

Master's Thesis – master Sustainable Development

The Equivalence of Injustice



Author: Tobias Vast

Supervisor: Bianca Szytniewski

Second Reader: Gery Nijenhuis

Made in cooperation with: New Dutch Connections, Bright Richards

Abstract

Ten years after the first gas-mining earthquake in Groningen the people of the region still suffer regular quakes and the effects of the poor political response. Although it appears as a clear case of environmental injustice, it is situated in one of the richest and most socially secure countries in the world. This makes it an interesting paradox when compared to more classical cases of environmental injustice such as that of oil drilling in the Niger Delta, which is rich in historic marginalisation. This research examines the functioning of the environmental justice framework in describing the lived experiences of injustice in a highly privileged country such as the Netherlands. This was done by comparing the lived experiences of the people of Groningen to those of the people of the Niger delta. With this I contributed to expanding the environmental justice framework to become more encompassing, showing that comparison of cases is indeed possible, whilst simultaneously contributing to the dearth of qualitative data in the discourse. The qualitative research involved meetings with involved organisations, and focus groups and interviews with inhabitants of both regions. These were analysed using the environmental justice frameworks of Fraser and Nussbaum and compared to the lived experiences of the inhabitants of the Niger delta. It was found firstly that the frameworks were indeed capable of capturing and interpreting the lived experiences in Groningen. Secondly, the research showed that the experiences in both approaches were impacted in varying but comparable ways. Importantly, it showed many experiences to be similar between cases, even though the impacts of the actual injustice were not, and Groningen had no history of marginalisation. I thus argue that the comparing of cases is indeed possible and useful and provides valuable clues about underlying systemic problems. Furthermore, I argue that the prerequisite of historic marginalisation hampers the frameworks capacity to describe cases that would otherwise benefit from qualifying as environmental injustice, such as Groningen.

Picture on cover courtesy of Friends of the Earth (above) and NPO (below) (2017; n.d.)

Acknowledgments

I'd like to take a short moment here to name a few people without whom this thesis would never have seen the light of day. Firstly, I'd like to thank my supervisor Bianca Szytniewski for her aid, corrections, and flexibility in supervising my work and Dominique Schmid for a significant contribution to the setup of this research. Secondly, I want to extend a big thanks to Bright Richards, for sharing his creativity with me and taking me onboard to research this project together. I owe a further debt of gratitude to my sister Eva Vast, Solveig Kreinsen, Noralie Schadee and Arjuna Valli for their constant aid in providing feedback on my writing and structure. A final thanks goes out to Galiëne van Houten and her family, for aiding in the writing of the proposal and providing valuable first access to respondents in the earthquake region in Groningen, to all of whom I am grateful for their open hearts and stories.

Table of Contents

.....	0
Abstract.....	1
Acknowledgments.....	2
1. Introduction.....	5
1.1. Academic relevance.....	8
1.2. Societal Relevance.....	10
2. Theoretical Framework.....	10
2.1. Environmental Justice.....	11
2.1.1. The Triad of Justice.....	11
2.1.2. Capabilities.....	17
2.2. History and socio-cultural context.....	20
2.3. Lived experience.....	21
2.4. Framework.....	22
3. Methods.....	23
3.1. Rationale.....	24
3.2. Participant recruitment.....	24
3.3. Organisational meetings.....	25
3.4. Focus groups.....	27
3.5. Interviews.....	28
3.6. Operationalisation.....	29
3.7. Reflexive qualitative research.....	30
3.7.1. Personal.....	31
3.7.2. Interpersonal.....	32
3.7.3. Methodological.....	33
3.7.4. Contextual.....	34
3.8. Data analysis.....	35
3.9. Ethics.....	37
4. Regional Context.....	37
4.1. Niger Delta.....	38
4.2. Groningen.....	39
5. Results.....	40
5.1. Groningen.....	41
5.1.1. Distribution.....	41
5.1.2. Recognition.....	45
5.1.3. Procedure.....	49

