans.

## Chapter 2 – An Ontology of Oil: Agency of the Dead

*“There's nothing fundamentally wrong with people. Given a story to enact that puts them in accord with the world, they will live in accord with the world. But given a story to enact that puts them at odds with the world, as yours does, they will live at odds with the world. Given a story to enact in which they are the lords of the world, they will ACT like lords of the world. And, given a story to enact in which the world is a foe to be conquered, they will conquer it like a foe, and one day, inevitably, their foe will lie bleeding to death at their feet, as the world is now.”*

*– Daniel Quinn (1995, p. 90)*

*Drifting or wandering around in the vast oceans and other bodies of water, we can find Medusozoa<sup>2</sup>, free-swimming in their medusa-phase. These creatures, otherwise known as jellyfish, wander around in the ocean in different colored dresses, hunting prey with their stinging tentacles. When and where I grew up these creatures were looked at with disgust, their gelatinous bodies were so foreign in comparison to our own human bodies. What I did not know then was that these creatures were part of the oldest living multi-organ group of species, and that we as humans have based a lot of our modern society on their buried bodies. Sometimes their bodies are grouped together with a larger body of creatures, Zooplankton<sup>3</sup>, many of them not noticeable to the naked eye. As these creatures passed through the living stages of life, many of them ended up on the seabed where they entered a different stage as the zooplankton, together with algae, got stuck in stagnant water, buried in mud and silt. Time passed and the bodies got buried deep beneath the crust of the earth and travelled until they reached a suitable place to dwell. It is there that they enter another stage, I imagine it as a burial ground where the dead once again raise up, this time as a*

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<sup>2</sup> Medusozoa is in the phylum Cnidaria and include several classes. They have a complex life cycle and during their medusa stage (or phase), the sexual stage of the creature. During that stage they develop an umbrella-like body that are recognized as jellyfish.

<sup>3</sup> The name zooplankton is derived from the Greek words “zoo”- (Merriam-webster, 2021)and “planktos” (Merriam-Webster, 2021) meaning animal and wanderer/drifter respectively.



*ghostly substance. From that place the substance travel along the porous sandstone along highways of the dead<sup>4</sup> until it reaches the impermeable limestone or caprock. Most of the time, this is where the journey of the ghostly substance temporarily ends but occasionally, it finds places where the barrier to the living is thin, and it can seep through. Through vertical fractures in the different sediments close to the crust, the oil can pass through all the way to the surface to create a new home. A home that we might recognize as a tar pit. These places are quite uncommon though and most of the time the oil resting below the capstone are brought to the surface with human force and technology. Heavy machinery penetrates the crust of the earth as well as the other sediments, down to the reservoirs, where the oil reside. Sometimes the oil has the desire and pressure to travel up the production tubing to the surface without much more encouragement and sometimes, usually in the already disturbed graveyards, more technological and chemical coaxing is needed. Human progress needs the undead to power the decaying husk of our modern society, like blood flowing through the civilizational Leviathan from Perlman's stories<sup>5</sup>.*

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Ever since I read Daniel Quinn's book *Ishmael* (1995) as a teenager I have dreamt and aimed to become a "leaver"<sup>6</sup> instead of a "taker"<sup>7</sup>. Like the quote that started off this chapter I believe that stories inform our actions, and by telling the story of the jellyfish transforming, and entering a different stage of being, becoming the ghostly substance otherwise known as oil, without losing its agency, I hope to be able to explore a different ontology of oil.

As I have been researching and thinking about this project of oil, I have really grown fond of the idea of reimagining oil in other ways, philosophically as well as materially.

Imaging a story where the dead oil still maintains its/their agency is the provocation I wanted to make with the dramatic vignette. With that provocation I hope to make us rethink and

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<sup>4</sup> An analogy to the opening fictional story in Clive Barker's *Books of Blood* Volume 1 (Barker, 1998).

<sup>5</sup> In his *Magnus Opus, Against His-Story, Against Leviathan*, Fredy Perlman imagines civilization as a decaying creature powered by death (Perlman, 1983). Alexander Dunlap and Jostein Jakobsen also lean on Perlman's *Leviathan* alongside Taussig's *Devil* (Taussig, 2010, 30th anniversary ed. ) in their somewhat recent book *The Violent Technologies of Extraction* in which they examine what they call "total extractivism" (Dunlap & Jakobsen, 2020).

<sup>6</sup> Leavers are described to live in harmony with and as a part of nature, leaving the world as they found it.

<sup>7</sup> Takers are, in contrast to the leavers, described as people who want to dominate and take what they want without any real concerns for the consequences.

imagine another relationship with oil ~~and~~ not only as a resource necessary to fuel humans civilized world (Povinelli, 2016, p. 167), but as something that deserves more thought, respect and consideration, maybe “slowing down” thinking as the Belgian philosopher Isabelle Stengers suggests. In the article *The Cosmopolitical Proposal* (Stengers, 2005), Stengers proposes an approach that could open the doors for new perspectives; by proposing to slow down thinking and reexamine decision-making processes relating to entanglements of humans and other-than-humans in order to cultivate their “emergences and differences” (Fariás, 2017). I believe this to be important because if we are to change our current relationship with oil, we need to find other ways for humans to relate to it, maybe even becoming kin with it?

A way to do this is to thoroughly examine the narrative and language most commonly used and provided by the industry and its mainstream opponents.

The industry of oil and gas tends to talk about how they are practicing recovery<sup>8</sup> of resources, which are just waiting to be used by us. In an article about improving recovery rates on Equinor’s own website they invite you to read about “our hidden exploration” (Equinor, 2021), which in short means that they intend to recover up to 60% of the reserves on the Norwegian continental shelf (NCS), instead of the international average of 35%. Using the word recover here, and in other articles, could be misleading and make it sound like they are just recovering something that is inherently for them to use. Another word that could be used to describe their practices is necromancy, a magical practice where you may raise the dead to do your own bidding by influencing worldly events (Merriam-Webster, 2021). It presents oil as valueless without human intervention. In this chapter I wish to reimagine oil as something else, as something dead yet with agency, vibrant and other-than-human.

## **2.1. Raising the Dead?**

This ontological project of reimagining what being oil can be is something that was first tested out in the field of chemistry more than 50 years ago. In *Echoes of life*, we learn what those conversations between a new student and a professor could sound like when the student is queried on whether they are interested in the origin of life **and** the origin of petroleum. A confused student wonder if they misheard the professor, but the professor was adamant that life and petroleum might be connected somehow (Gaines, Eglinton, & Rullkötter, 2009).

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<sup>8</sup> Using the word recovery instead of extraction is prevalent in the oil and gas industry and has, according to one of my interlocutors, been the way the industry has spoken about it for a long time. I will dive deeper into this in the [5.2. Recovery: a legal or a general term?](#)

When the chemists tried to understand what oil was made of, back in the 1960's, the connection to biology was just about to be revealed. It puzzled them that the molecular structures resembled those of carbon skeletons (Gaines, Eglinton, & Rullkötter, 2009, p. 56). This was something that had been hinted at before in Alfred Treibs's research in which he saw a resemblance between pigment parts he had extracted from petroleum with that of the green chlorophyll from plants (Gaines, Eglinton, & Rullkötter, 2009, p. 52; Kvenvolden, 2006, pp. 2, 4), something that would suggest a connection between life and petroleum.

From this place I would like to imagine oil as something other than an inert resource for humans to use. Think of petroleum as being both dead and as an agent or actant. Being dead as something other than an end and instead as another stage of being along the paths or lines of being<sup>9</sup>, as something imbued with the potential for agency. Like Bennet, I believe that imbuing matter with vitality, animating what is perceived to be inert, is a way for us to invite humans to relate to our surroundings in a more harmonious way (Bennet, 2010, p. ix). Even though I will not apply Bennet's vibrant matter directly to my imagining of oil, I will look to it for inspiration. Bennet explains how Baruch Spinoza is present throughout her task of creating a vibrant matter, and following her (and Spinoza) I would like to see oil as a conative body that is trying to strengthen and enhance itself through merging with other bodies, something that is made possible if everything is made from the same stuff (Bennet, 2010, p. x). Unlike Bennet, who rather understand the merging as forming alliances, I believe that merging does not have to be mutually coordinated, as an alliance is intended to be. I would like to suggest along with Povinelli that we need to erase the barrier between the realm of the living and the dead (Povinelli, 2016, p. 18). Animists and vitalist come close, but I do not necessarily need to see everything as animate<sup>10</sup>, to me the dead may still have agency and intentions even without resorting to coming alive. To preserve their being and retaining the ability to affect and to be affected. With all this in mind, I want to try to give the dead agency and create (at least a vague) basis for this dead and agentic oil, a ghostly substance.

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<sup>9</sup> I am borrowing some of Tim Ingold's terms and tweaking them a bit (Ingold, 2011). Instead of imagining everything as being alive along those lines I want to see them as just lines of being without necessarily giving any of the different ways or stages of being more value at this point.

<sup>10</sup> When I use the word animated, or derivatives from that word, (unless specified otherwise) I use the definition that animated means "endowed with life or the qualities of life" and not "having the appearance of something alive" (Merriam-Webster, 2021).

## 2.2. The Speech of Oil

With the vague basis in place, we will now investigate if oil might have the ability of “other-than-human speech” (Howe, 2019), also known as parrhesia. Howe start from Foucault’s theory of parrhesia<sup>11</sup> but invites other-than-humans to be included which is something which fits my imaging of oil. Parrhesia always speak against the one/s above which is true for oil in more than one way (Howe, 2019, p. 161). Firstly, oil is located below us in the material world, and it is used without any consideration to oil as a subject, or as a substance with potential for autonomous agency. Howe continues to list three different aspects that would make it possible to give other-than-human the ability to speak, and it is from these that I will develop thoughts of parrhesiastic oil. The first point that Howe makes is “(a) the parrhesiastes has a special relationship to truth because their life may be endangered” (Howe, 2019, p. 161). I will have to tweak this statement a bit to make it fit my imagined oil since I do not try to establish oil as alive, but as an agentic dead, still no less important than being alive. Oil’s being could be seen as endangered because of the forceful changes that mechanized extraction imposes on oil as it dwells underground, but I will explore this more thoroughly later on (see [2.3. The Prerequisite of Endangerment](#)). The second statement is as follows “(b) the parrhesiastes is synonymous with their message, a living virtue, and a transparent truth that also surfaces ethical concerns” (Howe, 2019, p. 161). The first part of that statement works well with my imagination of oil; oil is synonymous with its message and talks through its acts of being, at least in the context of spills and extraction. Seeing oil as a living virtue is not something that I can or want to do. Oil is, in my understanding, dead and not something that I am trying to change. It does not fit into the constraints of being seen as a virtue, the ghostly substance is not morally good (or bad), if anything, oil’s unintended merging with the living (e.g., oil spills) is mostly seen as morally bad (from a living perspective). The transparent truth surfacing and causing ethical concerns for other (living) beings seems obvious to me; petroleum products existing in the realm of the living, slowly merging with those beings dwelling there, is hastening the process for the living to transition the stage of the dead. During an oil spill the petroleum could be seen as merging with flora and fauna, trying to

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<sup>11</sup> According to the book *Fearless Speech* which is based on speeches that Michel Foucault gave at Berkley at the fall of 1983, the intention was not to “deal with the problem of truth, but with the problem of the truth-teller” (Foucault & Pearson, 2001). To summarize the notion of Parrhesia that originated in ancient Greek literature, it explores what moral qualities that is required to speak truth even if the truth separates the individual from the majority and puts the individual in danger.

bring them into the realm of the dead<sup>12</sup>, this act usually causes ethical concerns for the inhabitants of the living realm, and this is not something that the oil is trying to obfuscate, it is honest and transparent in that sense.

The final statement that Howe makes is “the parrhesiastes always comes from ‘below’” (Howe, 2019, p. 161). This statement is something that could work without me tweaking it since oil comes from below in more than one way (as I stated before); below as coming from the underground (the realm of the dead) and below as talking truth to the powerful (human) tyrant (Howe, 2019, pp. 160,161). There is also the possibility of seeing this as an attempt at alliance-building between the human and the ghostly substance. Even if the goals do not appear to align at first glance, humans seem to want to power their societies with the dead matter of oil, but I doubt that they would agree with my imagined goal of the oil, which is to hasten the process of bringing the living to the realm of the dead. Yet their goals do not seem to align, there seems to be some empirical evidence that the industry knew of the deadly goal of oil and its cousins (plastic, asphalt, diesel etc.), and still joined in an alliance with them (McGreal, 2021).

As oil is extracted from its underground dwellings by force, it speaks to us with its mode of conduct (Howe, 2019, p. 165), with its way of being. Through disastrous consequences on ecological systems the oil taints and poisons other beings in the realm above ground. One example of this could be the Aguarico river that Michael Cepek lived next to during his fieldwork with the Cofán in Amazonia. A river that, because of local oil spills, turned deadly for the humans and other-than-human inhabitants (Cepek, 2018). The oil merged with the different bodies of the inhabitants of this ecosystem, changed them and brought many of them to the stage of the dead. The changes in the bones and organs got translated to doctor-certified cancer in human speech (Cepek, 2018, pp. 157-158). To the humans and the other beings not tainted by oil this ought to be seen as sign, a manifestation, maybe even a warning, that mingling with the ghostly or revenant substance this way was unwise if one wanted to remain in the realm of the living. Elizabeth Povinelli writes that when changes happen in one’s own surroundings, signs appear. These changes could be mutually coordinated and expected or not. In any case, an oil spill could be understood as a manifestation or a sign “that demanded

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<sup>12</sup> Or the consequences of an oil leakage could just be something that happens because of its materiality and have no deeper meaning at all, but for the purpose of this exploration have imbued oil with some kind of intention and agency.

to be heeded” (Povinelli, 2016, p. 59). However, a spill is something that I want to believe to be an unexpected happening. Incinerating these refined substances as fuel to power a machine might seem to show a mutually coordinated action, man and oil working together, to advance their own agendas. They are both progressing, even if their goals might be different. Earlier I have touched upon that the goal of oil might be seen as trying to make other beings join the realm of the dead, or make living beings enter the dead stage, and this does not seem to end as the crude is incinerated. Smoke and fumes still try to mingle and merge with other beings, causing respiratory distress in human and non-human animals. Humans are once again not listening to the manifestations that the exhaust fumes cause, they seem to believe that they are mutually coordinated even though the parrhesiastic oil is speaking truth through its mode of conduct.

### **2.3. The Prerequisite of Endangerment**

Another aspect that is seen as a prerequisite for parrhesiastes is that they are endangered, and in Howe’s article she uses the tropical hare<sup>13</sup>, an endemic hare to the region of her studies. A species that has been in severe decline for a long time, and there are only believed to be less than a thousand individuals left (Howe, 2019, pp. 167-169). These hares speak against the enormous wind turbine project, a parrhesiastic speech that are translated by environmental impact specialists (EIS) into documents in human speech, where their voices *could* be heard. Similar documents exists where oil speech has been translated into human speech, documents that we seem to read but not really listen to, at least not anymore. When Rachel Carson warned of the dangers of the insecticide DDT in her book *Silent Spring* (1962), something *actually* happened. As a result of her book DDT was later outlawed. Petroleum was one of the parts that made the chemical compound DDT, but the difference here is that oil is fueling our current civilization, making the body of Perlman’s imagined Leviathan (1983) move smoothly, DDT was not.

Does this mean that oil lose their parrhesiastic ability, or could oil be seen as being endangered? Is it possible for something not alive to be endangered? To be endangered is to have one owns life, or being, threatened with extinction, a final end. For the purpose of this chapter, I have positioned myself to question the idea that death if actually a final end, and instead imagining it as a different stage of being. Therefore, the question of extinction, a final

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<sup>13</sup> Also known by many other names like *Lepus flavigularis*, the Tehuantepec (or Tehuana) hare or the *Liebre de Tehuanatepec*.

end, is made problematic. No matter how I twist and turn this around in this philosophical thought experiment I cannot see how oil can be seen as endangered. Even if the finite liquid we know as oil is extracted with force through their underground dwellings, possibly against their will, being burned as fuel in human's combustion engines, possibly against their will, forcing them to transform from a liquid substance to that of gas. This whole forceful process is problematic, not only because of how the oil transforms, but because it was done without considering the will of the dead or at least respecting their resting places. I believe that it is possible to argue that oil, and what it becomes, is trying to tell us that it preferred preserving the being it used to be by trying to force living beings to join them through cancer and respiratory illnesses. This led me to think that the version of parrhesia that Howe presents cannot be applied to oil because of the aspect of endangerment. I still think that it could be important to think of oil as being able to speak, and that we as humans should try to learn how to listen to it.

## **2.4. Refined Substances**

The crude substance of oil, the raw and unprocessed, can and has been used as fuel and burnt for heat before humans knew the chemical structure of it, and before they knew how to refine it (Gaines, Eglinton, & Rullkötter, 2009, p. 50). Oil is made up of long dead marine creatures existing beneath the surface of the earth in different porous rock formations (Britannica Academic, 2020). This substance has a long history of usage, dating back to the ancient Sumerians, among others. They accessed the petroleum, or rock oil, as it seeped through the earth's surface (Britannica Academic, 2020), and did not need to extract it like we do in our modern era. As the discoveries happened in the field of organic chemistry, the creation of a more finetuned fuel grew along with other potential uses for this ghostly substance.

Nowadays there is little distinction between what is called the refined oil and its crude origins, and they are arbitrarily both referred to as only petroleum. I do not want to follow in their footsteps and want to make a point of separating the unrefined and the refined beings.

The crude being is generally separated through something called fractional distillation, a technique used at oil refineries where the unprocessed oil is heated in a tall cylindrical tower and where it transforms into vapor. In this new form it travels upwards within the tower, through different levels that rests at slightly different temperatures, and at these different levels, parts of what now is vapor breaks off and form new parts that previously made up the

ghostly substance of oil<sup>14</sup>. Some of the lighter variants are separated from what used to be known as crude and can be used to humans with very little refining and turned into a valuable product like gasoline and kerosene. Some require more refining before they become the product in mind. One of the parts that require more refining to become of value to man is something the industry calls “heavy oil”, a denser substance with a higher viscosity than the substances that require less refining. This substance can be found outside of the distillation process as well and is not as keen on joining the realm of the living; this ghostly substance prefer to stay underground and where it would remain immobile without the technological coaxing of humans in comparison to the lighter variants (Mai, Bryan, Goodarzi, & Kantzas, 2009). With the help of a process called “cracking”, a process in which the chemists crack the heavy hydrocarbons into lighter parts that can be used more readily by humans (Encyclopedia Brittanica, 2021). Apart from the liquids of different viscosity and value, the process also forces some gases to break off from the heavy and undead substance. These gases are sometimes put straight back into the systems at place at the different petrochemical plants to power the machinery, and sometimes they end up creating a new thing like synthetic rubber. This new and refined matter is still imbued with some of the undead and ghostly aspects of oil. Rubber made from undead substances that derive from oil are more resistant to decay caused by oxygen than rubber that naturally reside in some tropical trees (Chemistry LibreTexts, 2021).