5.1.4. Capabilities	52
5.2. Niger Delta.....	55
5.2.1. Distribution	56
5.2.2. Recognition	57
5.2.3. Procedure	59
5.2.4. Capabilities	60
6. Discussion.....	62
6.1. Comparison.....	62
6.1.1. History.....	62
6.1.2. Distribution	64
6.1.3. Recognition.....	65
6.1.4. Procedure	66
6.1.5. Capabilities	67
6.2. Discussion of the research.....	69
6.3. Future research.....	70
7. Conclusion	70
8. Bibliography	74
Appendices.....	85
Appendix I. Interview guide	85

1. Introduction

In 1991 the small town of Middelstum in Groningen, the Netherlands, experienced an earthquake of magnitude 2.4 on the Richter scale (Muntendam-Bos & De Waal, 2013). This is a highly unusual occurrence, as the Netherlands is far removed from any dangerously mobile fault lines or active volcanoes (Zelenin et al., 2021). Strangely enough, it quickly turned out to not be a one-off event as subsequently, the eastern area of the province experienced frequent small earthquakes over the course of the coming years. The unfolding of the case is still recent and lacks academic description. Currently, it is most comprehensively captured in the works of investigative journalists Ekker and Start in a series of podcasts and the journalistic book by Hakkenes (2022; 2020). Although the speculation as to the origin of the quakes involved the drilling for natural gas in the area, this was denied and even actively combatted by both the mining corporations as well as the Dutch state. They vehemently denied it could be due to the winning of natural gas in the area, ridiculing scientists and public figures who considered it a possibility. Only in 2012 was the hypothesis of gas-mining-induced-earthquakes confirmed, when an earthquake of magnitude 3.6 inflicted significant structural damage in the town of Huizinge and surroundings (Hakkenes, 2020; Muntendam-Bos & De Waal, 2013). The case then escalated over the years, with the earthquakes continuously damaging more houses, driving people out of their homes and the province itself. Since then, it has been shown that the psychological harm of these quakes and the subsequent lack of structural solutions caused and is still causing great harm. People are driven from their homes, lose sense of a safe environment, experience anxiety and depression, and even have significantly reduced lifespans (Ekker & Start, 2022). There is a significant dearth of recently published academic literature on these problems as well, notably missing research on the experiences of the inhabitants, further contributing to the lack of experienced acknowledgment and recognition.

This eventually resulted in increasing protests in the region, lawsuits against companies and the state, scientist and healthcare outcry, and now a parliamentary inquiry (Ekker & Start, 2022; Hakkenes, 2020; Voort & Vanclay, 2015). Compensation for both the physical and psychological damages however quickly became a bureaucratic maze, hardly suited for any lay person to navigate. At every step of the way the mining companies opposed any measure that would reduce the gas mining or compensate those harmed by the quakes. This goes hand in hand with the Dutch state failing to assist its own citizens in a manner fitting the extent of their problems in this slowly unfolding crisis (Ekker & Start, 2022; Hakkenes, 2020; Voort & Vanclay, 2015). To this day there is still no structural solution, and

the situation remains unchanged with no real prospect of improvement for the region's inhabitants.

Now, almost ten years later, after numerous protests, procedures, gas shortages due to war in Ukraine and the parliamentary inquiry, the gas-mining and the quakes are gaining traction as a real case of environmental injustice (Ekker & Start, 2022; Temper et al., 2015). This is important to underline, as cases of environmental justice are scarce in affluent and highly developed countries such as the Netherlands (Schlosberg, 2007; Temper et al., 2015). Cases of environmental injustice commonly follow a template of specific traits; they concern groups that suffered historic marginalisation and usually take place in the global south, involve racism or discrimination of ethnic minorities, or economically impoverished social groups. Environmental justice then is a scientific and social movement that concerns itself addressing this issue of fairness in burden of environmental problems. Within academia, the discourse contains several frameworks which bring together and apply contemporary concepts of justice to environmental disturbances (Schlosberg, 2007). The past decades have most prominently featured the framework of the triad-of-justice by Fraser and the capabilities approach by Nussbaum (2012; 2013). Due to its many prominent cases of injustice, environmental problems, and lacking social security systems, the frameworks have mostly been used in the global south (Gonzalez, 2015; Mignolo, 2011; Temper et al., 2015). The research of the discourse encompasses mostly quantitative research but also includes accounts of lived experience, storytelling and other qualitative research (Althor & Witt, 2020; Coolsaet, 2020; Schlosberg, 2007; Temper et al., 2015).

One of the most notorious cases of environmental injustice in the 20th and 21st century is that of oil extraction in Nigeria. Here, the local subsidiaries of British/Dutch fossil fuel multinational Shell first started drilling for oil in the Niger delta region back in the 1950s (Lindén & Pålsson, 2013; Sala-i-Martin & Subramanian, 2013). These activities at first promised a great increase in economic activity in the region and improvement of the financial situation of the entire country. However, as time passed it became clear that the profits from the oil did not flow back into the region of the delta. Instead, a few high placed government individuals but mostly Shell, gathered large profits, while the Niger Delta and its inhabitants suffered ever increasing oil pollution, wildfires, increased child mortality, shortened lifespans and many other negative effects (Abdulkadir, 2014; Konne, 2014; Lindén & Pålsson, 2013). This injustice slowly started fuelling resistance amongst the local populace, who reaped no benefits from the oil mining. Instead, they had to deal with declining ecosystem services upon which they relied for subsistence, increasing child mortality, and other health problems. This

resistance was spearheaded by the local Ogoni people, amongst whom Ken Saro-Wiwa came forward as most vocal. At the time, Nigeria was a military dictatorship, which benefited greatly from the extraction of crude oil. As such, the uprisings were struck down, often violently. This situation lasted for years, until it came to international attention when the local regime publicly executed Saro-Wiwa and 8 other Ogoni in 1995 (Kpoturu, 2021; Ojo-Ade, 1999; Udogbo, 2021). Thus, they came to be known as “the Ogoni Nine”. In turn, this led to international court cases, massive media attention and Shell ceasing some of its activities in the region (Bassey, 2012; Kpoturu, 2021). These events took place more than three decades ago in 1995, since which the government and Shell have pledged to restore the delta. However, the clean-up of the delta is yet to take place and the environment is projected to not recover for several decades due to the fragility of mangrove ecosystems (Lindén & Pålsson, 2013). This injustice is made even more poignant when taking into account that most court cases, ranging matters of indemnification to wrongful death, are still not settled and the suffering of the locals has not stopped to this day (Abade, 2018; FRANCE 24 English, 2021; Pols, 2021).

The case of oil exploitation in Nigeria is probably the most well studied case of environmental justice in the history of the movement (Abdulkadir, 2014; Ikporukpo, 2004; Jude, 2011; Konne, 2014; Ogwu, 2012; Okonkwo, 2020; Osofsky, 2010; Sala-i-Martin & Subramanian, 2013). It is textbook in all aspects of environmental justice; the entire continent has suffered the resource curse since early colonial times (Bassey, 2012; Sala-i-Martin & Subramanian, 2013; Smith, 2016), there is a long history of marginalisation and racism, and the societal situation is undemocratic with no independent law system or social security systems in place. Logically, the framework of environmental justice has seen far less application in the global north, as its affluence generally guarantees a higher standard of living and stronger social systems protecting its citizens. However, as we have seen, the case of gas drilling in Groningen bears striking resemblances to this and other famous cases of environmental injustice.

These cases in Nigeria, Groningen and all around the world are all linked to the extraction of resources and its consequences for the environment. Now, as the 21st century progresses, humanity comes to face ever increasing challenges in moving away from a fossil-fuel reliant world and the global spread of the effects of climate change (Garvey, 2008; Hickel & Kallis, 2020; Masson-Delmotte et al., 2021). Consequently, cases of environmental justice are becoming more frequent, visible, and less limited to marginalised communities and the global south (Gonzalez, 2015; Temper et al., 2018). This raises interesting questions

concerning the application of the environmental justice frameworks of Fraser and Nussbaum in the generally affluent and privileged global north and the underlying comparability of these cases. Here, I compare the lived experiences in Groningen and Nigeria to research whether cases in the privileged global north can legitimately qualify as environmental justice.