## **2.5. A Ghostly Substance**

Throughout this chapter I have tried to give agency to the dead. Rather than perceiving oil as inert matter without any intentions and power, I have tried to give it just that. To perceive something that is generally considered a resource for us to (ab)use I believed that I needed to start somewhere else, start with something that, without a doubt, was alive, the jellyfish. From the animate and living jellyfish, a recognized actor in Latour’s actor-network theory (Latour, 2005), we follow this being as it lives its life, and like much else in this world, dies. As this being dies and later mingles with other sediments under heavy pressure, the dead jellyfish becomes part of something else, dead matter we know as crude oil. Bennet speculated if we humans would treat the world in a less destructive way if this dead matter would be injected with vitality, in other words they tried to animate the innate or the dead (Bennet, 2010, p. ix).

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<sup>14</sup> I have looked at a few different videos on how fractional distillation works and I found this one the most useful. <https://www.youtube.com/watch?v=vD0kbidIS6kE>.



I, on the other hand, do not have the same necromantic urges to conjure the dead back to life or make the dead do my bidding. I wish instead to give the dead agency without having them come back to life. If we consider the process of life and death to be a circular process, a process where the dead always move toward the living and the living towards the dead. Why would any stage on the circular process be more valuable than any other? Maybe we could learn something from at least question this assumption, to try to weaken the value-barrier between the living and the dead, or at least acknowledge that it is the dead that power our modern lifeways (Povinelli, 2016, p. 167). By entertaining the thought of crude oil as a substance that is made up of countless ghosts, and therefore retaining their ability to affect their surroundings, I could see the crude as an agentic substance.

## Chapter 3 – Mongstad

This chapter aims to give a historical summary of the place named Mongstad as well as tell a story of a typical<sup>15</sup> family by focusing especially on the changes many families here experienced as Mongstad changed through industrialization of/in the region. Mongstad is located in the district of Nordhordland and the municipalities of Alver<sup>16</sup> and Austrheim.

### **3.1. A village by the coast**

As part of this thesis, I have chosen to dig deeper into one particular place while still investigating the ontology of oil and the narratives that determine our view on this ghostly substance and how it is (ab)used by humans. The place that I chose is Mongstad. As a student of anthropology, I had an inner battle on whether I should try to anonymize the place but decided against it because I believe that the story has more to gain from it not being anonymous. The lengths I would have to go to keep it anonymous would take away a great deal of the particularity that this place adds to my analyses, and to reiterate I have anonymized my participants by creating collage characters such as the Engineer, the Scientist and the Politician.

Mongstad is located in a coastal region north of Bergen. Some archaeological findings suggest that there have been humans in the area dating back to the old times when they used tools of stone on a regular basis which would indicate human activity from the neolithic period (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 18; Idsøe, 2014). Some of the archaeological findings were unearthed in digs as the industrial park in Mongstad has expanded, in mandatory investigations to make sure that the expansion would not damage any old remnants worthy of preserving.

In a “village-book”<sup>17</sup> we can find written sources that informs us that one of the first farmers in the area “Torbiorn på Nonsta” lived there in 1519 (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 18). At least since then, there has been people trying to live their lives in the area known as Mongstad (or Monstad as it was known prior in the church books prior to 1910 (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 18)). A census count of the

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<sup>15</sup> I understand typical implies some kind of generalization but that it not my intention with the term typical, my intention is to showcase a story that is representative to some of the people in and around Mongstad.

<sup>16</sup> in 2020 the municipalities of Lindås, Radøy and Meland merged and became the municipality of Alver (Lovdata, 2018)

<sup>17</sup> An attempt to translate the Norwegian word bygdebok.

individuals living and working there in 1865 painted a picture of 49 people divided up between 8 farms (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 18).

According to at least two of my interlocutors, Mongstad were a place of conservative values and had a strong tradition of Christian meeting houses (Elstad, 2020). These meeting houses acted as a place for the local community to come and practice their faith.

In the end of the 19<sup>th</sup> century Mongstad was yet to be industrialized when a man named Ditlef laid the ground of what would become the central workplace for many in the small community (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 57). This workplace hosted several commercial enterprises, like the six individuals who worked as coopers, and others who shipped salted sardines all the way to England and the countries that share the Baltic Sea. This man is described as a merchant (Kolstad, 1999, p. 19) and industrialist (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, pp. 53-66) in the books I have read about Mongstad, and while the books (*Mongstad bygda som var* and *Mongstad: frå utkantbygd til industristad*) described him as those things I see a pioneering man, and a product of the protestant work ethic (Weber, 2001), diligently developing his commercial enterprises at Mongstad and in many other places in Norway (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, pp. 59-62). In *Mongstad bygda som var* his tragic childhood and upbringing is presented, at the age of seven he had lost both his parents. His mother had died from complications associated with his birth and his father passed on seven years later after being admitted to a privately owned insane asylum for melancholy (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 54). According to Olav Mongstad, he pushed himself through his own sickness and later became a diligent and creative person, a child of nine that allegedly, rowed all the way to Bergen from Mongstad to sell fish that he had caught himself (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 55). Having him described that way reinforces the feeling I had earlier, that he was a product of the protestant work ethic, and it seems like he continued on that path throughout his life, at least according to the stories I have read and heard.

In 1933 Ditlef Olson Monstad entered the realm of the dead (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 66), but during his lifetime he fathered 14 children, six who did not die close their birth. He also facilitated a lot of economic growth for the inhabitants of Mongstad even though his company went bankrupt in 1920.

What about the other inhabitants of this Mongstad that used to be? Many of them worked at sea, either fishing or transporting goods. Some worked at the factory called “Storbua” that Ditlef owned up until 1921 when went bankrupt and were forced to sell it to his son Harald Mongstad (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, pp. 29, 65). In 1927 a company named Neptun Canning set up shop in the “Storbua” workplace and soon became the biggest job provider, and as the name might imply, they were in the canning business; a business that offered the up to 60 individuals a place of work during the height of the seasons (Kolstad, 1999, p. 20; Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 82). The canning business seemed to go quite well and in 1941 they became the new owners of “Storbua” when they bought it from Harald (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, pp. 29, 82). Neptun Canning kept providing job opportunities up until 1971 in Mongstad, unfortunately their business was quite irregular in how many jobs they could provide each season. The reasons for this were blamed on the uneven access to resources needed to keep the business running smoothly (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 82). However, in the early 1970’s a new player appeared in town and promised job opportunities and they were not dependent on the same irregular resources as the previous employer, they were dependent on oil.

### **3.2. Mongstad and the early industrial park**

These new players laid the foundation of what would become the second largest oil port in Europe (measured in tonnage transported through there), a modern oil refinery in the 70’s. According to Kolstad’s book about Mongstad, Norsk Hydro placed an ultimatum on the inhabitants of Mongstad around this time, either they sold their land and moved, or they would stand in the way for all the work opportunities that this community was in dire need of (Kolstad, 1999, p. 30). Some of the inhabitants were not very fond of this new industrialization of their home, while other saw this as an opportunity and chance to be able stay in their community instead of having to move away because of the lack of work opportunities. It seems to have been a time of heated discussion, and according to one of my interlocutors, a local politician had supposedly declared “you might be in charge at Mongstad, but I am in charge in all of Austrheim” (or something along those lines) during the early town meetings with the sharply dressed envoys from Norsk Hydro. The sentiment of those words suggested that the local politician feared that they might lose some of their autonomy by allowing the establishment of the industrial park.

Many of my interlocutors would confirm that there was a dire need of jobs, widespread pessimism, and how their parents told them that “there’s no future here”, and that they would need to leave and make something of their lives somewhere else. Inhabitants had already been leaving for a while, and according to one of my interlocutors that grew up in the area, close to half the locals had left the place in search of a better life before the construction finished. In Kolstad’s book we can read about a few of the positions that the local community congregated around. These positions were (explained in Kolstad’s book (1999, p. 34)):

1. Those who saw selling their homes and moving away as a sacrifice, something that needed to be done for the progress of the community.
2. The second group could not imagine letting go of their homes, no matter what.
3. Thirdly Kolstad recognizes a group that exists in most debates, the ones that does not know what they want.
4. A fourth group that believed that a “no” would mean that their homes would be taken by force.
5. The last group saw the plans that Norsk Hydro presented as the solution to many local problems. The new industrial park would provide them with an abundance of job opportunities.

A thing that I find important to comment on here in this debate is value, what is valued and how do different values fare against one another. In chapter 1 of *Mongstad, bygda som var*, we can read the following (translated and paraphrased by me):

*“It is better that these rural areas that no one previously thought of as valuable would be used and provide for a larger population next to the industrial expansion. One might have to accept to sacrifice the farm, even if it is done with sadness. Let the lovers of nature that barley have seen the city call us materialists.” (Leirvåg, Steine, Areklett, Lervåg, & Mongstad, 2016, p. 8)*

In that quote the valuing of Mongstad is displaced from the inhabitants of that place to other people far away. It is framed as if the rural and non-developed area is without value, and that is an assertion that only recognizes economic values. The lovers of nature are portrayed as

enemies of Progress<sup>18</sup> while the emissaries of the same Progress are seen as the savior, even though they do not use those words it is easy to spot those sentiments between the lines.

One interlocutor told me a story about how he was part of the construction crew of the first iteration of this new industrial park. He told me about how he was laying electrical cables alongside almost 2000 workers that had been brought into this area from other places, workers that had previous experience building for the oil industry. This put a strain on the quite small community that even had a ban on alcohol for religious reasons, something that had to change to accommodate the new thirsty workers. An interlocutor told me that some of the locals were apprehensive of the incoming Navy<sup>19</sup> laborers, that their culture would destroy the local culture of Christian meeting houses. I was told that a kind of clubhouses emerged to satiate the thirsty workers, places where they could host private events that allowed the drinking of alcohol. Furthermore, one of my interlocutors told me that these clubhouses were segregated based on ethnicity, creating alcohol-fueled ethnic enclaves for the imported workers. This was how it worked up until the local ban on alcohol was lifted in 1980 according to the same interlocutor. The sentiment that many of the people that I came in contact with shared was that the industrial park was a good thing as it allowed people from the area to either return, get a job at the refinery and build themselves a house and a new life there.

### **3.3. “En Mong”**

Moving into the 80's, the Norwegian oil industry was shaken by a horrible tragedy at the offshore platform Aleksander L. Kielland in the Ekofisk field where 123 lost their lives (Regjeringen, 1999). The whole platform disappeared into the ominous ocean during a violent storm in March of 1980. This disaster surely affected almost everyone in the country, and it was recognized as a national tragedy.

Many of my interlocutors, who were already working at the industrial park and living in the area, informed me that life and work at Mongstad were all right during this time, even if the recent tragedy had shocked them. One of them told me that even though things were good back then, they were not as good as Norsk Hydro, and later Statoil (name changed in 1972) had promised them. As an example, he told me that one of these local municipalities had

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<sup>18</sup> When referring to Progress (progress with capital P) I am referring to the idea of progress as a concept,

<sup>19</sup> Navy refers to the laborers that did a lot of construction work in the 1800's and 1900's. They built the canals in and later the railways. The navvies were known for their unruly behavior and being drunk all the time (Railway Museum, 2018).

constructed whole neighborhoods for the to-be workers, but the workers did not move in as fast as the leaders of the municipality had hoped.

Promises of what the work at Mongstad would provide seemed to underwhelm; as things are supposed to always get better, and the previous insistent pessimism resurfaced among the locals once again. People wanted more, and the progression seemed to have stagnated according to one of my interlocutors, but it appears as if Mongstad and Statoil had a plan for it all along, a plan to expand the industrial park substantially. Arve Johnsen was the Chief Executive Officer of Statoil when the plans were put into motion to expand Mongstad, however, the planned expansion would have considerable consequences for him. The goal of the expansion was to turn Mongstad into something more than just another refinery, it would become a modern refinery aiming to be one of the best in all of Europe.

Many of my interlocutors spoke very highly of this man, according to some of them he embodied what they referred to as "Statoilkulturen" (the culture of Statoil/Statoil-culture). According to the book *De Beste Intensjoner*, Arve said that what is good for Statoil is good for Norway (Sæther, 2017), a sentiment that almost everyone from within the industry seemed to agree with. I will explore what they might mean with "Statoilkulturen" more extensively in a separate section (see [3.7. Statoilkulturen](#)).

What did end up happening with this expansion was that they exceeded the prospected cost with 6 million NOK, and that would later become known as a "mong". This is something that I would consider as a form of leakage even if it does not follow the exact definition of economic leakage. In economic terms, leakage is defined as non-consumption use of income like savings, taxes etc., and this is something that I will explore more in the chapter on leakages (see [Chapter 5 – Paradoxical Leakages and the Terrifying Consequences of Plugging the Oil Industry](#)). Because of this economic leak Arve Johnsen, had to leave his place as CEO of Statoil but one of my interlocutors did not want to blame that man. Instead, the same person told me that when Mongstad industrial park turned 40 years, Arve was met with the biggest applause during that celebration. I was told that many years after the debacle in 1987-88, an interlocutor claimed that when they met Arve many years later, he had said that he did not regret what ended up happening. Unfortunately, my interlocutor did not elaborate further but if I were to speculate, I would not be surprised if Arve considered that the consequences was ultimately worth it.

### **3.4. The moon landing at Mongstad**

In what looks like a very serious talk to the nation, something that you often see in an American context, like a president addressing the nation on an important subject, the Norwegian prime minister of 2007, Jens Stoltenberg, talked about a new kind of moon landing (TV2, 2007). With a stern face he informs everyone watching that “we must take our responsibility” when it comes to the consequences of climate changing gases, specifically the consequences of carbon dioxide. He continues, saying that Norway will become pioneers in this field and that they are going to construct a facility at Mongstad that will scrub the carbon dioxide from the emissions released there. This is where the moon landing analogy starts: he explains that what they are about to undertake is similar to when the Americans declared that they were going to visit the moon in ten years, even though they had never traveled past the confines of the planet. Much like them, he explains that even though we have not seen that kind of technology yet, they will have the finished project at Mongstad within ten years. He turns to another camera and informs the viewers of the vision that they have: A vision that entailed that within seven years they would have a facility at Mongstad with capabilities to scrub the emissions of the climate changing gas, carbon dioxide. This future project (that to this day has yet to be materialized) would become a breakthrough for Norway, and a breakthrough that he believed would make the rest world follow. His speech ends with him declaring that this is a big project for the country, and that it would be our (the Norwegians’) moon landing.

Technology Centre Mongstad’s (TCM) was supposed to be the place for this wondrous project, and TCM was something that Stoltenberg helped to initiate in 2006 as well. In 2007 the planning of this future test center began with Statoil as a leader of the project and with Gassnova among others as collaborative partners. It would take a few years before the plans were brought to the Norwegian parliament but in 2009 these plans were approved by the investing partners and the construction could begin. A construction that would take three years before the testing facilities were operational (Technology Centre Mongstad, 2021). This means that in 2012 the testing facility that Stoltenberg prophesied would help develop the technologies that would then help to catch the dangerous carbon dioxide stood ready two years before they would have reached the end of the projected timeframe. A short time to develop and apply a new technology, but I guess that technological innovation knows no boundaries? Alas, in 2013, a year before the finished facility was prophesied to be done the partners with stakes in the construction thought that the risks were too great to go ahead even



though they believed that the technology was “mature” (Technology Centre Mongstad, 2021). Instead of creating a full-scale facility with the capabilities of scrubbing the carbon dioxide from the emissions at Mongstad refinery they changed their goals to instead have a world class testing facility where international companies could try out their technologies at large scale setting. According to them this had been an “unconditional success” (Technology Centre Mongstad, 2021, p. 2), which might be something that they had come to realize during the years, but in 2013 some reporters thought that it was quite strange and one wondered what happened with the forgotten moon landing (Myrset, 2013). In 2020, *Teknisk Ukeblad* published a story in which they wrote about the valuable things that the researchers had learned during the years even if they did not succeed with the project. A new and large CCS project launched by Erna Solberg’s government (ruled between 2013-2021) has been called a “Langskip” (“Longship”) to liken it to a historical pioneering Scandinavian shipbuilding technique (Pedersen, 2020).

To me it seems like Stoltenberg’s prophecy in which Norway would be a leading actor in the battle against the rapidly changing climate did fall through even though the involved have learned from the attempt.

Leading up to the global conference on climate change COP26, BBC published an article in which they uncover that many countries that have big stakes in the fossil fuels industry have asked the Intergovernmental Panel on Climate Change (IPCC) make changes to their report<sup>20</sup>. One of these countries was Norway and according to the leaked documents they wanted the IPCC to allow those Carbon Capture & Storage technologies to count towards their reduction of emissions originating from fossil fuel extraction and production, instead of replacing it with renewable energy sources (Rowlatt & Gerken, 2021). It would appear as if the will to lead the change has stagnated.

### **3.5. The low prices on oil in 2014 & a typing error**

The volatile value of oil plunged in 2014 and this sharp decline brought its economic value from over \$100 a barrel to under \$35 (Teti, Dallochio, & De Sanctis, 2020). This economic upset of oil products affected the order at Mongstad according to interlocutors of mine, and

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<sup>20</sup> The report in question is most likely Working Group 1’s contribution 6<sup>th</sup> assessment *Climate Change 2021: The Physical science report*, which was discussed at COP 26. It should be mentioned that Working Group 2’s contribution *Climate Change: Impacts, Adaptation and Vulnerability* was released on 26<sup>th</sup> of February 2022 and Working Group 3’s contribution *Climate Change: Mitigation of Climate Change* on 4<sup>th</sup> of April 2022. Finally, the *Synthesis Report for Assessment Report 6 (AR6)* is predicted to be released in the month of September in 2022.

that it only got back to normal in 2018. Another one of my interlocutors told me that they<sup>21</sup> had never been without a job since their work debut, but in 2014, and because of the lower value of oil, their whole family were temporarily laid off.

But the low prices of oil were not the only thing that affected Mongstad in 2014. A typo or a typing error made by a person in India, as part of the outsourcing that Statoil had made, caused the production to grind to a stop. When NRK reported about this, the question of safety was brought to the forefront and put into question. Internal reports questioned if they should continue outsourcing these types of tasks, tasks that could put the safety of everybody on site in the hands of someone on the other side of the world (Remen & Tomter, 2016).

### **3.6. A Story of a Family**

In an attempt to bring the reader along on a brief journey through time and up until today I will give a glimpse into the story and life cycle of a typical family in Mongstad, to illustrate how the industrial park has affected the people there and their everyday lives in its surroundings. The description that follows is based on a collage of individuals and families that I have met in connection to Mongstad and its industrial park. I am presenting it in this story-like fashion to protect the identities within it.

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At a place with a beautiful view of Fensfjorden that has been around since before the birth of the industrial park at Mongstad, a farm can be found. It is a farm that has been handed down through generations, from parents to their children. At this farm, now without the livestock animals but with a forest as well as cats and dogs, a typical family resides. Two generations ago, the grandfather used to spend much of his time away as a fisherman with his boys before the arrival of the oil industry, and so did many other men from the area. Working at sea had been one of the common occupations here, along with working at the local family-owned farms. While the grandfather was out at sea the grandmother stayed at home taking care of their farm. The ways of this family changed from what they used to be ever since the arrival of the oil industry, an industry that even claimed the space of several of their friends' generational farms. Several families that lived on the 4000 acres (Kolstad, 1999, p. 36) that

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<sup>21</sup> The use of the pronoun they in this instance is used to anonymize the preferred gender of the interlocutor in question and not necessarily their preferred pronoun.

they sold to the shire who later sold the area to the great facilitator needed to leave their homes as the oil industry claimed land for the development of the industrial park.

Some moved willingly.

Others would not.

Some would say that it was a small price to pay for the job opportunities that this new development brought along. With these opportunities they could fight the persisting pessimism in the area.

Others did not agree.

The children of the grandparents that had the beautiful view of Fensfjorden had become adults and were among the lucky ones and did not need relocate, instead they became among the first to work at the refinery and industrial port, one of them were even part of the construction crew that built the Industrial Park, when he was a teenager. The father used to tell the children that “I was one of the locals that was hired” and worked specifically with laying part of the electrical foundation on which the refinery still stands today. The father emphasized that he was among the locals working there but that “they also brought in 2000 workers from outside to work on the construction”, as he explained to me.

Feeling amongst this family in relation to the industrial park were complicated, the grandparents did not want to see their ways of life disappear, while the parents saw the possibilities and they did not want their children to be forced away for the lack of opportunities. With the new industry, children could stake out their future without having to move away in search for work opportunities. In a sense the jobs offered by the industry were work associated with Progress, industrialization, exploit, and development of the Mongstad area.

During the two children’s time at the local school, it was evident who had parents that worked for the great facilitator as they always had a lot of “stash”, that is, promotional products such as clothing given to the parents by their employer and often handed over to the children.

Some of the children later chose to move away to larger cities.

Temporarily.

Years later they returned to their origins, to the family farm, now as well-educated scientists, and engineers. They became employed by the facilitator of steady employment and pride that

had previously employed their parents. Some things had changed during their time away, and the farm had been passed on to the scientist and her own family, while the engineer moved to a neighborhood built to host the influx of new workers. A hopeful local shire had invested a lot of money in this new place based on insurances from the great facilitator. These were insurances that Mongstad Industrial Park would attract many to move to the area immediately. In practice, however, it took quite some time to fill the newly constructed neighborhood which caused financial problems for the local shire but with time enough people moved there to fill the new neighborhood.

The children, now established adults, did try their wings in the city but it never felt right, the jobs they had tried did not provide enough career opportunities and the excitement they hungered for; “I’m a trained bioengineer and started out at a lab in a hospital, but felt more fulfilled at the lab at Mongstad”. The facilitator of steady employment and pride offered an exciting workplace, as well as the career progression other jobs had lacked, it also made it possible for them to have a job, and a future in a place they wanted to live.

The scientist and engineer settled and started to make a life for themselves close to the industrial park, and their spouses began the tedious work of becoming integrated into a fairly small community with only a few newcomers compared to some of the other local communities. Other communities had more or less become hubs for the new ones moving there, and these communities had therefore ended up more ethnically diversified. This diversity was something of value that the oil industry had facilitated by offering a great number of workplaces, a different kind of value creation, according to the Scientist. Diversity was only one type of value, and another was the more common, money. A seepage of monetary means to a variety of local community projects had created a great amount of goodwill to the main facilitator, Statoil and later Equinor. Even though the pride of working with oil that the early workers carried around rarely waned, the new and younger generation did not carry the same pride, something that the scientist and engineer learned from what their own children had told them as well as younger co-workers. The older co-workers commented on the recent shifts, the green shift, and the name change, by saying things like “Statoil could never be green, but Equinor can”. Potentially the new generation of workers experienced how the beliefs about energy was changing, concepts that guide how we use energy which in turn shape their beliefs about energy. Could that shift have entailed a shift from viewing energy produced from fossil fuels as “desirable and indispensable” to “omnipotent and dangerous” (Strauss, Rupp, & Love, 2016, p. 10)? The growth made possible because of the profits from

the fossil fuel industry helped to lift the country from below OECD average (Ryggvik, 2015, p. 6) which would have made oil seem as desirable and indispensable. Time went on and the knowledge of oil increased, however, the perspective on oil might be changing to that of omnipotent and dangerous.

Our scientist and engineer progressed their careers at the workplace provided by the great facilitator, taking different paths, all within the frames of the company, rarely considering the consequences of their employer's activity apart from the great stability it provided. The scientist took a path out of the lab and into other areas such as engineering and communication, while the engineer got international responsibilities acquiring assets in tar sands. Oil seemed to bring the promised riches, turning the poor into the rich. It brought the sought-after stability, a stability based on the volatile substance of oil, and the stability was real until the great decline of the monetary value of it that happened in 2014 (Teti & De Sanctis, 2020).

As the flow of monetary means declined, the associated businesses, such as petroleum-niched suppliers<sup>22</sup> for the great facilitator, lost some of the work opportunities that they previously had. No one in their extended family had previously been without work and this made their situation feel “unsafe”, but those who had it worse were the ones that worked at the supply base for the offshore industry (Mongstad Industrial Park, 2022). The scientist and engineer got to keep their jobs but their extended families, including their parents, were all temporarily laid off because the profit margins of the main facilitator shrunk, and it would not have been profitable to keep the associated businesses employed at the same rate. A sense of how connected they were to a global financial system and the worth of the ghostly substance dawned, “many had an ‘aha’ experience”, the scientist declared. It also reminded the parents of the economically unsafe times in the 90's. But thanks to the monetary stability that the great facilitator had provided for the engineer and the scientist, they did alright during the crisis.

After a while the global financial system re-recognized the value of the ghostly substance and the prices rose and began to stabilize. However, the pride that had once been associated with the industry continued to dwindle which made the great facilitator step in and try to change the course and associations of, and about the company as well as oil. The pride, that many of

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<sup>22</sup> Like Petro Support West that we will come across in the next chapter about students and the representatives.

the old workers felt, was something that the facilitator tried to recapture as it changed its name from Statoil to Equinor, from something that had earned its pride from a singular energy source to something that wanted to gather energy from a plurality of sources. Workers became divided, and some did not want to let go of the pride they felt as they made the machinery of society move by fueling it with the ghostly substance. They noticed how the decisionmakers said “by changing the name to Equinor and branding themselves as green they could attract new investors that would not have invested in Statoil”<sup>23</sup>. Some saw the necessity of change and were glad to embrace the new iteration of the grand facilitator. In any way, the relation that the facilitator has to the ghostly substance would help to shape Mongstad’s future, depending on what technologies that would be developed there, technologies such as the new versions of Carbon-Capture-Storage and its cousin Carbon-Capture-Release as well as energy from a new hydrogen production facility. By having the Industrial Park change with the green shift, offer new opportunities, and stay relevant, it could offer the sought-after stability for the engineer, the scientist, as well as for their families, even if the great facilitator ceased working in oil. If the work in oil was to cease the spaces previously reserved for oil work could now be repurposed for energy production from hydrogen. However, the work in oil is still here and the engineer insisted that “we still need oil” and do not forget that “oil and the oil industry built this country”.

As for now the family farm is located about 10 minutes from Mongstad Industrial Park and as long as the future development at Mongstad Industrial Park does not extend further, the family farm could be passed on to the next generation once again. Whatever the future may hold, the engineer and the scientist believe that it is important to inform the young ones about the past, the village that used to be, and to maintain an optimistic view of the future

### **3.7. Statoilkulturen**

The previous story about the family at Mongstad hints at a shared understanding that the workers at Statoil had in common. When the older co-worker states that “Statoil could never be green, but Equinor can”, part of this notion of organizational culture shines through. According to him Statoil was too proud and too entangled in oil to be able to diversify its energy production without a name change and a rebranding. In an anthropological understanding the notion of culture is a complex term that includes shared knowledge,

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<sup>23</sup> The quote comes from one of my interlocutors as we discussed the name change from Statoil to Equinor.

symbolism, values, morals, etc. I will not try to assess whether or not the company's/workers' reference to "Statoilkulturen" corresponds with an anthropological usage of the term, only that it for a certain period was associated with particular workers' benefits and security of employment – used in a positive sense by "insiders" and often in a negative sense to "outsiders" of Statoil. With the change of name to Equinor the company wanted to signal a move towards diversification of energy sources, if not necessarily of the internally valued "Statoilkulturen". I guess that it would have been difficult for a company with a name like **Statoil** to become a broad energy company, investing in a wide range of non-oil sources when it is part of their name. Nevertheless, that same person, the old co-worker, also said that he was not surprised about the oil leakage that became news in 2019-2021 (see [Chapter 5 – Paradoxical leakages and the terrifying consequences of plugging the oil industry](#)) because the greening of the company that happened with the name-change made people keener on "only turning pages" instead of "hands-on work". In his eyes this change had made such incidents more likely to happen. He believed that as the greening of the company became more prominent, less "real work" actually took place. I do not fully understand what the old co-worker meant with less "real work" and "only turning pages" but it could indicate that office work took precedence over "hands-on- work". Similarly, the Engineer also liked to reminisce about the past, and of Statoil. "It was fantastic" to work for them, and that Equinor lacks that special "Statoilkultur". But before we venture forth investigating that culture a brief history on Statoil and its different iterations might prove useful.

Our brief summary of the history of Statoil begins in 1962 as the American company Phillips Petroleum Company sent the Norwegian government an application that would allow them to explore for oil in the Norwegian continental shelf (NCS) in the North Sea (Olje- og energidepartementet, 2021). On the 23<sup>rd</sup> of December 1969 oil was found in what would later be known as Ekofisk, and it was found by a the already mentioned American company Phillips. At this point in time Statoil did not exist and most of the extraction that took place on the NCS was done by non-Norwegian and already established international oil companies. Those established international oil companies remained dominant up until the mid-1980's when it came to offshore work, even if Norwegian shipowners dominated out the ship-related tasks necessary for a functional offshore oil industry (Ryggvik, 2018, p. 102). The Norwegian Leviathan of oil first saw light in 1972 when the state-controlled company Statoil was established, and it was also decided that for each of the rewarded production licenses the company received, the state would be a 50 % participant in each and every one. In 2007

Statoil merged with Norsk Hydro and became StatoilHydro for a short period (up until 2009) before changing back to only Statoil. The Norwegian state has consistently been the majority shareholder of the company and retained that position as the company once again adopted a new version of itself in 2018 and rebranded itself Equinor, all while remaining primarily an oil company<sup>24</sup>. It is probably fair to say that the state of Norway has influenced Statoil/Equinor greatly, considering how it can project Norwegian equality, social responsibility and exceptionalism through the well-known company. However, let us not forget how the oil industry influenced the state as well through the Government pension Fund of Norway (or the Oil Fund)<sup>25</sup> who has invested the surplus from the oil industry since 1990. The perception of the company is that their tripartite system (oil workers, companies, and the state) makes the model exceptional and extraordinary on the international playing field of oil companies. According to the article *Bringing the state back in*, the one thing that sets them apart from other oil companies in the world would be the influence that “the labor movement has on state and capital” (Knudsen, Rajak, Lange, & Hugøy, 2020, p. 9), as well as their dedication to corporate social responsibility (CSR). However, in the case of Equinor’s operation in Brazil they had to submit to Brazilian CSR regulations and design, a project that would later receive an internal award within Equinor for best CSR project of 2016, which is paradoxical according to Knudsen et al. since it was not Equinor’s own design (Knudsen, Rajak, Lange, & Hugøy, 2020, pp. 17-18). Norway is not alone adhering to this type of system; other Scandinavian countries also organize in accordance with the Scandinavian Nordic Model. A model born in the Great Depression of 1930’s where the workers, companies and the state began to work together to build the famous Scandinavian welfare (Ryggvik, 2018, p. 100). With that brief summary let us now return to the question:

What is this mysterious "Statoilkultur"?

According to the Engineer, “Statoilkulturen” became more apparent when it collided with other distinct cultures as he phrased it. For instance, the Engineer remembers when he was on

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<sup>24</sup> Already in 2001, Statoil was partially privatized but as in the case with the Equinor rebranding the Norwegian government retained a majority of the shares (67%). As it was partially privatized in 2001 the majority shareholder (e.g., the Norwegian government) but it promised that it would not meddle with the activities of the company (Ryggvik, 2015, p. 31). As of 1<sup>st</sup> of January 2022 the shares owned by the Norwegian government became managed by Nærings- og fiskeridepartementet rather than Olje- og energidepartementet who had previously managed those shares (Tollaksen, Ryggvik, & Smith-Solbakken, 2022; Aspøy & Berg, 2021; Aspøy, 2022).

<sup>25</sup> The Oil Fund was the largest sovereign wealth fund as of June 2022 and valued over \$1 trillion (Statista, 2022).



a mission in North America to identify several smaller energy companies that Equinor wanted to merge with. These smaller companies had what the Engineer called a distinct “cowboy-culture”, which was something that Müller also heard about the American offshore workers on Ekofisk in the 70’s (Müller, 2005, p. 43). The so-called cowboys that are mentioned in Müller’s publication were described as good workers with extensive experience but without being formerly trained at a university (Müller, 2005, p. 78). And the “cowboy-culture” that the Engineer encountered differed also in other ways, as illustrated by the statements that “Statoil always played with open cards, while the American companies did not”. Open cards should be understood as transparency, and according to the Engineer, Statoil were always transparent in their undertakings. This transparency and information-sharing are something that Ryggvik also mentions in his text about the Norwegian oil workers (Ryggvik, 2018, p. 123). According to the company’s own (and current) website they state that “transparency is a cornerstone of good governance” (Equinor, 2022) and claim that they have supported the Extractive industries Transparency Initiative<sup>26</sup>, an initiative that advocates for public disclosure of “host countries and their petroleum contracts and licenses”. As I mentioned previously, historically the Norwegian oil industry had a majority of international companies that employed most of the offshore workers up until the mid-80’s. The way the Norwegian state could intervene, and control was through safety regulations and laws that the international companies had to follow (Ryggvik, 2018, p. 102). In 1971, Stortinget (the parliament) declared 10 principles that would guide the Norwegian oil industry, principles that would ensure that the novel industry would work for the entire nation (Olje- og energidepartementet, 2011, p. 1). I saw these commandments illustrated with big white letters and gold background when I visited the Norwegian Oil Museum in Stavanger.

The following section will in part look closer at the industry’s use of language in relation to “Statoilkulturen”, as well as the proclaimed benefits and salaries offered by Statoil/Equinor but let us start with few of the oil commandments.

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<sup>26</sup> The Extractive Industries Transparency Initiative (EITI) appears to be a kind of lobby organization. Its mission according to themselves is “to promote understanding of natural resource management, strengthen public and corporate governance and accountability, and provide the data to inform policymaking and multi-stakeholder dialogue in the extractive sector.” (EITI, 2022). To my understanding companies and countries can join the organization and try to adhere to its principles. The organization was created in 2003 as a response to find a cure to the “resource curse” (EITI, 2022).

The first commandment dictates that there must be “national supervision and control” (Olje- og energidepartementet, 2011, p. 1) for all oil extraction on the North Continental Shelf (NCS). Along with the second commandment that states that the exploitation of petroleum must be done in such a way that “makes Norway as independent as possible of others for its supplies of oil” (Olje- og energidepartementet, 2011, p. 1), these commandments enabled the “Norwegianization” (Ryggvik, 2018, pp. 102-103) of the oil industry. This Norwegianization rhymes well with what Arve Johnsen said in the 70’s, “what is good for Statoil will be good for every Norwegian”<sup>27</sup>. Many of my interlocutors agreed with this and spoke very highly of Arve Johnsen, the first CEO of Statoil, and that he in some ways embodied “Statoilkulturen”. As I have stated previously, one of them told me a story of when Arve returned to Mongstad Industrial Park on its 40<sup>th</sup> anniversary in 2015 and he was greeted like a hero. This last interlocutor, let us call them the Politician because of his occupation, was one of the few people that I spoke with that did not work in the industry himself but had grown up in the area and had a strong connection to the industry through family members that worked with oil. The Politician saw an obvious connection between Statoil and Arbeiderpartiet<sup>28</sup>, maybe because Arve Johnsen himself was a member of Arbeiderpartiet, and had a vision of nationalizing the industry in Norway. Arve wanted “national steering and control” (Borchgrevink, 2019, p. 36) like in the first commandment. According to the Politician, individuals like himself, who were strong proponents of this “Statoilkultur” did not want to use the new name Equinor because “Høyre changed the name,



Figure 1: A picture of the 10 oil commandments being presented at the Norwegian Petroleum Museum in Stavanger.

<sup>27</sup> My translation of a quote by Arve Johnsen in 1974, “en god utvikling for Statoil, vil være til gagn for hele det norske folk” (Sæther, 2017, p. 24).

<sup>28</sup> The commandments were developed over the political party lines, and at the time when the commandments became officially recognized Norway was led by conservative coalition (Høyre, Venstre, Sentrepartiet and Kristelig Folkeparti). Another important part in this story was when the Norwegian government led by Gerhardsen (from Arbeiderpartiet), and the Norwegian King declared sovereignty over the Norwegian Continental Shelf in 1963.

and I don't agree with them". I asked the Politician if Statoil was the social-democratic version of the Norwegian oil industry and if Equinor is the liberal-conservative version, to which he only laughed and moved on. What set Statoil and its distinct culture apart from other companies such as British Petroleum (BP), two companies who cooperated closely previously, and it was something that Statoil discussed internally in the early 1990's. The situation and attitudes at BP was described as having "less rigid procedures, [...] long working hours and a sense of insecurity and anxiety" and rewarding "individual initiative, information hoarding, individual empowerment, [...] self-promotion [...]" as well as being "[...] result-oriented [...]" (Ryggvik, 2018, p. 123). In contrast, "Statoilkulturen" were described as "teamwork, information-sharing, authority retained by management, rigid procedures, a focus on processes, self-deprecation, fixed working hours, security and a sense of confidence" (Ryggvik, 2018, p. 123). My interlocutors seemed to share that picture of "Statoilkulturen", and I did have one tell me that Statoil had less of a hierarchic structure than the American companies. In the American companies the separation of the hands-on workers and the trained engineers and such were much stricter than what they had experienced at Statoil.

The contents from that internal Statoil report<sup>29</sup> from 1993 that I alluded to through Ryggvik's article in the previous section appears to correlate with slogans such as "everyone will be included"<sup>30</sup> and "we solve the big tasks best together"<sup>31</sup> from Arbeiderpartiet. The similarities found in the internal report from Statoil and the slogans seems to confirm the connection that my interlocutress made between Arbeiderpartiet and the imagined work culture at Statoil, described to me as "Statoilkulturen". Nevertheless, what does not correlate with perspectives of the mysterious "Statoilkultur" are the shift towards providing managers with bonuses if they performed their individual work well. These bonuses could, according to Ryggvik, be observed as early as the 1990's but were properly developed in 2001 when 400 managers received a personal bonus (Ryggvik, 2018, p. 125). It should be said that these changes happened after Arve Johnsen had left his position after the colossal overspending (see [3.3. "En Mong"](#) for more information) during the upgrade of the Mongstad Industrial Park in

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<sup>29</sup> The internal report is called *Statoil Report No. 0513 Audit, BP-XFI Report No. 01/93* and has been mentioned in (to my knowledge) two separate documents by Helge Ryggvik (Ryggvik, 2018; Ryggvik, 2002). In both documents he mentions the distinctly different cultures between the companies Statoil and British Petroleum that apparently has been discussed in the internal report itself (Ryggvik, 2002, p. 23; Ryggvik, 2018, p. 123).

<sup>30</sup> My translation of "alle skal med".

<sup>31</sup> My translation of "de store oppgavene løser vi best sammen".