This brings us to the main research question of this research:

‘How and to what extent are the environmental justice frameworks of the triad and capabilities approach applicable to lived experiences in the global north, such as the case of Groningen?’

This question is answered by means of several sub questions:

1. What is the history and current situation of the environmental injustice case in Groningen and the Niger delta?
2. How do the lived experiences in Groningen and the Niger delta compare in terms of environmental justice when analysed through the triad of justice approach and its dimensions of distribution, recognition, and procedure?
3. How do the lived experiences in Groningen and the Niger delta compare in terms of environmental justice when analysed through the capabilities approach?

The relevance of researching this question is elaborated in the following section.

1.1. Academic relevance

Oftentimes the cases of environmental justice are portrayed as only happening to “the poorest, racialised, most vulnerable, discriminated and marginalised social groups and communities” (Temper et al., 2018), and as such there is an amalgam of environmental justice literature on cases within this template, e.g. (Banzhaf et al., 2019; Bick et al., 2018; Blondin, 2019; Kopas et al., 2020; Osofsky, 2010; Temper et al., 2018; Torres et al., 2020). Groningen however is in the Netherlands, one of the few ‘triple-A economy’s’ of the world (FitchRatings, 2022). This is an expression of its general affluence and a reflection of both its economic but also socio-political stability. As such, Groningen as a region would fall far from the standard template of environmental justice. This is reflected in the absence of scientific literature on the gas mining from the perspective of environmental justice, of which there is currently none to this authors knowledge. However, as was explicated before, there are enough reasons to assume the case of Groningen does fit and would benefit from being

described as a case of environmental injustice. The only place where this is currently reflected is its placement in Temper's atlas of environmental justice (2015). This naturally warrants more research into the area conducted from a perspective of environmental justice.

This research proposed and conducted a comparison of the case of Groningen with that of Nigeria. The Niger delta oil case is considered here as a classic case of environmental injustice, adequately fitting the template described earlier and thus a relevant literary comparison (Bassey, 2012; Hill, 2012; Sala-i-Martin & Subramanian, 2013; Temper et al., 2018b). Here, this is done for two main reasons. Firstly, the comparison may show and solidify the case of Groningen as actual environmental injustice if it is indeed comparable to Nigeria. This is important to legitimise the case of Groningen within the academic community and is indeed intended as a form of activist research akin to e.g., Bryman or Miles et al. (2012; 2013). Secondly, the comparison of two cases of environmental justice is a novel application of the framework of environmental justice. I assume it to have several possible functions within research such as e.g., the ability to compare historic and current development of cases and their impact. This might enable researchers to apply lessons learned from historic cases to current ones. This comparative approach is underlined as a promising avenue of research by Temper et al. as well saying "such approach has a strong potential in explaining why particular environmental and social outcomes are to be found in one place rather than in another, or why specific social groups react with similar means or using similar counter-arguments" (2015). Simultaneously, it would serve the purpose of tying local cases to the more global themes such as e.g., the capitalist centre-periphery split, the resource curse, or international jurisdiction in the environmental justice discourse (Althor & Witt, 2020; Okonkwo, 2020; Osofsky, 2010; Sala-i-Martin & Subramanian, 2013; Smith, 2016; Stevens et al., 2015). Furthermore, it might aid in uncovering underlying themes and patterns in cases, indicating pathways for future research and solutions to the injustices.

Finally, this research attempts to contribute to the environmental justice discourse simply by conducting qualitative research. This is important as in their review, Althor and Witt (2020) found only 19.77% of articles within the discipline to be qualitative research. They continue to show that within the research most articles focus on matters of health/mortality, underrepresenting themes such as social wellness, mental health, and security/safety. This, according to them, also indicates the need for furthering the use of qualitative methods within environmental justice research. This is in line with the importance ascribed to the experience of justice described by major authors within the discourse of

environmental justice (Fraser, 2000; Fraser & Honneth, 2003; Schlosberg, 2007; Sen, 2005), and underlines the importance of contributing to the current dearth of qualitative data.