1987-1988. The year after (2002) the managers received their bonuses and soon after it was announced by Statoil and its CEO Olav-Fjell<sup>32</sup>, that the company would also pay bonuses to workers that did a good job. Unions representing the workers in the oil industry found themselves in a strange position; could they tell their members to refuse more money, even if they came in the shape of individualized bonuses? The unions could not reject the offer and it put them in a delicate position since they had previously criticized other oil companies for incentivizing and individualizing workers performance with bonuses, and now they were doing the same thing (Ryggvik, 2018, pp. 125-126). This decision also cleared the path for further changes that would go against the narrative that "Statoilkulturen" promote, and in 2007 a new proposal was presented. In this new proposal, grades between one to five, would be assigned to individuals based on their performance as well as how well the individual kept the values of the company. This was not applied to the whole workforce to begin with and when they tried to implement it on every worker the unions protested loudly as they felt that there were inherent risks with it. They were worried that the workers would be reluctant to speak out because that could be seen as not acting within the company values. Despite the loud protests from the unions representing the workers, Statoil decided to ignore them and go ahead anyway (Ryggvik, 2018, p. 126).

Keeping within the values of the company is still something important for Statoil/Equinor, and something that I observed firsthand when I participated in a seminar at OTD in which representatives met students and potential future co-workers (see [4.4. A different kind of student](#)). The representative from Equinor emphasized the importance that future co-workers should share the beliefs of the company while pointing toward a slide in his power point, "inspired by vision, guided by values". These values are according to Equinor to be open, courageous, caring and collaborative<sup>33</sup> and the vision rests on being "competitive at all times", "transforming the oil and gas industry" and "providing energy for a low-carbon future" (Equinor, 2022). He also stressed the need for potential future co-workers that they need to be

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<sup>32</sup> Olav Fjell were forced to leave his position the year after the proposal to give the workers individual bonuses. due to the corruption scandal in Iran in which Statoil were forced to pay 20 million NOK. (BBC News, 2004).

<sup>33</sup> On Equinor's website they place three values each under those four I mentioned in the text. Open in the sense that they "promote transparency", "embrace diversity and new perspectives" as well as "raise ethical dilemmas and act with integrity. Collaborative because they "work as a one team", "share knowledge and help each other succeed" and "engage with, respect and earn the trust of our business partners and society". They are courageous because they "are curious, innovative, and commercial", "continuously improve" and "use foresight, identify opportunities and manage risk". Finally, they are caring because they "seek zero harm to people", "respect each other and contribute to a positive working environment" and "act in a sustainable, ethical and socially responsible manner" (Equinor, 2022).

able to “have many ideas and thoughts in the head at the same time”; in other words, being able to invest in oil now while researching and planning for an energy transition. He ends his talk by encouraging the audience to ask themselves “what’s in it for me?” when they look to Equinor as a future employer. This speaks to the individualization of potential workers more directly than previously. This individualization of workers appears to have been promoted ever since the alliance with BP in the early 90’s with individual income policies, even if the culture of Statoil often promoted itself as focusing on teamwork rather individual empowerment. Therefore, it feels somewhat deceptive to blame the new iteration of Statoil, Equinor, for these things, like some of my interlocutors did. Like the Politician that blamed Høyre for not sticking to the previous, highly regarded, “Statoilkultur”, even though the actual change seems to have started much earlier (Ryggvik, 2018).

It appears as if the stories told about the mysterious “Statoilkultur” lives on in an immaterial plane and is more about how they would like to remember Statoil. The shared norms and values that place teamwork higher than individual accomplishments or the pride in Statoil’s accomplishments and the role it played in making Norway a rich country. Maybe the culture has been prevalent locally at certain workplaces, or maybe it has not, nevertheless the perception of what “Statoilkulturen” is, is real.

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As of 2021 Equinor had more than 21.000 employees spread across almost 30 countries, and before the name change in 2017, according to their yearly report Statoil had 20.245 employees in more than 30 countries. The difference is quite small considering the scale, but the point is that it would be somewhat safe to assume that most of them would never meet. Therefore, this work culture could be imagined as an imagined one (Anderson, 2006, p. 6). The boundary of this elusive culture is also quite clear and was highlighted when it came in contact with the culture of the American companies (mentioned earlier by my interlocuter) and when it is compared to the work culture of Equinor. The imagined community proposed by Anderson also suggests that an imagined community often disregards material inequalities between people in favor of piercing the community (such as a nation) as having a “deep and horizontal comradeship” (Anderson, 2006, p. 7). The belief that there are inherent or even essential qualities shared among members of a nation is imagined according to Anderson, but a nation could create an ideal for members to strive towards. This ideal often promotes things (such as deep horizontal comradeship) that would bring its members closer to against one another. I want to point out that like a nation, “Statoilkulturen” appears to favor something

akin to a deep and horizontal comradeship as they promote teamwork and a teamwork structure rather than individual excellence. It is not of importance whether this community that “Statoilkulturen” proclaims is imagined, an ideal to strive for, or something else. What is important is that this notion of comradeship has a special place among many oil workers in Norway, and among almost all of my interlocuters. It is for this reason that “Statoilkulturen” that sets this oil and/or energy company apart from other companies, even if it appears to act like most other oil giants on the planet.

## Poetic Interruption

*A deep chasm*

*Cuts through and divides*

*Black and highly viscous ooze fills the rift*

*Your perspective*

*Mine*

*and theirs*

*Your truth*

*Mine*

*and theirs*

*What is truth without anchoring*

*in a post-truth world,*

*but a perspective?*

*Perspectives, narratives*

*Guiding our interactions with our surroundings*

*A way of life*

*A lifestyle*

*A culture*

*Is all that needs to change*

*To change our relationships*

*To our surroundings*

## Chapter 4 – Students and the Representatives: Relations

### During Transition

In the following chapter I will explore the relations between the different groups I have met during my short excursions to the physical field. I have decided to explore my ethnographical findings by showing the interactions between two different groups of students with representatives from the industry with the help of theories of trust, value, narratives, and shame.

Questions of trust appeared to be important to understand the events observed in the context in which the representatives and the students interacted. As their narratives collided and disagreements ensued, shifts in who or what to trust seemed to take place. Through a selected chapter in the anthology called *Anthropology & philosophy: dialogues on trust and hope* I was introduced to the prima facie trust/distrust, or in other words, the notion that the “immediate trust reaction” of an agent is based both on the individual’s personal experiences as well as the social context and conditions (Pedersen, 2015, pp. 106-107). There is also the aspect of reflective trust/distrust that recognizes the agent’s capacity to changing their own mind (Pedersen, 2015, p. 116). These conditions and contexts are something that Pedersen tries to organize with the “locus of trust” model by placing participating agents in accordance with “(1) conventions of social action, (2) institutions and social structure, (3) collective world views, and (4) ways of behaving toward nature and social entities in concrete time and place” (Pedersen, 2015, p. 115). It might be a complex model to operationalize, but my intention is to try to make it work.

The narratives and the stories at play will be analyzed with the help of *Future Narratives: Theory, Poetics, and Media-Historical Moment* (Bode, Dietrich, & Kranhold, 2013) and Viktor Turner (Turner, 1980). My reasoning for this decision rests on that the main narratives at play, and of interest to me, concerns those of the future, indeterminacy and an openness that allows for multitudes of outcomes. A future narrative that will be explored is that of a future climate catastrophe.

The different groups of students and the representatives from the industry that I came across seemed to understand their own situation as precarious, even though the representatives never said so explicitly. Some actions that the industry make suggests that they recognize the



precarity of the fossil fuel industry<sup>34</sup>, a precarity that, in combination with diverging narratives, facilitate a situation where the cruel optimism of Lauren Berlant emerges (Berlant, 2011). According to Berlant, this kind of relation (the cruel optimism) comes into play when what you want is actually keeping you from becoming prosperous and thrive. The industry's attachment to the ghostly substance that generates the sought-after money in the narrative expressed by the industry is an example of cruel optimism. However, like the fossil fuel industry the energy transition students have a similar attachment to another set of "good ideas" in the form of the narrative that the UN sustainable development goals promote. An optimistic narrative that proclaims that through technological innovation and energy transition to "green" technologies we can keep our progressive lifeways, and not cause an imagined worldwide ecocide<sup>35</sup>. Oil will also be looked at as an object of desire, a substance embedded with promises of financial wealth (Berlant, 2011, p. 23), at least according to some of the informants in this project.

Questions of value will be looked at in a similar fashion to how anthropologist Fabiana Li analyzed the mineral industry in Peru. She observed how the corporate mining actors managed to equate most things they came across to an amount of money with a logic of equivalence (Li, 2015). The theme of shame became important as I heard how a group of students expressed feeling ashamed when students not studying petro-subjects found out what they were studying. To explore that theme, I will attempt to draw parallels to the Ayoreo of Paraguay, and the shame ascribed to those who got caught acting in pre-contact ways by the colonizers and colonized (Bessire, 2010).

To analyze the meetings, the events, in which different groups collaborate to find ways to support their epistemology in ways that could confirm their own narratives and understandings, I intend to use Tsing's version of assemblages (Tsing, 2015, pp. 22-24).

Instead of mushrooms, the prominent non-human in this assemblage is the ghostly substance

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<sup>34</sup> When one considers the fossil fuel industry, precariousness might not be the first thing one would think of but the way the industry clings to the core of its identity, the energy production from fossil fuels, would highlight a kind of precarity; without energy from oil and gas they would cease to be relevant and that makes their existence precarious. An example of this could be seen in the recent article published on NRK that states that "Equinor er fortsatt 99,85 prosent fossil" (Langum Becker, 2022).

<sup>35</sup> The question of whether progressive "green" technologies can save us is being put into question more of late and in the book *Total Extractivism* the authors Dunlap and Jakobsen critically question the trajectory of the Progress that "green" technologies promises. According to them there is little evidence that "green" technologies (or extractivism as they call it) can solve or mitigate the current ecological and climatical crises, instead they suggest that the consequences of these new "green" technologies are "under-acknowledged, or willfully ignored" (Dunlap & Jakobsen, 2020, p. 106).

of oil, the escapee carbon dioxide, as well as the knowledge that helps to build and inform the narratives at play.

## 4.1. Energy Transition

What is energy transition?

Energy transition is the process that aims to change the structures of the existing energy infrastructure; To swap out or transform the energy production that need fossil fuels to supply societies with energy, for the simple reason that consequences of our energy production and consumption seems to mutate the ecology of the planet in “deeply troubling ways” (Boyer, 2015).

The transition to new ways of producing energy is part of the UN Sustainable Development Goal 7 which states that we need to “Ensure access to affordable, reliable, sustainable and modern energy for all” (United Nations publication issued by the Department of Economic and Social Affairs, 2022). This is something that the industry needs to take into account if they want to stay relevant. The ghostly substance that powers our late liberalist society (Povinelli, 2016, p. 167) up until now is being put to question as scientists suggest that we might be digging our own grave, and they feel they have a “moral obligation” to warn humanity of their data and prognosis (Ripple, et al., 2021).

The need for transition seems to be evident for many of the climate scientists, but nonetheless their suggestions are met with resistance from the oil and gas industry. This resistance is made visible as some countries lobbied against specific formulations in an assessment report from IPCC important for the negotiations at the COP26 conference<sup>36</sup>. However, the industry should not be seen as being one-sided, many companies proclaim their transition to “greener solutions” for a low-carbon future. Nevertheless, many of the environmentalists I have been around see this almost as a Manichean battle between economic growth and the survival of the earth<sup>37</sup>. As for myself, I most often tend towards the environmentalist’s perspective; I appreciate the aesthetics and the ethics many of them propose. By ethics I mean how the certain environmentalists emphasize the importance of a non-industrial world in which

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<sup>36</sup> According to news reports that suggested that countries tried to downplay the rapid need to move away from the use of fossil fuels. See this story from BBC as an example (Rowlatt & Gerken, 2021).

<sup>37</sup> An example could be seen in an email sent out by Greenpeace in Sweden in which they express themselves in the following way, “in this like these it is important with things that spread light in the darkness [...]” (personal correspondence).

humans re-integrate in a way not destructive to the ecological systems voiced in pamphlets such as *Invitation to Desertion*<sup>38</sup>, and by aesthetics that I much prefer forests to spaces covered with concrete. However, I have come to realize that this is not a battle between good and evil, it is one of different perspectives and values, and in a world with conflicting narratives, it can sometime be difficult to make a decision that feels right.

What compromises can these groups (the energy transition students and industrial representatives, and the petroleum students and representatives from the fossil fuel industry) agree upon in their negotiations of value, meaning and physical alterations of local and global ecologies? What similarities and differences can be found in their narratives that guide them in these specific assemblages? In the next section we will be introduced to a group of energy transition students and representatives of industries closely associated with the oil industry.

## 4.2. A future to be caught

“Catching our future”, a slogan that adorns the outside wall of a building that houses some of the individuals that work at Technology Centre Mongstad (TCM). This is a place that used to be open for frequent study visits of university students studying relevant subjects. Because of the COVID-19 pandemic that ravaged the world these frequent visits were put on hold, until now. The students that I joined were among the first students allowed back on site and everyone had to provide negative test results from covid infection before being allowed to join the visit.



Figure 2: The slogan "- catching our future" adorns the outside wall of the TCM office building.

The main objective of the course they were studying was “to introduce the science of energy transition and sustainable energy sources, and to provide them with an understanding of key cross-disciplinary challenges related to the transition towards a low CO<sub>2</sub>-emission society”

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<sup>38</sup> This pamphlet was originally an article in the first of the radical magazine *Backwoods: a journal of anarchy and wortcunning* (Fitzpatrick, 2018).

(University of Bergen, 2022). To understand the challenges of energy transition, the course addresses themes ranging across disciplines such as climate science, biology, political science to mention a few, as well as provide an excursion to a hydroelectric plant and to TCM. The course required no previous knowledge and many of the students I joined were exchange students or part of an Erasmus program. By joining this group of students, I could observe how associated industries to the fossil fuel industry interacted with a group of students and how they would interact with young people who might have considered joining the CCS industry in the future. As I walked around with this group of students, seeing the different sites for CCS testing up close, listening to talks, in other words experiencing a tour constructed for them, I noticed that the students did not necessarily share the same perspectives and values as the people working there, even if the course description kind of suggested that. The purpose of the course they were studying was energy transition and therefore TCM looked like a suitable place to visit, but unexpectedly the representative from TCM did not seem to share the students sense of urgency for a rapid energy transition.

Many of the students struck me as hopeful and during a short break an Erasmus student explained to me how they wanted to do research in Antarctica and dreamed about a future in which they could visit the icy continent. They were worried and saw a need to change the existing energy sector before our current ways melts their dream away. As I was going to ask them to expand on their dreams of the future, a representative and process engineer started to give her talk about TCM. She greeted the group in English because most of the students were international students.

The process-engineer and representative from TCM started her talk with a brief history of TCM and what kind of research they conduct. She explained how the initiative for this research facility emerged in 2006 and is owned by the Norwegian state through Gassnova (73,9%), as well as a few minor partners, Shell (8,7%), Total (8,7%) and Equinor (8,7%), whom also is the operator of the facility. Companies bring their experimental solvents here to test them on a larger scale and on “real” flue gas, not artificial only created for the purpose of testing. The “real” flue gas they test the solvents on come from the nearby refinery. During this talk, several of the students inquired about the technological aspects of the carbon capture technique, a technique that TCM can test in unique ways because of the scale they can conduct their testing. The representative explained: At TCM we find three different large-scale testing sites, the first one allows for a method using chilled ammonia (CAP) to catch carbon dioxide. According to an article from 2014 that lays out the first results from CAP

testing at Mongstad the one can read that CAP is a version of what is called post combustion carbon capture technology, and in this chemical process carbon dioxide is absorbed by an ammoniated solvent at low temperatures, to be released at higher temperatures, separated for the emission captured before the process began (Lombardo, Agarwal, & Askander, 2014).

In another article about the design and functionality of the second site that hosts amine plants of two different sizes the reader can learn about another post-combustion CO<sub>2</sub> capture and cleaning technology (de Koeijer, et al., 2011). Here they scrub the carbon dioxide and remove hydrogen sulfide from emissions produced at the refinery. Captured carbon dioxide would most likely have to be liquified and transported to a facility like Northern Lights<sup>39</sup> from which it would be sequestered, exiled, banished, below the seabed off the Norwegian coast (Fagerlund, et al., 2021).

The third site is a kind of modular site to which companies can bring their own container-sized "solutions" to test them out in a secure location. The representative from TCM did not elaborate more on the third testing site, and later when the students and I were shown around we only got to see that site from a distance. What was being tested there was kept secret, something which is not unusual in a competitive industry that is about to transform waste to a commodity (see [5.4. "Enabled by new technology", and Progress at any cost?](#)).

On a yearly basis the Amine and chilled ammonia plant scrub 100 000-ton CO<sub>2</sub> a year and the modular site 18 000 ton. The lecturer states that it's the research that is the main thing and focus here. I tried following along in the technological jargon but got lost somewhere along the way, as the speaker pointed to a complex picture in her power point presentation. The students asking questions seemed content with the answers they got.

After going over the technological aspects of the testing and the Carbon Capture Storage (CCS) and Carbon Capture Release (CCR) techniques that are developed and tested at TCM, the questions from the students started to shift slightly in their tone. The questions started to sound more and more like critique. To my understanding this happened because the representative from TCM informed the students that we (the industry) already possess the technology to both capture and store carbon dioxide quite effectively, to which they responded with "why aren't we already doing it?". The storage part has been known for

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<sup>39</sup> This is a collaboration between several energy companies, including Equinor, that aims to launch a carbon storage on large scale. It is part of project that the Norwegian government calls "Longship" (Equinor, 2022).

several years, and even if they cannot seem to catch all of the carbon dioxide emitted, they can catch up to 90 % according to the speaker<sup>40</sup>. The group of students turned their heads toward the professors leading them on this excursion with wondering eyes, and the professors confirms the information from the representative. It is paradoxical to imagine that even if the CCS technology can scrub the dangerous carbon dioxide from emissions, they will not apply it, not even at the TCM, a leading CCS innovator with a refinery next door.

In the assemblage of students, professors, a representative and the conflicting “good ideas” of what to do with the dangerous escapee, carbon dioxide, their differences become illuminated. According to Berlant, a “good idea” is one way in which a “cluster of promises” could be embedded in things, institutions, norms, etc., and in our case the “good idea” appears as an object of desire that promises us to make certain things possible. The “good idea” of the oil and gas industry entails perceiving oil as the facilitator of profit and progress, as well as a way to energy transition (Berlant, 2011, p. 23). “Good ideas”, as attachments, as objects of desire, invites a cruel optimism that offers something good for some and not so good for others (Berlant, 2011, p. 24). In this instance the testing opportunities available at TCM are unique because of the scale of the facilities they can offer companies from all over the world to come there to test their solvents in exchange for money. The “good idea” that affects the representative’s narrative seems to be that testing ways to capture carbon dioxide can save the industry that produces the emissions as well as the industry of testing out new carbon capture techniques. This highlights a conflict of narratives: the “good idea” of the energy transition students which would do good for the future “green” energy companies but not so good for an industry whose existence is either based on fossil fuels or the emissions that they produce clashes with the “good idea” of fossil fuels as a facilitator of business opportunities. Having different goals seems to be at the core of the conflict. One side wants to move hastily through the process of energy transition to the new “green” energy production while the other is doing well remaining in the process of transition because it is profitable and because moving past the process would force them to reimagine themselves in a world not running on oil and gas, and where energy production would not produce carbon dioxide.

Turner suggests that we follow the threads linked to an event backward to determine its origins and forward to determine its impact (Turner, 1980, pp. 144-145). In our case, the

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<sup>40</sup> See chapter [3.4. The moon landing at Mongstad](#) for more information on the failed attempt to apply the CCS on a larger scale.

event is not a closed off event, it is an ongoing process: The climate has been changing without human input and that is all well, but the way it has been changing recently has been caused by a human culture distinguished by its fondness of industrializing everything. Industrialized ways of being in this world has caused the climate to mutate to something that has become detrimental to human and other-than-human life on this planet. The physical reality of this event/process is something shared by both narratives, but after their original starting points they seem to diverge. A social drama plays out and a “breach” could occur when the assignment of trust no longer seems to align. The narratives diverge and follow new paths, and the prima facie trust that previously existed due to the belief that they shared similar world views changed and the agents reflected upon their previous allocation of trust and changed their minds in a similar way to what Pedersen explains the “interplay between prima facie and reflective trust” (2015, p. 111). In other words, a subject takes a step back and reflect upon its prima facie reaction and either resume its previous prima facie trust or reflect and change it before returning to social situations that trust is tested. This “breach” (Turner, 1980, p. 149) happened as the students asked, “why aren’t we already doing it?”, and the representative from TCM answered that deploying these technologies on the large scale they had previously planned was not financially defensible. I mentioned this point earlier, how the students turned to their professors, for what I imagined to be, reassurance or confirmation, but viewing this through Turner really exemplifies what I understand to be a “breach” followed by the “crisis” phase. A “crisis”, “a momentous juncture [...] in the relations between components of a social field” (Turner, 1980, p. 150). The students had seemed very interested in the “good” that the carbon capture technologies do for the world and had enthusiastically asked about the technological details. However, now they were faced with a reality in which they had to question how much “good” the carbon capture technologies could do if they were not being implemented by a leading actor in the industry of researching and capturing the escaped carbon dioxide. The next phases of “redress” and “reintegration” or “recognition of schism” (Turner, 1980, p. 149), would have to wait.

By returning to the question “why aren’t we already doing it?” a dissonance among their values becomes visible. Fabiana Li problematizes and exposes the industry’s reliance of a “logic of equivalence” while examining why the environmental plans of mineral extracting industries got rejected by the local human inhabitants of regions around the Yanacocha mine near the city of Cajamarca in northern Peru (Li, 2015, pp. 23-29). I believe that the way she problematizes the situation in her fieldwork can provide useful comparisons to what I found

out. The industry that Li spoke of assigned economic values to the calculated damages that their operations would cause to the environmental region, in other words they equated those things through a logic of equivalence. In a similar way, the industry at work in my case have indirectly assigned a monetary value to environmental pollution that refinery emits and deemed that the cost to prevent that emission too high when they decided that the implementation of what they used to call the “moon landing” would be too expensive. In other words, environmental pollution caused by the escaped carbon dioxide was indirectly assigned a price, and that price was too high to pay, in economic terms. The students on the other hand did not seem to agree with equating current and future environmental degradation to an economic value, hence their honest question “why aren’t we already doing it?”. The prima facie trust that the representative from TCM had because of giving a lecture to students (known social action) and appearing to share the same worldview no longer seemed to hold. This would become even more obvious as the day continued, and we met other representatives from other projects and businesses associated with the fossil fuel industry.

### **4.3. Bickering about money**

Later during the same day, I had the opportunity to join the same students for a talk given by a representative from Greenspot Mongstad, a “strategic initiative to develop MIP<sup>41</sup> into a diversified green industrial park. It is a joint initiative involving several stakeholders from multiple industries and sectors” (Mongstad Industrial Park, 2020). An organization with a vision that aims to:

*“[...] to transform Mongstad Industrial Park into the ‘green spot’ of Norway  
by offering favorable conditions for sustainable business models.”*

*(Mongstad Industrial Park, 2020).*

The representative seemed to embody this vision as he walked around in the conference room, with a straight back and a confident stature. Before he properly began, he informed us all about his extensive background within both the oil industry and the military. When speaking of his past in the oil industry he indicated that the most important instance in Norwegian history during the last century was when oil was discovered on the 23<sup>rd</sup> of December 1969. He surprised me with that statement, because I would have thought that the most important thing would have been the liberation from the German occupation in 1945. No matter how

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<sup>41</sup> Acronym for Mongstad Industrial Park.



important he believed the discovery of oil was, now he is in a leading position of one of the main actors that are developing the Mongstad Industrial Park as well as leading the new initiative that aims to bring more "green" businesses, businesses economically, socially, and ecologically sustainable, to Mongstad. As he is telling us his story he walks around, like an officer observing his fresh recruits.

He spoke with great enthusiasm about what he does, and it was easy to get swept away by his stories and his great rhetorical skills, I know I did. During the talk he invited and encouraged the students to jump in and inquire about anything that he said, and even if the students did not catch on from the start, they did warm up and joined the interactive presentation soon enough.

Many of the students kept bringing up a need to change things now, to transition into another form of energy production that does not require fossil fuels. Neither the students nor the Greenspot representative seemed unwilling to compromise on how and what needed changing at first but after a while it seemed they could not reach common ground or agree on a compromise. As an example, he explained that electrifying the offshore platforms that extract oil and gas would be a good start and a compromise. The students voicing their opinions seemed to think that electrifying the offshore platforms would be an unnecessary thing to do if the goal is to transition away from oil and gas. They wanted and valued a more rapid transition to secure an imagined sustainable future even if this would end up being very expensive, financially speaking. The representative from Greenspot encouraged the students to attempt to fill his and other executive positions in the future. Positions from which they could make the changes that they wished for, but he was adamant that they should not forget the power of money and the market.

*"The market always wins. Politics might act as speedbumps sometimes." –  
the Greenspot representative*

The representative from Greenspot Mongstad said he was confident that the way forward was through money and claimed that capitalism is the only system that has ever been proven to work, and that humans will never willingly decrease their material welfare. His outlook seemed to correlate well with the logic of equivalence that the extractive industry relies on, and that I noticed in the last lecture. Capitalism and the adherence to a logic that allows one to equate everything to an economic value, facilitate a worldview in which a commodification of everything is possible, and where the most valuable thing is the generation of more money. It

appears to me that when these ideologies assign values to things outside of the economical world, they force them into their world; A world in which things lack value unless they can generate more economic value.

When the discussion moved to the question of money, and the bickering of money commenced, the disagreement became clear. The energy transition students seemed to be willing to explore new avenues of transition and change while the representative was keener on continuing along the already explored paths of markets and capitalism. He explained how “yesterday we sold gas for more than a year [worth] of hydroexports”, and if the market gets to decide the way forward, our future will be powered by gas. However, he also mentioned how “we are in a hurry because of climate change”, and we must claim the good positions in the market that are open for both old and new actors that want to secure a spot in the changing value chains. I could observe that his comments about capitalism and the market did not sit well with the students around the conference table. Some students rolled their eyes in disbelief and contested his assumption of the power that money possess by pointing out that there are more than financial incentives, people can change because of ethical reasons as well, while some stayed silent and nodded in agreement with the students that did talk. The prevailing attitude of these students did not align with the narrative espoused by the representative. One of the students did however go slightly against the stream and expressed that the Norwegian oil industry have done a lot of good in the past but still saw a need to change the direction of the industry today, and to focus more on energy from renewable sources. Her comment did not receive any critique from the rest of the students which made me think that they more or less agreed with her, or that they had no connection to the Norwegian context because many of them were international students.

The conversation moved on to a slightly different topic, the topic of continuous growth and/or the idea of degrowth, and from discussions of global climate change to more local issues at Mongstad. The discussion of the borderless global climate change became territorialized, which according to Latour this makes the individuals involved more ready to mobilize (Latour, 2018, p. 8).

The representative from Greenspot Mongstad responded to the question of future exploitation and development that:

*"I'm a pilot. If I pass over Mongstad at 10 000 feet, it doesn't look good.*

*The damage is already done."*

That quote suggests that he is fully aware that the area that Mongstad Industrial Park occupies does not look like a healthy ecological place, and that makes it a better place to continue to develop on because "the damage is already done". Not only does the sentiment of that remark suggest that he is aware of the ecological degradation, but it might also suggest a break from the logic of equivalence that can equate everything to an amount of economic capital. His observation of the industrial site of Mongstad suggests that he acknowledges the damage that an industrial site has had on the local ecological networks. By analyzing the phrase, one could notice a sense of acceptance of loss, of not being able to save the local environment where the industrial park now resides. But it also signaled an awareness that exploiting other un-exploited areas would be more detrimental than already develop in a damaged space.

One of the most vocal students suggests that maybe more development might not be the only option and suggests that maybe we should consider the idea of degrowth to deal with the current climate change issues. The Greenspot representative does not appear to give that suggestion much merit, and once again brings up the argument that humans would never choose an option that would decrease material welfare. This statement put further discussions in a deadlock as no one wanted to budge.

The chasm that divides the narratives that seem to inform these two different groups<sup>42</sup> appears to be a question of value. What do they value more, and what do they value less? The group of young students seemed to value an imagined "green" future to a world created by a fossil fuel industry relying on a logic of equivalence. An imagined future that appeared like a distant dream especially if the narrative of the industry maintains control of the material world and its future. The students were keener on radically changing the industry immediately, no matter the financial cost, while the older generation seems to value access to stability, decent work,

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<sup>42</sup> The usage of groups versus assemblage in this text have hopefully not been too confusing but I will take this opportunity to explain how I have and intended to work with them. An assemblage is something akin to an arena where groups, ideas, other-than humans, etc. interact in a multiplicity of connections, while the groups in my case represent individuals that share something like an occupation (being a student, being a representative), an ideology (like capitalism), or chemical composition (like carbon dioxide).

and capital. Transitioning away from the industry that provides stability through work is harder for someone who have stakes in that same fossil fuel industry, than for the students yet to join any industry. Both have stakes in the existing and the coming situations, however, it is easier to equate the stability of workers today with economic values than doing the same with the imagined future of the students. The workers have existing salaries, and they have real (financial) costs of living.

The representative from Greenspot Mongstad expressed his concerns of a regional collapse if the oil and gas production ceased without offering the workers realistic alternatives. The students nodded in agreement; they were sympathetic to the affected workers within the industry. Before he ended his talk, he asked the room a rhetorical question before he made room for the next speaker.

*“Are we less moral? I don’t think so.” – the Greenspot representative*

With a question like that he might try to capture, or re-capture, any loss of trust that he feels like he lost in the eyes of the students. Or he could be affirming his own world view by answering his own question of morality. By affirming, with confidence, that he does not feel any less moral, even though stories and narratives espoused by environmental activists and climate scientists sometimes suggest that individuals like him would be less moral, he tries to assert that they (the Greenspot representative and the students) do indeed share world views on the interface of locus of trust. Pedersen suggests that trust is not only an atomized choice but that it is shaped by the social setting, and that “trust emerges as a social phenomenon among humans” (Pedersen, 2015, p. 112). Even if these two groups do not necessarily share the same social setting outside of the temporary setting that they made up at Mongstad, the effects from that encounter would influence their prima facie trust in future assemblages and social encounters. When it came to the question of morality that the representative raised it seemed to be grounded in a belief in capitalism and how it would pave way for potential societal progress. The energy transition students also wanted societal progress but instead of relying on a fossil fueled industry they wanted to attain it by adopting “green” industrialized ways, all while they appeared to not subscribe to the capitalistic logic of equivalence the representative espoused.

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A short break commences to let the next speaker prepare his power point presentation. Students open a few windows to let some fresh air in while others take the opportunity to top

off their mugs with coffee from the thermoses lined up on the conference table. Discussions among the students are still on the topic of what needs to happen to battle global climate change. The ideas among them differ on the specifics, but everyone that I could overhear or speak with were certain that a more radical change was necessary than what the last speaker had been promoting. The conversations quickly subside as the next speaker asks for their attention. The man in front of us represents an associated business to the actual energy sector; the company he works for provides services and products for the oil and energy industry. He explains how he quite recently made the jump to this industry from having been a preacher before, and I prepare myself for a similarly oil fueled sermon.

The company that he represents is called Petro Support West (PSW), and as the name suggests they mostly cater to the oil and gas industry even though they do also have customers from the renewable energy sector. They, the company, want to cater to all tastes who conduct (industrial) business in the North Sea, and he wants the company to be seen as a “Gateway to the North Sea”, an enabler and helper to those interested in industrial exploitation of that region. This company also provides services for the oil and gas industry as the “reservoirs” are emptied of the ghostly substance and gas by providing tools to “plug” the “taps”. He explained that as a major supplier and enabler to the industries in the North Sea they could very well be seen as the gateway they imagine themselves to be. With PSW’s help the industries can “recover” the “wealth of the North Sea”, a wealth either hidden in the reservoirs of oil and gas or attainable through the ability to erect offshore wind turbines.

The group of students seems to be quite mentally drained from a whole day of talks. Sighs and tired-looking eyes suggest that their attention appears to be dwindling even if they try their best to keep up. A contributing factor for the lack of engagement from the students could be that the intake of free coffee has passed the point of caffeinating the students in a productive way. It could also be that he is a lot less outspoken than the last speaker, and frequently likes to mention that he and his company “should stand shoulder to shoulder with environmental groups to solve the problems ahead”, thus appealing to any environmentalist inclined students in the conference room that they do want the same thing and should work together instead of fighting. This appeal appears to be a way to build trust. It seems like he is aware of the problems associated with the industry and has made them somewhat personal, something he expressed when he mentioned that he would like to be able to continue to fish in the local fjords, an activity that would become more difficult and less enjoyable with a degraded and polluted environment. He is standing shoulder to shoulder with the

environmentalists that enjoy spending time outdoors in healthy ecosystems trying to create a shared world view and shared ways of behaving toward nature in a concrete way, which is imperative to building trust, and trust is important to forming a stable social setting in which productive work can happen.

As the second speaker starts to wind up his talk, and the students seem happy to soon be able to board the bus back into the city, the previous speaker, the Greenspot representative, breaks in and starts to speak. He stresses the need to “follow the money” and similar sentiments that lies at the core of capitalism. The students continued to disagree with him, and any compromise that they had been working towards on a theoretical level earlier appears to be much further away now. The last word of the day goes to him, and he emphasizes that “there’s no alternative”, the only way forward is Progress. Any other option would entail “doom and destruction and we don’t even want to think about that”.

Those final words were met with shrugs, of what I perceived to be, hopelessness. A feeling that was confirmed when I spoke with some of the students afterwards while we were waiting for the bus to bring us back to the city. It was not only hopelessness, some of them also felt more driven, to pursue the changes that they felt to be necessary. Changes they could achieve by joining the industry of green energy once they finished their studies at university. However, some of them doubted that the industry that they had just met representatives from would be good partners in the energy transition. The distrust between the groups was almost palpable as the students and I left the conference room and walked outside only to be met grey skies and light rain on our short walk to the bus.

How can we understand these exchanges between the students of energy transition and representatives of the industry? What compromises could they agree on, and what differences and similarities were illuminated during this assemblage?

An example that Pedersen uses to illustrate interpersonal trust and distrust with is based on anthropological fieldwork in a war-torn Uganda. It follows the changes of prima facie trust of an actor, a recent father, and of how this man grew more distrusting (of non-family) ever since his child was born. Pedersen explains this change in the immediate trust/distrust reaction by acknowledging that the agent’s stakes had become higher since he became a father. He had much more to lose now (Pedersen, 2015, p. 105). In the case that I presented, the representative from Greenspot Mongstad (also a father), could therefore be seen as not necessarily distrusting towards a group of students that threaten his stability by threatening the

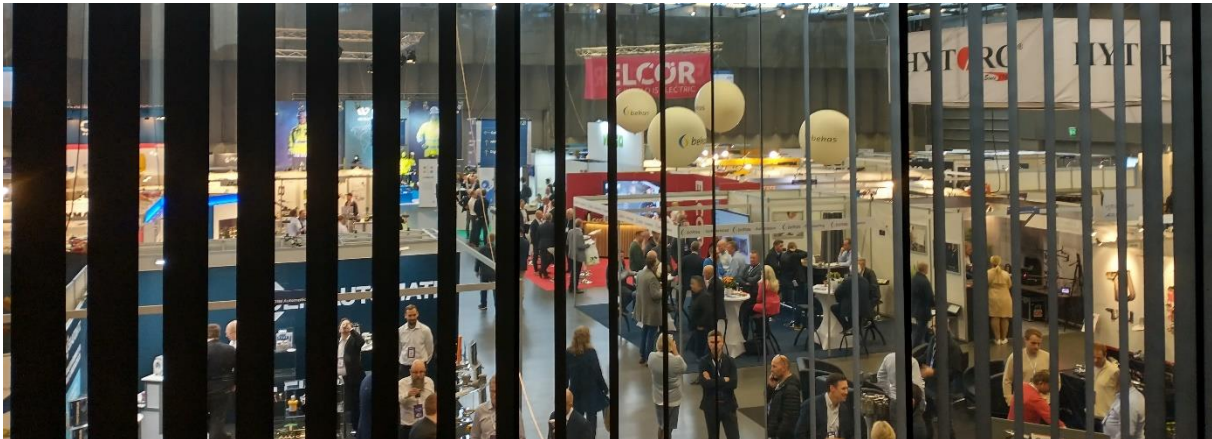
stability of oil (through their act of studying a transition away from oil) but as skeptical of their ability “to do his job”. The stakes of the students could also be seen as high even though I doubt that many of the young students were parents. Their stakes were associated with an uncertain future as seen in the comment made about Antarctica melting away by one of the students. With stakes like that it is not surprising if they find it hard to trust representatives from an industry that are often seen as part of the problem that are preventing them from having a safer and more certain future. Oil spills and the ecological damages caused by the escaped carbon dioxide are consequences to actions that are culturally embedded in the social reality of the oil industry. The only things that I could see them agree on with little to no reservations was that of a future with secure and stable jobs for those everyday workers of the oil and gas industry, as well as vision of an industrial future.

Let us turn to Turner and look at whether these groups ended up reintegrating or recognizing a schism when the temporal assemblage came to an end, and I would like to think that they recognized a schism. The narrative chasm was too deep, however, for them to be able to build a stable bridge across. The staunch belief in capitalism of the Greenspot representative and the reaction of hopelessness among the students helped to fortify the divide.

The group of students that I met at Mongstad industrial park are only one of the multitudes of student groups that move through the academic world. I came across another one of these groups at a later point during a yearly conference called Offshore Technology Days in Stavanger. A conference, created in 1999 by and for the associated businesses in the offshore sector, and according to their own website they have become a “leading place for Norwegian oil, energy and offshore businesses” (OTD Energy, 2022). It aims to be a happening where new connections between suppliers and the energy industry are made. OTD’s own public statements recognize that the industry of energy production needs to transform through technology and innovation which would allow the private actors remain to relevant in the financial world (OTD Energy, 2022). The students I met there, seemed to be informed by different narratives and values concerning the ghostly substance and the escaped carbon dioxide than the students I encountered at Mongstad.

#### 4.4. A different kind of student

Sitting on a plastic folding chair in a room with a view over one of the exhibition halls at this year's OTD conference in Stavanger with a cup of free coffee in my hand, I see students gathering for a several hours long meeting in which students and their future employers discuss recruitment to the oil and gas sector. The conference room is almost filled with participants and only a few chairs are left empty as the seminar begins.



*Figure 3. View over one of the exhibition halls at OTD in Stavanger 2021.*

A representative from Rystad Energy informs the group of students that it is unrealistic to limit global temperature increase to 1,5 degrees, and instead suggests that an increase of up to 1,8 would be more realistic and not noticeably worse for the global climate. I look around in the room to see what kind of reaction this would cause since this representative just downplayed the importance of the recommendations from IPCC. To my surprise not a single student reacted with critique or worry, they did not really react much at all.

The atmosphere here is significantly different from my visit to Mongstad where the comment made by the representative from Rystad Energy would have caused an uproar with the energy transition students I met at Mongstad. At OTD no such thing occurred. Next up was a representative from Equinor who described what the company is looking for in future co-workers. According to him, they look for individuals with a wide range of skills and attributes, knowledge and understandings of industry specific tasks, as well as that those future co-workers share the beliefs of the company. The students to whom these representatives spoke seemed to be worried about not being able to get gainful employment with their finished university degrees. It was quite easy to notice the OTD students' desire to become employed by the oil and gas industry once they have finished their degrees in relevant subjects as they persistently asked for assurances. Their feelings of uncertainty, wondering if



they will have a job once they are finish at the university did seem to stress some of them out, something which they expressed by asking the industry for promises of a secure future: “Why can’t you promise us jobs?”.

Another thing that was noticeable was a kind of dissonance between the students and the industry. The industry complained about how they needed to recruit from abroad because they could not find what they are looking for in Norway, all while the students were worried about having a safe and secure future within the industry. This peaked during the Q&A segment where both the students, and the representatives seemed to be annoyed with one another. The students wondered “Why can’t you promise us jobs?” and the industry responded, “We don’t want to have to import our workforce, but we have to”.

Many of the students are going to dedicate several years in universities to make them suitable recruits for the industry and if that industry now is threatened it is not difficult to understand their worries. In other words, after years spent at the university the students fear that the industry will not be there to employ them once they are finished, which is probably something that many students can relate to; a worry of not becoming employed after years in training. Their niche study subject of petroleum extraction had already made them “locked in the business” even before they finished their degrees; locked in a business threatened by the new green industries.

In relation to the university degrees, one of the representatives expressed their disdain for how the degrees had evolved at universities. He thought that they involved too much “meaningless theory” and that the best way to teach future employees is with hands-on experience. Many of the representatives seemed to agree, the students spend too much time at the universities and that makes them more difficult to hire. The woman from BP, whom is not a speaker but is there as an audience member, complains that they must import much of their workforce and that there is only the “old guard” left now. A student in the audience raised an issue that bothered them all. She had noticed a worrying trend at the universities, “many of the petro-subjects are being replaced with energy-subjects”. One example where this change or trend could be observed is the newer design of a bachelor’s degree at University of Stavanger that

previously used to have specific petroleum subjects and degrees, but now there is a new focus on energy and transition <sup>43</sup>.

The speakers try to reassure the students and sooth their uncertainties for the future by having the students focus on the “excitement” that they will experience if they decide to go forward and join the industry. The employer association Norsk Olje og Gass has tried to promote such excitement through commercials such as the video they released in 2017, showing off the variety of positions one can apply for in the industry (Norsk Olje og Gass, 2017). They, the speakers and representatives, also assured them, the OTD students, that even if “the environment needs” changes, oil will still be relevant until at least 2040 or 2050, and if the Norwegian industry does not extract oil another industrial actor will do it in our place with worse environmental policies. In a dramatic video from the same employer association released in 2019 the actors express the need for a change and proclaiming that the “party is over”, “we are destroying the world”, while the video cuts between violent storms, escalators, busy hospitals with lines of newborn babies in plastic containers, busy times at the stock market, and roads with lots of cars. Actors in black and white also pose questions like “how are we going to pay for the healthcare system?”, “or the roads I drive on?” After aiming those questions towards the viewer, they wonder if it is not their (the oil workers) responsibility to find a new way. The video ends with a plead for the viewer to help before it asks you to visit the website *The New Oil* (Norsk Olje og Gass, 2019). With videos like that it appears as if the industry is concerned with the future of society and its members.

Apart from the feelings of uncertainty that the students seemed to have in relation to a secure future another thing caught my attention, namely the expression and ascription of shame. These expressions and ascriptions of shame must be seen in the context of what it feels like to tell others (outside the oil industry) that they study petroleum and gas extractivism. One student in particular raised his hand during the Q&A and described a situation in which he was asked by students of other non-petroleum subjects, what he studied. This was a situation in which he felt a sense of worry because he knew what would happen when he answered that he studied petroleum. The worry originated from the shame he was about to be ascribed, a shame that he did not necessarily feel without the external input from non-petroleum students.

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<sup>43</sup> In the description found on the website one can read that previously there used to be separated subjects (“Tidligere har det vært slik at man utdanner seg med spesialisering i enten strømningsbasert eller materialbasert energi”) (University of Stavanger, 2022). This change could most certainly be observed in other places as well.

A student of these subjects goes against mainstream narrative expressed by many of big media outlets and UN researchers (IPCC, 2021).

The reluctance of sharing his subject of study with fellow university students that particular OTD student expressed struck me, he did not want to be ascribed or feel any shame for his choices. What I perceived as a sense of shame was observed by the insecurity in the student's voice as he told everyone in the room his story. This led me to an article called *A Fieldnote on Shame* (Bessire, 2010), an article that explores the shame expressed by the Ayoreo of Paraguay in the context of colonization. The colonizers in the case of Ayoreo were missionaries that tried to convince the Ayoreo to change their ways, cut their hair, get a job, and convert to the colonizer's belief. For the individuals that did not change their ways or that occasionally disobeyed the new norms and morals, got labeled as shameful individuals when (and if) the converted found out (Bessire, 2010, p. 2). What seemed to worry this student was that shame could be ascribed to him when the converted (those ascribing to the belief that there is no future for fossil fuels) would find out about what he was studying, and this is what seemed to worry that particular student. The concept of the contextual shame of the Ayoreo, is "fundamentally about social status, and it mediates the relationship of individuals and moral authority" (Bessire, 2010, p. 3). If the moral authority is the same as the stories that many media outlets report (that fossil fuel is bad) it could be applicable to the OTD students in my case. In other words, the non-petroleum students ascribed shame to the petroleum students because they saw them as lacking morality, at least in "green" narratives. Similarly the oil workers that was interviewed in an article concerning the use of the word "oil worker" in recent Norwegian media, said that they felt a sense of "being shamed" (Ytterstad, Houeland, & Jordhus-Lier, 2021, p. 7), and it appeared to be true to at least a few of the participants in the seminar. By studying petroleum subjects, they are turning to the pre-contact knowledge of energy production in a world in which those actions would be seen as non-innovative, primitive in comparison to the stories of the technological innovations of renewable energy production.

Feelings of being an obstacle for a green shift, of an energy transition, was something that the authors of *Heroes of the Day After Tomorrow* mentioned in their investigation of the oil worker's place in Norwegian media between 2017 – 2021 (Ytterstad, Houeland, & Jordhus-Lier, 2021). In that article the authors track and analyze the usage of "oil worker" and noticed an increase. Moreover, they also saw the term was used in both positive ways, such as "we are all oil workers" and "proud oil worker", as well as in a negative way such as "the oil shame",

all within the context of the green shift. These shifts in public narratives are so-called “devil shift[s]” and/or “angel shift[s]” (Ytterstad, Houeland, & Jordhus-Lier, 2021, p. 14). In their findings, the oil worker was seen both as the one carrying the shame of an industry that appears to be the cause of our mutated climate, as well as the savior to come of an imagined future (Ytterstad, Houeland, & Jordhus-Lier, 2021). In that same article the authors showed an explicit example that they found in the Christian newspaper *Dagen* where two priests’ debate and one of them compare supporting the oil workers in the North Sea with visiting drug convicted drug traffickers in Colombian prisons, and how they can visit both without supporting them (Ytterstad, Houeland, & Jordhus-Lier, 2021, p. 8), an example that illustrates the consequences of portraying oil as bad. Continuing the comparison with the Ayoreo, a context in which acting against new moral laws of the colonizer and getting caught could cause the feelings of shame, even if not everyone among the Ayoreo was as susceptible to this assigned shame. High-ranking members of their society was said to never have any shame. The students I met appeared to be susceptible as they asked the representatives for reassurance or looking for ways in which to contest the shame they had been ascribed, something that those aspiring to a for a higher status would do among the Ayoreo (Bessire, 2010, p. 3).

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If we imagine the energy transition as a narrative node from which multiple paths originate, paths which could carry us to either the utopia of the techno-positive green industrialists, or to a world in which we continue to burn fossil fuels for energy production (even if the emissions might be caught by carbon capture technologies). No matter which of these two examples one imagines, they appear to never cease to be a future narrative, in other words the plans to implement any major change never seem to be realized. The representatives I encountered at Mongstad seemed to be content with lingering with the oil and gas industry and viewing the transition as the goal. If the representatives of the “green” industry (Greenspot Mongstad and TCM) were serious in actually transitioning they appear to be stuck with a business deal that would not let them actualize the “moon landing”. The capitalist structure and its reliance on the logic of equivalence and ability to give everything it touches a monetary value, being locked to the market, and as a result, a decision was made, the “moon landing” was not worth the money. The narratives of the energy transition intrigued me, and I am interested to see if their plans will come to fruition in the future, if they can remain convinced that consequences of global climate change are a personal matter of concern for them.

I also remember a young student, yet to start her university studies, who appeared to be accompanied by a representative from BP as they came and sat together. The young students asked the representatives how we can “inform the masses that oil is not bad”. This young student indicated that the “media tells us that oil is all bad” and asked for advice from the representatives how she could better argue for the oil industry. She wanted help, wondering how to best argue against those who point out that their industry is largely to blame for global climate change. I myself had even received push-notices on my phone as I enjoyed my hotel breakfast on my first morning of the OTD conference of stories that she wanted help to argue against. The notification on my phone informed me of a new episode from a state-sponsored media outlet from Sweden proclaiming that an increased extraction of oil, gas and coal is in conflict with UN climate goals (Zachrisson & Värjö, 2021), and further along, during the writing process I browsed The Guardian’s website for more stories related to the climate only to find a whole section on the “climate crisis”. In this section I was bombarded with stories of “Megadroughts” (Canon, 2022), how climate activists plan to stop oil infrastructure (Gayle, 2022) and how the licenses for oil and gas extraction in the North Sea are incompatible with climate goals (Harvey, 2022). The persistent sentiment in those stories suggest that human industries, such as the gas and oil industry, are causing irreversible harm to the planet. At the OTD conference I did not encounter any obvious narrative battlefields, both the students and representatives I encountered seemed to be guided by a similar story; A story in which the concerns of the IPCC were treated as facts but not something that would cause personal concern for them. What was a matter of personal concern though was the question of future stable employment within the oil and gas industry, and with this in mind it is hard to find the actual change that the IPCC is asking for because the industry manages to equate an imagined post-energy transition future with the generation of economic value today.

## Chapter 5 – Paradoxical Leakages and the Terrifying Consequences of Plugging the Oil Industry

Working with and trying to control a substance such as oil and the constantly escaping carbon dioxide gas, one must be constantly ready for leakages. Many of the anthropologists who have presented the practices that have been important to this thesis have conducted their fieldwork in places where the technological tools have not been on the same (technological) level as where I have conducted mine like among the petroleum fields in Amazonia (Cepek, 2018) or the Venezuelan oil industry (Coronil, 1997). When leaks would happen at those places one is seldom surprised. Ragnhild Freng Dale made a similar observation in her PhD dissertation during her fieldwork in Hammerfest, a petroleum city in Northern Norway. Hammerfest was nothing like its counterparts in Ogoniland, Nigeria (Watts, 2001 as cited in Dale, 2019, p. 103) or tar sand extraction sites in Canada (Wanvik and Caine, 2017 as cited in Dale, 2019, p. 103). In Hammerfest one would not see enormous open-pit mines that you would find in Canada, and you would not find anything near the ecological devastation that the oil industry has caused to the Niger Delta. However, if a leakage would occur in Hammerfest or when it occurs at a place like the refinery at Mongstad Industrial Park, a place where cutting edge technology is also being developed it is easy to be flabbergasted by a similar event. It is somewhat of a paradox that at a place such as the refinery at Mongstad can be the source of the kind of leakage that was uncovered in 2019, a place where technological innovators congregate and develop CCS/CCR technologies that is supposed to carry the oil industry into the future. This chapter aims to investigate paradoxes of leakages occurring at places with cutting edge-technologies and how companies in the industry handle the inherent leakiness of oil and how the escaped carbon dioxide manages to slip through industry's fingers.

### **Interlude: The Anthropocene?**

When I first heard the term Anthropocene, I was working at an animal sanctuary in New Mexico, and it was a co-worker of mine who made me aware of the term (who would later become a researcher in Antarctica). Anyhow, we had just given a dog we called Blue as much pain-relief we could safely give him, he had been hit by a car and left by the side of the road with a small towel covering his face. We sat down in the communal kitchen hoping that he would survive the night and my co-worker and friend mentioned the new human epoch, the Anthropocene, and described it as how humans now had left such a devastating mark on the planet that many suggests that we now have entered a new geological era. I felt that I could get behind that term back then in 2011, as I had already lost my hope for humans and humanity. But today, I understand that the situation is more complex than I had understood in the past. Of course, humans have had a devastating effect on the planet, but they have only been vessels for certain ideologies and beliefs that perceive nature as something separate and that needs to be controlled and tamed, commodified and equated to economical terms. The term Anthropocene has yet to be officialized which leads many to explore and examine what it is and what it might contain. Viveiros de Castro explored the distinction between models and examples in relation to geo-engineering as technological fixes (Viveiros de Castro, 2019), Haraway searched for ways to make kin (Haraway, 2016), and Tsing states that the most convincing starting point of the Anthropocene is with the advent of modern capitalism (Tsing A. L., 2015, p. 19), something which Moore has written more extensively about (Moore, 2017). For now, and for the purpose of this text I will continue to use the term Anthropocene until I find something that works better.

## 5.1. The recent leakage at Mongstad

According to an internal report done by Equinor oil had been leaking into the ground at Mongstad, something that they came to realize during 2019 when they installed a “new and modified water flow meter” (Equinor, 2020, p. 9). As they realized that they were exceeding the amount of allowed leakage they proceeded to make some repairs in 2019. However, these repairs did not seem to fix the leak, and by early 2020 they did not notice any decline in the oil concentration where they had previously noticed the leak (Equinor, 2020, p. 1). As the investigation continued to try to figure out what freed all this oil (Equinor, 2020, pp. 8-9), they dug ditches to trace the path that the oil had travelled and to collect and classify the oil they found. When they reported their findings, it became clear that this leakage was serious, so serious that it was classified as the highest degree of seriousness (Equinor, 2020, p. 9). They explained their reasoning behind their classification in the following way,

*Actual Red 1 – Uncontrolled discharge, and the highest potential degree of seriousness under slightly different circumstances;*

*Red 1 - Uncontrolled discharge. “Slightly different circumstances” mean[s] that it is only by chance that alternative outcomes of the incident did not occur, and not what could have happened in a worst-case scenario.*

*The classification is based on the amount of oil collected from January 2020 to 1 October 2020 from ditches in the area surrounding the aerated lagoon and the securing basin.*

*The incident is classified with the highest severity Red 1.*

*(Equinor, 2020, p. 9)*



This means that it is only because of luck that this freed oil did not cause any more harm than it already managed to cause. Further along in the same report they explain that they noticed the leakage in connection to the installment of a new and modified water flow monitor in 2019.

*The oil spill was discovered when oil, lying in the contaminated ground surrounding the securing basin and aerated lagoon, was set in motion after the new water flow meter was installed at the outlet of the securing basin. (Equinor, 2020, p. 9)*

In this instance the leaks originated from the oily water drainage system<sup>44</sup> underneath the refinery, and the report listed a few reasons that could have caused the leakage in question. The first one they mention points toward possible “latent faults and defects from the time of installation in 1973-1975” (Equinor, 2020, p. 10), which leads to the idea that the leakage might have been there since the construction of the industrial park. Two other issues they point towards are lack of maintenance and that “the OWS system have not been adapted to the design conditions for the process plant” (Equinor, 2020, p. 10). In the conclusion of the English summary, they also mention a few positive aspects of this incident like that it has “already helped to lift the environmental management focus somewhat” (Equinor, 2020, p. 12) before listing things that could improve. One of my interlocutors mentioned and he acknowledged that the leak was “bad” but surprised me with whom, or rather what he blamed for this specific leak. According to him the blame ought to be placed on the “new greening of the company” and the new green bureaucrats that rather spent time writing reports than actually doing “real hands-on work”, in other words investigating the leak instead of fixing it. His reaction to the leak appears to entail a notion of a form of collaboration between the escaped oil and the narratives about the “greening of the company” in context of his “socio-environmental landscape” (Krøijer, 2019, p. 102). Socio-environmental landscape is a concept in which both the social situation (such as economic, cultural etc.), as well as a subject’s ecological connections and surroundings is considered to determine a context. In the case of this interlocutor, his socio-environmental landscape was largely shaped and facilitated by Statoil/Equinor, the salary that they provided paid for his shelter, and the development that Statoil/Equinor brought to Mongstad which transformed it from outskirts to an industrial city.

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<sup>44</sup> Or OWS for short and is a kind of industrial sewer system that collects the contaminated water and separates it from untainted water.

To put his response into a larger context I would like to point to how Krøijer noticed that local leaders among the Secoya often tried to control any unintended flows (Krøijer, 2019, p. 96) as they tried to maintain a control over their lives and. Like those leaders, the leaders in charge at Mongstad could be seen as trying to maintain a sense of control of an unintended flow of oil by conducting an investigation and creating a report. Unsurprisingly, his understanding of the situation echoes well with what Equinor's own report stated, that the investigation into the leak "helped to lift the environmental management focus somewhat", which is also rather paradoxical. If the greening of the company causes leakages of oil which lead to investigations that then lead to lifting the environmental management focus somewhat, e.g., a greening of the company, one can notice a dangerous circularity. I cannot determine if this chain of events (leakages and consequences) happened because of "intended and unintended effects" (Krøijer, 2019, p. 102) caused by leaks of oil but it appears to illuminate the difficulties of trying to control an inherently leaky substance such as oil. Alternatively, this might be how a petro-influenced community tries to maintain "a sense of control" (Krøijer, 2019, p. 95) amidst the oily narratives in and around Mongstad. Attempts to control or manage leaky substances such as oil can also be noticed in the industry's use of language and to illustrate, I have looked closer at its use of recovery and reservoir.

## **5.2. Recovery: a legal or general term?**

In the early days of my digital fieldwork, I came across the term *recovery*, a term that bothered me. From an etymological perspective the word recovery is related to the word recover a word that can be traced back about 800 years. By the mid of the 14<sup>th</sup> century there was somewhat of a consensus that it meant "The sense of "get (anything) back, get or regain possession or control of," literally or figuratively, after it has been lost [...]" (Online Etymology Dictionary, 2021). If we instead look specifically at the word recovery, it is somewhat younger, but not by much. An interesting part this word is that it has one legal meaning and one general. The legal meaning of the word is described as "a gaining possession (of property) by legal action" and the general like "'act or power of regaining or retaking" (something lost or taken away)" (Online Etymology Dictionary, 2021).

In a digital correspondence with a person researching the recovery of oil, I inquired why they had chosen to use the term recovery, unaware at this time of the different definitions of the word, and they responded that the term recovery had been a canonical term for as long as they could remember. Through reading several articles on oil recovery I am unsure if they are true to the legal definition of the term. As an example, let us look at when Equinor are explaining

“Improved Recovery Rates” (Equinor, 2021). In this article one will encounter sentences like this “On the NCS, we have increased the average oil recovery rate on our fields to 50%, well above the worldwide industry average of 35%” (Equinor, 2021), and here the term recovery seems to aim for the general definition of the word. If they were to aim for the legal definition that allows an agent to acquire possession of something, they would have to write about the legal procedures of recovery and not the mechanical part of oil extraction. They also seem to mix the hard science of recovery and the supernatural in a subheading further into the article when you will come across the following title, “Oil recovery at Troll—aiming at **magical** IOR figures” (my emphasis). With that use of language, it is almost presented like it existed in the time of Enlightenment, in a time when Progress was meant to be achieved by any means necessary be they occult magical practices (“hidden exploration”, “magical numbers”) or new innovative technology. It is unclear if they wish to indicate that they are part of some new kind of enlightenment era but if they were it would most likely be seen as a positive thing.

Under the subheading “Optimizing reservoir recovery calls for new solutions” in the same article it becomes crystal clear that they are not using the term recovery in the legal sense. The wording here suggests that they need to improve their technologies by cracking more codes and developing their “toolbox” (Equinor, 2021) to be able to coax the most dormant and immobile oil from its resting place. Equinor’s goal is to be able to “recover” 60 % of the oil at each reservoir, and by improving the recovery rate it will extend the “life of our (their) fields” (Equinor, 2021). The definition of the term “recovery” seems to alternate to suit the industry’s goals: if they are trying to get a new production license the legal term seems to be the good choice but if they were to talk about improved recovery rates the other definition is a better choice. Even if there are different definitions of the term “recovery”, the commonly understood definition is that one is regaining possession of something lost and that it is also something that appears to benefit the industry’s narrative.

### **5.3. Exploring the reservoirs with etymology**

Underneath another subheading in the same article, I came across another word that intrigued and confused me: reservoir. The etymological past of this term seems to be exactly what one could expect that reservoir can be traced back to words associated with something being stored for later use, as well as being “a place where something tends to collect” (Online Etymology Dictionary, 2021). Most of the definitions associated with the term seem to tend towards something being actively kept, preserved, retained, etc. rather than an active something that tends to collect at one specific point. This is something that is affirmed by

Merriam-Webster's Dictionary entry on reservoir. It is described as a place where something is kept in store such as "an artificial lake where water is collected and kept in quantity for use" (Merriam-Webster Dictionary, 2021), and artificial<sup>45</sup> most likely means made by humans in this case. Again, there is some confusion on whether a reservoir is an artificial construct or not. If we accept the definition that the term describes a place where a something tends to collect, then the industry's use of the word could be seen as correct, but if the other definition (the definition from Merriam-Webster's dictionary suggests that it is artificial and kept in quantity for use) were to prevail there is further investigation needed. We are then confronted with the question if humans are the stewards of the world and reservoirs are filled for and kept for humans to use, in other words, a world in which humans can act as "takers" (Quinn, 1995) without any consequences. In a world like that, the places where oil tend to dwell are not there for their own sake but for the human, a perspective that sounds extremely anthropocentric. A world in which the humans only value what they come across based on how it can be of use to them, a nihilistic approach that strips any potential inherent value of other beings and things and assigns a new value to it based on what use it is to humans.

By creating a narrative that enables humans to treat "reservoirs" of oil as something for us to take without much consideration, let us now continue forth and look closer at another enabling technology for catching the paradox of the failed moon landing at Mongstad.

#### **5.4. "Enabled by new technology"<sup>46</sup>, and Progress at any cost?**

Progress through the continued use of fossil fuels such as oil and gas appear to rest on the premise that it can be done with the least amount of harm to the environment. A premise that rests on technological optimism and, more recently on the use of technologies like CCS and CCR. At TCM at Mongstad these technologies are being developed and tested in a cutting-edge setting, nevertheless uncontrolled leakages happen here as well. It might be illuminating to see this in comparison with Hannah Appel's fieldwork in Equatorial Guinea (Appel, 2012) where the oil companies could easily disentangle by creating compounds shielded from the not so good aspects of extraction and production of petroleum products. Any such disentanglements at Mongstad would be more complex because of the strong connection

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<sup>45</sup>Definition of artificial: "humanly contrived [...] often on a natural model: man-made" (Merriam-Webster, 2021).

<sup>46</sup> See Equinor's own website for more information on this quote and their technological ambitions for the future (Equinor, 2022).

Equinor appears to have to their Norwegian origin<sup>47</sup>, and if they would try to build shielded compounds in Mongstad it would most likely be met with a strong skepticism or maybe even a sense animosity. Appel's ethnographic fieldwork included privately funded oil-compounds, constructed (mostly) for Europeans and North Americans where they could be disentangled from the everyday life outside of the compounds in Equatorial Guinea. One woman she met explained that living on the compound was very similar to living in Houston, USA, to which they also shared area codes with (Appel, 2012, p. 440). While living on the oil compounds the entanglements with oil seems to be unequivocally positive as it provides a luxurious life without having to be exposed to any potential negative effects that the everyday population in Equatorial Guinea experience, like not experiencing any economic benefits made from the oil business or any ecological devastation caused by potential leakages. This is different from Mongstad where disentanglement from any potential negative effects of oil, like a leakage, would very difficult since many of the workers live in the area around the industrial park. My interlocutor that suggested that the greening of the company was to blame for the recent leakage at Mongstad has not been disentangled by an oil company's attempt to displace him as an actor with infrastructure as seen in Appel's fieldwork. Instead, the disentanglement occurs on a narrative level; the actions of the oil leakage is blamed on the green shift and not on the practices of attempting to control or refine oil. If the technologies that facilitate the activities at Mongstad Industrial Park would have been to blame, the inherent paradox would be revealed, since Equinor (like most oil and gas companies) put their faith on cutting-edge technologies. In other words, the paradox lies in that it appears to have been a faulty (technological) system to blame for the leakage in the same industrial park where pioneering CCS technologies are being developed. Where the operating company is extremely techno-positive and even state that "data is the new oil" (Equinor, 2022).

The belief in Progress is deeply tied to that of modernization and industrialization, and the interlocutors I met during my fieldwork rarely, if ever, questioned that belief and narrative. Sociologist Robert Nisbet states that the idea of Progress has been the most important idea in Western Civilization in the last 300 years and that Progress simply is the thought that mankind as a species has progressed from primitivism and barbarism to something superior

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<sup>47</sup> The name Equinor is formed by combining "equi", the starting point for words like equal, equality and equilibrium, and "nor", signaling a company proud of its Norwegian origin, and who wants to use this actively in its positioning. (Equinor, 2018).

along a linear understanding of the world (Nisbet, 1994, pp. 4-5), an idea with strong ties to social evolutionism. Quite often my interlocutors would mention Progress in opposition to, or as a solution to a pessimism. Many I spoke with had grown up, in or around the area of Mongstad and been told of the lacking future of that place and therefore saw kindly on the establishment of a large industrial park there: it would provide them with opportunities and to modernize Mongstad. Similarly, the students I met when I visited Offshore Technology Days in Stavanger looked for a future in an industry championing the idea of Progress. Before we continue, I believe a brief digest of pessimism in relation to Progress would be helpful.

Pessimism can be divided into two subgroups, one relating to what could be perceived as a negative attitude and outlook. The most famous illustration of this subgroup is that of a glass filled to half of its capacity and when a pessimistic person observes this glass they perceive it as half empty, while the optimist sees it as half full. Adding any context could change this perspective of the observer, context like informing the observer that the glass used to be filled to the brim might make them more likely to see it as half-empty. Informing the observer that the glass was never filled to full capacity might make them perceive it as half full.

The other subgroup of pessimism explores it as a philosophical school of thought and tries to find a place for it among other philosophical schools of thoughts. Philosophical pessimists often receive critique for their lack of positive projects, projects that can shape and orient us in the world. The critics of the pessimists suggest that everything that the pessimists do is complain about the world and living in it, and that the complaining they do is often a result of the pessimist having a personal negative attitude and outlook. Philosophical pessimists are often dismissed as not having anything worthwhile saying, even though they are complimented for their style (Dienstag, 2006, p. 17). While Joshua Dienstag, a professor in political science, explains how pessimism is often used to brand any other negative philosophy like skepticism (knowing nothing) and nihilism (wanting nothing), as a remedy to that branding he suggests that pessimism should be understood as a “substitute for progress” (Dienstag, 2006, p. 18). The conservative sociologist Nisbet implied a cyclical understanding of the world in which civilizations rise and fall like ecological cycles of life and death (Nisbet, 1994, p. 4). This is an idea that affirms Dienstag’s suggestion that pessimism would be a substitute for Progress. Additionally, Nisbet understands Progress and its goal as advancing toward “ever-greater perfection of human nature” (Nisbet, 1994, p. 5), something that would entail improving humankind’s moral and spiritual condition.

Let us now return to the question at hand: is there a cost too steep for Progress or not?

In Dale's thesis she tells us a story about the giant offshore platform destined for the field in Barents Sea with which it shared a name: Goliat (Dale, 2019). The platform was constructed in South Korea where three workers perished as they built it (Skarsaune, Tollaksen, & Seglem, 2019). However, the tragic loss of human life was not the only price that was paid for this platform. Costs surpassed the budget by more than three "monges"<sup>48</sup> and the final cost for the Goliat landed on 20 billion NOK more than what the Parliament (Stortinget) had planned for. Similar to how the oily developments in northern Norway provided new work opportunities and revenue for the nearby communities, the inhabitants who lived around Mongstad appeared to greet these developments with a positive attitude more times than not. According to Dale it can be difficult for people who identify as Norwegians to criticize developments in oil and gas because of what she calls a "petroleum-optimism" (Dale, 2019, p. 181).

It appears as if neither the cost for the Goliat platform or the expansion of Mongstad in the late 80's exceeded the cost for Progress, and in contrast to those endeavors I would like to point to something that appears to have surpassed the cost for Progress. During my fieldwork I did indeed come across something surpassing the price tag of Progress: the application of CCS and/or CCR on a large scale. In the chapter on Mongstad I mentioned the moon landing, a project with the ambition to construct facilities that would catch the escaped carbon dioxide on a large scale, capturing the emissions of the refinery before it enters the atmosphere. When the energy transition students, whom we met in a previous chapter, was informed of the reasons behind the canned idea to employ the CCS/CCR technologies on a large scale they reacted quite strongly. But rather than focusing on their reactions, let us look at the difference between Progress and Progress.

On the one hand there is a Progress endorsed by energy transition students and others akin to them, a future in which a new "green" industry will keep the world not only running but progressing forward, all in line with Nisbet's idea of Progress as perfecting the human nature, by transitioning away from fossil fuels. On the other hand, industries based on fossil fuels also claim the idea of Progress but trying to achieve it with different methods. The cruel optimism that I touched upon in an earlier chapter (see [4.2. A future to be caught](#)) might get to play a

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<sup>48</sup> A nod to how much the Mongstad expansion in 1987-1988 exceeded the projected costs. "En mong" is considered to be 6 billion NOK.

role in this drama as well. In the previous chapter I sketched a conflict between different “good ideas” but in the context of the question of whether there is a cost too high for Progress, another cruel optimism makes itself known. I want to exemplify this with the help of an article called *What Is Carbon Dioxide? When Is Carbon Dioxide* (Günel, 2016). This article investigates what happens with carbon dioxide when CCS enters the stage as a climate change mitigation technology and transforms something that was previously only seen as dangerous waste. According to Günel, carbon dioxide changes as the CCS techniques introduces an idea that allows one to view the dangerous emissions as something other than waste; carbon dioxide is commodified by the introduction of CCS infrastructure. CCS could most certainly mitigate climate change caused by the escaped CO<sub>2</sub> by catching it in places such as the refinery at Mongstad. However, advocates of CCS technologies are now trying to reconceptualize carbon dioxide “neither as waste nor as dangerous material that should be taxed and exchanged in carbon markets, but rather as natural gas that can be bought and sold freely as a commodity” (Günel, 2016, p. 34) and even as an “additive for the oil industry” (Günel, 2016, p. 34). Günel had contact with several interlocutors, mostly based out of Rotterdam, who saw opportunities for this new product. A product that chemically remained the same but that was assigned different values depending on when it was. Nevertheless, by transforming the escaped carbon dioxide molecules to an additive that can be used for “enhanced oil recovery”, its incentives further oil production and combustion, rather than a move to other investments in other energy sources (Günel, 2016, p. 38). By commodifying it a new market may be created that is in conflict with the current carbon market where the polluter pays. One of those that advocated for a commodification of carbon dioxide saw the current market as “not capitalistic enough” and asserted that “We should let the private sector handle the transition to renewable energies and clean technologies” (Günel, 2016, p. 40). Those quotes from Günel’s interlocutor are similar to the ones to what the Greenspot representative expressed in Chapter 4 when he said, “the market always wins”.

I want to point to the idea of an inherent aspect of the Progress espoused by all actors in this debate, oil, and gas companies, CCS/CCR pioneers, energy transition proponents, and that aspect is that there is no Progress without industrialization. What if there is an attachment to industrialization that is “*too* possible, and toxic” (Berlant, 2011, p. 24)? If industrialization is too possible it is very likely that ideas that suggest anything not including it would be laughed away as unrealistic or as fantasy. Berlant elaborate that “subjects that have x in their lives might not well endure the loss of their object/scene of desire” (Berlant, 2011, p. 24), x in this



case would be an attachment to industrialization. The attachment as well as the content of object/scene (industrialization) are cruel because even though the actual content and the attachment threatens the well-being of the subject. The subject needs both the attachment to the content as well as the content itself to see any meaning to “keep on living on and to look forward to being in the world” (Berlant, 2011, p. 24).

### **5.5. The Norwegian Environmental Agency enter the Stage**

Returning to the story of the recent unintended but not necessarily unexpected leakage at Mongstad where we had just learned that one of my interlocutors decided to blame leakage on the greening of the company, and in the context of that story a new actor now steps onto the stage: the Norwegian Environmental Agency. In *Dagens Næringsliv*, a relatively long story about the incident is published in which Equinor admits that they do not know how long these leaks have existed, they do not how much oil have seeped into the ground or how much cleaning this up will cost them. They do however know how much of the freed oil they have been able to be reclaim (Ånestad, 2020). The article from *Dagens Næringsliv* did not state anything that could not be read in Equinor’s own investigation, and this could have been the end of this story of leakages at Mongstad. Nevertheless, in yet another strange reaction to the unintended, yet not necessarily unexpected, leak, a few months later the same newspaper published another story. In that article they inform the reader that the Norwegian Environmental Agency have reported Equinor’s leakages at Mongstad as unlawful. The reporters also present a harsh critique from the environmental agency; according to that institution Equinor does not seem to care much for the existing laws. They insist that they update outdated parts of the refinery before 1<sup>st</sup> of January 2022 to which Equinor responded that they will have the updates in place before 2024 (Holter, Ånestad, & Solgård, 2021), maybe as early as mid-2022 (Holter, 2021).

The immediate ecological damage of a leakage of this magnitude is downplayed with responses such as “the damage is already done”. The representative from Greenspot Mongstad that we met in Chapter 5 described the place where Mongstad Industrial Park is situated in those terms, in other words, the area had already been transformed in such way that would make co-existence with a healthy ecological system very difficult. As a consequence of this physical leak another leak follows close behind; the “leak” of money to pay for the damages that have occurred and to pay workers to clean up the mess. This kind of economic “leak” does not adhere to the economic term where a leak is a non-consumption use of income, instead I lean on Krøijer’s definition where money “leaks” which can cause “intended and

unintended effects” (Krøijer, 2019, p. 102). Even though this unintended leakage forced Equinor to spend money on cleaning up and potentially pay a fine, their overall revenue increased from 2020 to 2021 with more than 100% (Equinor, 2022) which makes me wonder if this this unintended flow of oil (and money) actually effected things on a larger scale. To me it appears as if the effects did very interfere with business as usual.

### **Intermezzo: Plugging the wells**

When the machines of the oil and gas industry no longer can coax anymore of the ghostly substance out from its dwellings, the practice of plugging becomes relevant. The act of plugging a gas or oil well entails the removal of any exterior structures, or a so called “wellhead and X-mas tree removal” (Vrålstad, et al., 2019, p. 479) and the placement of several plugs made from cement. There are three phases that makes up the act of plugging and abandonment (P&A), phase one is called “Reservoir abandonment” and entails two of the three plugs. Phase two is called “Intermediate abandonment” and at this point a surface plug is installed as well as other potential barriers. Lastly, during the third phase any exterior structures are removed such as the wellhead and the retrieval of casings, strings etc. However, some suggest that a fourth phase should be included, a phase zero, in which one would be “killing the well” (Vrålstad, et al., 2019, p. 479). The practice of P&A is not foolproof, the integrity of the plugs used can deteriorate allowing for an unintended flow of the ghostly substance that would harm the surrounding ecosystems. According to the cited article in this intermezzo, the authors are expecting an “upcoming P&A wave” (Vrålstad, et al., 2019, p. 478) especially in places such as off the coast of Norway in the North Sea and in the Gulf of Mexico. I wonder if there is an analogy to be made between the wave of plugging and abandoning oil wells and plugging the oil industry as a whole as many narratives of green transition now suggests.

## 5.6. Progress, pessimism, and the plugging of an industry?

In an attempt to understand the events on a larger and maybe more abstract scale I want to look at the fossil fuel industry in relation to Progress and pessimism in the context of the Anthropocene, and through the perspective of terror management<sup>49</sup> industry. I will explore and investigate this with the help of analogies to snippets of modern horror stories.



Figure 4: A cartoon strip explaining how the oil industry will facilitate the future energy transition.

First off, I would like to point to how the oil companies such as Statoil/Equinor have positioned themselves in narrative concerning Progress and the path towards and through the green shift. This position is illustrated very well in the cartoon (seen in Figure 3), first produced by *Den nye oljen* (Den nye oljen, 2017), an independent project within the industrial organization Norwegian Oil and Gas Association, and later re-used in the article *Heroes of the Day After Tomorrow* (Ytterstad, Houeland, & Jordhus-Lier, 2021): The illustration depicts and defends the current use of fossil fuels as well as other non-renewable resources to fund a sustainable way of life in the future. The oil and gas industry are not alone in this shared narrative, and I clearly remember reading about an old statement by an Australian governor when he spoke of mining as being at the core, and integral to a continued civilization (Trigger, 1997, p. 164). Nevertheless, industries like mining and the oil industry carrying the torch of industrial progress are often, at least partly, responsible for our global material reality, a world that philosopher and poet Eugene Thacker describes in the opening of his book *In the Dust of this Planet* as: “[...] increasingly unthinkable – a world of planetary

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<sup>49</sup> I want to clarify that when Terror Management Theory is tested, the test subjects are confronted with the thought of their own mortality through hypothesis such as the Mortality Salience hypothesis, it is the thought of actual death that they are confronted with. Through this section I explore if one can apply this theory in a different way by suggesting that when a subject's economic stability is threatened within a capitalist reality it can evoke similar responses as when confronted with their own mortality, because living without capital in a capitalist system would entail enormous feeling of hardship.

disasters, emerging pandemics, tectonic shifts, strange weather, oil-drenched seascapes, and the furtive, always-looming threat of extinction [...]” (Thacker, 2011). However, the human reactions do not seem to be a response matching the reality, most of us treat it as a banal occurrence, even if our situation most definitely is extraordinary (e.g. Peeters, Diependaele, & Sterckx, 2019; Levinston & Walker, 2021; Shinko, 2020). The situation in front of us is, as the philosopher Bernard Stiegler puts it, “exceptional and extraordinary in every respect” (Stiegler, 2018, p. 35), before he asks a relevant question “how can we live *under the weight of a common protention*<sup>50</sup> that is potentially but massively negative on a worldwide scale?” (Stiegler, 2018, p. 35). Our common protention, or in other words, our common (human) perception of the next moment is filled to the brim with feelings of fright and with input from negative sources. Those negative sources could be, as Stiegler puts it, “[...] warnings of the Intergovernmental Panel on Climate Change (IPCC) and a thousand other current realities bring about *expectations and protentions of the worst*, that is, of collapse – not of this or that lost civilization, [...] but of humanity itself and in totality.” (Stiegler, 2018, p. 35). These two philosophers describe a reality filled with horrors that plague the human, a totality that moves me to imagine it as a creature, or at least the contours of a creature, a husk. With stumbling the steps, this husk moves forward, dripping of oil and with flammable gas as odor, not unlike the giants in *In the Hills, the Cities* (Barker, 1998), humans had to pay the price. Because even if the husk itself is dead it gains life-like features as it fills with bodies “a body [made] out of their bodies” (Barker, 1998), some of which fall out of the machinery and pays a steep price for the march forward. Filtered through an imagery provided by horror stories, philosophers’ description of the current events, and just existing in these times I can see humans finding themselves in a haunting world in which the anthropogenic landscapes of ruins, destroyed atmo- and biospheres are the price for some taker’s<sup>51</sup> “dreamworlds of progress” (Tsing, Swanson, Gan, & Bubandt, 2017, p. 2).

Talking about dreamworlds of progress I would now like to point to Statoil/Equinor’s somewhat recent change of name with the help of a statement that the company released in relation to that event. Unsurprisingly, this event evoked questions as to whether this was an attempt to dress the proud oil company in new green garments. In a news article, previously available on Equinor’s website, they posed the following rhetorical question: “Equinor – Is

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<sup>50</sup> A term first used by philosopher Edmund Husserl, is our (human) anticipation of what is to come, an anticipation that would guide how we would decide to face it (Bishop & Ross, 2021, p. 114).

<sup>51</sup> A term I borrowed from Daniel Quinn’s book *Ishmael* (1995).

our new name just an attempt at greenwashing?”<sup>52</sup>. However, the article in question and it appears to have been removed from their website. I tried finding it with the help of Wayback Machine.org, but I did only find a related news article released within the same period of time. In the article I did find, Eldar Sætre, the previous CEO of Statoil/Equinor received a similar question: “Some might claim that the new name is merely an attempt to greenwash Statoil?”<sup>53</sup>. To this question he answers that they are “becoming a broad energy company and need a name that’s relevant for our entire business, not just oil [...]”. Notably he does not answer either yes or no to the original question, and instead appears to re-direct the topic of the question to talk about the positive aspects of this change. The progression from an oil company to a broad energy company is a slow process, according to Sætre, and he stresses that there will probably be a need for oil for many decades to come. He states that “oil is used to make your clothes, your shoes and your mobile phone” and that Equinor could have kept “pumping up as much oil as possible, with complete disregard for the environment”. However, from Sætre’s perspective the progression of Equinor was clear; he claimed in the article that “one of the most important things we can do, as a company concerned with balance and the climate, is to produce oil and gas in a sustainable way.” At the same time, he also stressed the need for Equinor’s continuous investments in renewable energy.

The industry has been and is being modernized, recreated in the image of an energy industry instead of an industry exclusively dealing with oil and gas. While the industry is greening it is also becoming more streamlined and more efficient with less human-powered labor than before to process the dead substance into energy, which is leading to a change where the workers and soon-to-be workers feel that their stability threatened. At this point I would like to invite the perspective of Terror Management Theory (TMT) to see if it can give any interesting insights. The theory was first introduced by anthropologist Ernest Becker in his book *The Denial of Death* (Becker, 1973) that tried to explain human behavior as responses to the knowledge of their own mortality. Humans often seek to create ways through which they can exist and live, knowing that they one they will perish and die. They, the humans, create

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<sup>52</sup> Previously the following link (<https://www.equinor.com/en/about-us/about-our-name-change.html>) would lead you to a website where you could find the quote and read more about the name change. However, now it only directs you to a summary of their history.

<sup>53</sup> I believe that this interview with Eldar Sætre was published on, or just after, the 15<sup>th</sup> of May 2018 and know for a fact that it was publicly available on the 17<sup>th</sup> of May 2018 (Equinor, 2018). Wayback Machine did not capture a digital copy of that article when it was published but it did capture a copy of it on the 8<sup>th</sup> of April 2019 (Equinor, 2019). It is from that digital copy that the information about Eldar Sætre’s reaction to the name change come from.

realities in which they can continue to live forever, either through afterlives in heaven, reincarnation, in memories of others or even by making a lasting impact in the material world (Lifshin, Helm, & Greenberg, 2017, p. 79). What happens when one applies this theory to followers and proponents of petro-cultures, as well as the industry? The industry is reminded of its own mortality as its opponents suggests that there is no place for oil in the future, and it responds by fiercely promoting narratives that uphold the worldview of a future for oil, something inherent to its own existence. What used to be a sector that only focused on fossil fuels like oil and gas are now rebranding themselves as energy companies investing in new energy sources. By being a part of this change and transition the oil and gas industry can be seen trying to live on after its demise by making a lasting impact on the world. However, they also insist that oil and gas are going to see an increased development up until at least 2040-2050, something that I heard expressed commonly by the representatives at OTD in Stavanger last year. I would suggest that both the rebranding and the continued development in the oil industry are ways in which the industry tries to achieve a sense of life after death (of an industry) through “cultural self-enhancement” (Lifshin, Helm, & Greenberg, 2017, p. 83). The intended flow of oil that used to create economic stability for many people, my interlocutors included, now see it being redirected to pay for a transition to renewable energy sources, a change that is out of their control. One of the intended effects of the flow oil that these subjects had become used to was a stable job with a good salary that made it possible for them to work towards a desired future, or something akin to a life (-making) project (Ødegaard & Rivera Andía, 2019; Blaser, Feit, & McRae, 2004) in their western capitalist context. Whether we currently exist in an “age of man” (Moore, 2017, p. 596) or an “age of capital” (Moore, 2017, p. 596), it is hard to deny the extraordinary impact capitalism has on cultures and societies globally. It is therefore not too much of a stretch to argue that a life-making project in a capitalist reality must include an ability to generate capital. A denial of this ability would consequently threaten life and remind subjects and actors of their mortality, a life without money. To reinforce my point: To exist in a capitalist system without any capital entails immense hardship, homelessness, starvation and even death since the human have been alienated from skills that could directly provide food and shelter if one cannot use a paycheck to acquire it. By threatening an industry, like the oil industry, by suggesting that there is no future for oil one is indirectly threatening the economic stability of the workers affected, and a threat to the economic stability of a human in a capitalist reality is a threat to that human’s existence within that capitalist reality. In an article from *Journal of Applied Social Psychology* the authors present some evidence that suggests that if an employee would be confronted with

the thought of their own death or mortality, they would be more likely to defend the company that they worked for. They suggest that the workplace helps to give meaning and framing of a person's existence in a similar way as religions and national identities can do (Jonas, Sullivan, Kauffeld, & Fritsche, 2011). With all this in mind it is easy to empathize with the workers, students and representatives who fear for the previous known stability that the oil industry could provide. It is easy to understand why workers staunchly defend the industry, why representatives proclaim that we will develop oil for several decades, and why students look to the representatives for signs that could boost their cultural self-esteem.

What I have tried to show in this chapter is the paradox of finding leakages in places of pioneering technologies, and paradoxes associated with climate change mitigating technologies like CCS/CCR. I have pointed to actual leakages of oil at Mongstad and the insistent leaks of carbon dioxide at the same place even though the company have claimed to have both the necessary technology, competence, and a plan to fix it (the failed moon landing at Mongstad). Furthermore, I have also shown leaks of economic capital by the same company when they expanded Mongstad Industrial Park in the late 80's and when they ordered the large Goliat platform destined for a field of oil in Barents Sea. All of these leakages seem to originate, at least partly, from an optimistic belief in a Progress and technology that is cruelly attached to the continued industrial flow of oil. Nevertheless, there appears to exist more than one belief of Progress in this case, one that seems to be worth the cost (continued development of oil and gas) and at least one that was not worth the cost (large scale application of CCS/CCR). This was illustrated when the planned large scale carbon capture implementation at the refinery at Mongstad Industrial Park was cancelled (or maybe pushed into the future) because it was too expensive. There is a paradox in this decision as well because the continued use of oil is based on a consistent use of carbon capture technologies to make current and future developments of oil net-zero, and by not implementing it they are disturbing the premises that they base their future on. I do not want to speculate too much in the reasoning behind that decision any more than to point out that there appears to be a multitude of beliefs in Progress. Economical contexts influence these beliefs and as long as there is money to be made from fossil fuels, a belief that oil can lead us to Progress will exist, at least as long it is framed in a capitalist context. And as long as there will be money to be made from testing new CCS/CCR solvents or from turning emitted CO<sub>2</sub> from waste to a commodity, the "green" Progress will be trapped in the same capitalist context. It appears as if there are few reasons for these companies to do anything continuing



with business as usual since there are no real economic incentives for them to do so. Finally, I would like to reiterate that advocating for a future without the industrial use of oil would be similar to that of putting a plug in the industry to use an analogy to the practice of P&A. Plugging the industry would redirect the flow of oil radically but because of the cruel optimism evoked by oil and the potential terror felt by humans whose economic life is threatened, would most likely do their best to prevent such a thing.

## Chapter 6 – Conclusions

### **6.1. Before the Epilogue: What about the Environmentalists?**

This project never intended to focus on the environmentalists but nevertheless they have been like a shadow, as I have partly followed who they consider to be their opponents. What follows in this section is my everyday conversations with friends and acquaintances from several environmentalists and some reflections of my own. From conversations that I have had with these individuals from the environmentalist side, I heard pessimistic sentiments but compared to the groups we previously met in this project, their reactions were different. Many of them saw the existing world as bleak and the proposed modern way of life as having the potential for destroying any chance for their future. In an online discussion group, a non-binary person in their early twenties expressed this bleak view and a dire need of change, and if that radical change did not happen, they would not want children of their own, a position that they thought of as being an altruistic anti-natalist position. According to them, it would be immoral to have children of their own if the world the children would grow up in would be like ours or worse. They saw the act of procreation as incredibly irresponsible, because they no longer had any faith in leaders or people in positions of power making it better. This made me think of Wessel Zappfe's story, in which a person (the last messiah) whose pain was the collective pain of the earth, urge the humans to:

*“Know yourselves – be infertile and let the earth be silent after ye.” (Wessel Zappfe & Tangenes, 2004)*

Peter Wessel Zappfe was a staunch advocate for anti-natalism in his days and wrote extensively about it. He made a comparison between the human species and the extinct Irish Elk in which he pointed to how the human species overevolved its knowledge of the self to the point in which it no longer could fit within the constraints of nature, similar to how the overevolved antlers of the Irish Elk led to its demise, and with that comparison he argued that human being is a paradox (Wessel Zappfe & Tangenes, 2004). The elk is a non-human animal that was believed to have gone extinct because of its massive antlers. Ever since Zappfe's death in 1990, research suggests that the antlers may have played a part but not been the main reason for its demise and extinction. However, coupled with a changing climate and a sexual selection that promoted massive antlers (weighing up to 40 kg), the Irish Elk could not adapt to its new situation in time for it to survive (Moen, Pastor, & Cohen, 1999). I am not sure if I would agree that the human is a paradox because of its awareness of itself, but there is

something paradoxical about how certain human cultures tend to control their surroundings in a totalitarian manner and expecting those surroundings to not resist. By the time the human realized that accelerated climate change was harmful to its survival it was too late, similar to how the Irish Elk's sexual selection led it down a path of no return as the climate changed.

It is possible that the environmentalists I have been in touch with and around for most of my adult life are indicative for a broader movement, nonetheless their voices and perspectives exist. Like many of them my disbelief in that current systems could ever change for the better have grown as promises are consistently broken by elected and non-elected leaders as well as many companies.

## **6.2. Epilogue**

I am sitting outside enjoying one of the first warm days of summer, trying to be just enjoy the moment, yet my thoughts wander, and I almost unconsciously pick up the phone and start scrolling. Alienated from and shaped by society to not be content with just being in the now. My fingers clumsily navigate the screen of my “smart” phone and I stumble over an ad for an article on Facebook. The title reads “People in west: - We are convinced that Norway will drill for oil for the 50 more years<sup>54</sup>” and the article interviews two young students of petroleum. I am struck by what feels like an ebb and flow of the reigning narrative of the ghostly substance of oil. In the time I spent on this project news about climate, oil, and other fossil fuels move like the tide: As the ebb pulls the stories that shines a positive light on oil and other fossil fuels back, it opens up a space for other stories that talk about the dire situation that the planet face. And for a while those stories dominate but soon enough the tide moves back, it steadily flood the area with positive stories like the one I came across.

More than anything I feel like this thesis shows this ebb and flow: Oil used to be seen as a facilitator of Progress and modernity but soon enough the oil industry was revealed to also be one of the main sources for global climate change. The angel and devil shifts pointed out by Ytterstad et al. could be applied to more than the perspective of the oil worker, it could be applied to oil as a substance. Energy produced from oil was seen as harmful in the context of global climate change but when I visited the petroleum museum in Stavanger, I could see the industry attempting to rebrand oil as “ancient solar energy”, a new angel shift. Whether this is

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<sup>54</sup> My translation of “Folk i vest: - Vi er overbeviste om at Norge kommer til å bore etter olje i 50 år til” (Nerbø, 2022).

due to a fear of the “reservoirs” of oil running dry or of the industry running out of new capital as investors moves to support “renewable” energy sources instead, plans for rebranding spearheaded by human imagination are common responses to fears of a resource running out (Ferry & Limbert, 2008, p. 7). Surely there is something to say for the (cruel) optimism that humans seem to have for the ghostly substance, and the difficulty of not continuing to (ab)use it. There is also something to say for the apparent paradoxes of what kind of progress is worth the cost (and what kind is not worth the cost), that leakages happen at locations of cutting-edge technologies, and that the way out from oil addiction is to use more. Oil with the help of CCS/CCR technologies, that in turn are enabling the commodification of carbon dioxide, are supposed to pave the way for a future based on renewable energy sources. Maybe a reevaluation of our relations to our surroundings, to other-than-humans, could be a first step to something new, and maybe to something potentially hopeful.

However, if it is even possible, I believe I have become even less optimistic for any global change at all. Even those who believe that change could happen through the system appears to be in distress. This is perfectly exemplified by when Alok Sharma<sup>55</sup> fought back tears and apologized for the unimpactful packaged agreed upon at COP26 (BBC, 2021). Because of those feelings of no hope, I feel the need to write myself out of this project and I will try to do so with the help of experimental autoethnography.

### **6.3. A reflexive shard**

The process of conducting this project, reading, and writing in detail about the state of the climate on this planet has been a tough process. I thought I was prepared with my extensive background as person tending to the greenest<sup>56</sup> of politics and action, believing that I had already understood how dire the situation was. And to some extent I was not surprised of what I found out, but to be submerged in it for without respite for close to two years now has affected me. If possible, I have become even more cynical about the future, meeting both proponents of a continued industrialized use of fossil fuels and visionaries of a new industrialized era of high-technological “green” utopia. The existential dread and cosmic

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<sup>55</sup> The current president of IPCC.

<sup>56</sup> Greenest should be understood as favoring Greenpeace over political “green” parties, Sea Shepherd over Greenpeace, and Earth Liberation Front over Sea Shepherd. It should be understood as favoring degrowth over progress, forest gardens over agriculture, and neo-luddism over technological solutions offered by eco-modernists.

pessimism I feel sometimes immobilize me and forces me into apathy for periods of time, and even if I bounce back into a sense of normality the amount of dread and pessimism never dissipates it only accumulates. This is an attempt to write myself out of the situation I have been in the last two years in a similar fashion as Taylor Hazan wrote an *Ethnography of a Stone* (2020) in which she explored her own anxiety in an experimental way. And with an autoethnographic lens I will explore my own the cultural interactions that have occurred during this project by confronting “the tension between insider and outsider perspectives, between social practice and social constraint” (Adams, Holman Jones, & Ellis, 2015, p. 1) armed with my thoughts and emotions awoken by the subjects of this thesis.

Unlike Hazan, my stone is not a stone at all. My stone is a shard of sorts, reflective in some instances, sharp and jagged in others. This shard entered my life similar to, and much like any piece of shattered colorless glass, in 2002 when a biology teacher at my school mentioned the group Greenpeace to the 13-year-old me. I did not think much of this shard at first, I barely realized that it was there, it was like a piece of glass with edges round and smooth as caressed by the ocean, but nevertheless this is when it came into my possession. Over the years the shard would transform, it would become sharp, make me aware of something and in some instances, it would almost feel like it intentionally tried to hurt me with its vicious edges, even though I do not know of its intentions. It would also gain the reflective abilities in certain angles and a reflection of myself would appear on its surface. And finally on very rare occasions when the lights from the sun would hit the shard it would attempt to set the world on fire.

My shard is metaphorical but comes with real consequences. By looking through the piece of glass, the world would appear different, my perspective would change. Looking at Mongstad Industrial Park first without gazing through the shard it appears as many industrial sites does; it provides workplace for many and produces a product that we all use. If I on the other hand raise the shard and look at Mongstad Industrial Park through it, like a child looking through a magnifying glass, I see something else. I see death. Perspectives like that have most likely colored parts of this projects whether I wanted it to or not. When I explore the shard’s reasoning for exposing me to a perspective where a refinery is seen as ecological death and destruction, I am met with anxiety grounded in a fear for total damnation and a dishonest world proclaiming that it is doing everything it can to halt it all accelerating the things driving the total damnation. I am not necessarily worried about imagining the future of a world without humans, but rather I am anxious that the only ones left would be humans. In those

instances, I might be what some might recognize as a species traitor, even if I consider myself to be anything but that.

It has been a long time since my shard had smooth edges and would show me a joyous future. It is like the vistas I could perceive as I gazed through the shard previously have been obscured or tainted by industrial emissions. As I try to gaze through the shard of late it is very unclear and uncertain, like a future almost fully denied but I try to remind myself that “a world that generates[ed] nothing but future-denial would annihilate itself” (Skotnicki & Nielsen, 2021, p. 859). However, my shard remains with me whether I like it or not, poking and stabbing me with its sharp edges, and having written this short section I am not sure if I am any closer to leaving any of my anxiety or find a way to rid myself of the shard in the future. Who knows maybe contours of hope and a beautiful future will become visible through my shard in the future? But at the moment I am doubtful of that.

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