1.2. Societal Relevance

The case of gas mining and earthquakes in Groningen has become a well-known, yet still very contemporary socio-political and economic question within the Netherlands. Even though it has been twenty years since the first earthquake, the people in Groningen feel unheard and misunderstood (Ekker & Start, 2022; Hakkenes, 2020; NOS, 2022a). This thesis attempts to support their case by embedding it within a well-known and established academic discourse. Uncovering the similarities with a case such as that of Nigeria would lend it additional legitimacy that has so far seemed to elude the local population.

Additionally, there is a need to understand cases of environmental as not just individual incidences but connected instances (Miller & Spoolman, 2016; Schlosberg, 2007). This was alluded to in the academic relevance but holds true here as well, as it has been shown time and again that unity within social movements, such as climate action groups, and combination of strengths enhances the capacity of a movement to achieve the change they fight for (Frickel, 2004; Schlosberg, 2007; Temper et al., 2018b; Vedder, 2019). Uncovering similarities between a case such as Groningen and that of the Niger Delta might contribute to creating a sense of solidarity across nations (Miles et al., 2013). This is of ever-increasing importance as the problems of environmental justice and climate change are also of a global scale. Thus, the understanding of what ties together experiences in two cases so far removed in both a geographical and socio-political sense is also done to contribute to a more holistic and human view of the environmental challenges of this age. There is an arguable need for understanding the universality of the experience of injustice to aid in finding common solutions and bring people closer (Miles et al., 2013; Schlosberg, 2007; Vedder, 2019). Both these goals are of a more explicitly activist nature and a conscious choice of the author.

2. Theoretical Framework

The questions posed above have several dimensions. Firstly, it homes in on the definitions of justice over time and their application in environmental justice. Secondly the experiences of those the injustices are inflicted upon are researched. Here, the research into these experiences is placed within the concepts of environmental justice to shape the theoretical framework.

2.1. Environmental Justice

Historically, environmental problems were mostly treated as problems of a physical and scientific nature which were to be solved in an analogous manner. This perspective arguably persists to this day, with the fixation of nations on only driving down CO² emissions as the solution to the climate crisis (Curry, 2011; Miller & Spoolman, 2016). A wholly different and more holistic way of approaching these matters is the lens of environmental justice. As we have seen earlier, it strives to provide a view that combines the solving of environmental problems, whilst also providing justice to those affected by the environmental degradation. The past few decades have attempted to solve environmental problems in mostly the first way, which has led to arguably little successes (Masson-Delmotte et al., 2021; Miller & Spoolman, 2016). This, and the growth and relevance of the environmental justice literature in the current state of the art on sustainability make it especially relevant for use here (Banzhaf et al., 2019; Schlosberg, 2007; Temper et al., 2018).

This constitutes the environmental dimension of environmental justice, upon which the question remains what justice is. This philosophical question was raised most notably by Socrates and has more answers than can be described here. As a strong voice in the discourse and one of the primary inspirations for this framework, I use the definition provided by Fraser, as she argues that justice is never truly experienced, only the absence of it. According to her, it then logically follows that “justice is the overcoming of injustice” with which I concur and thereby apply this definition throughout this thesis (2012).

This section of the framework will then discuss the current discourse on environmental justice, specifically delineating Frasers’ triad of justice, and Nussbaum’s’ capabilities approach. These will be tied in with the focus of this thesis on lived experience and come together in the eventual framework used in the research.

2.1.1. The Triad of Justice

The triad of justice, as distribution, recognition and procedural justice, was put forward by Nancy Fraser and has seen broad application throughout the discourse (Coolsaet, 2020; Fraser, 2000; Fraser & Honneth, 2003; Holifield et al., 2018; Schlosberg, 2007). It therefore forms one of the two major components of the framework of this thesis and is delineated below.

2.1.1.1. Distribution

Commonly, justice and environmental justice discourse are focussed on questions of distribution. This concept of distributional justice is rooted in the theory of John Rawls, concerning itself with equal spread of costs and benefits (1999). His theorem is commonly applied to research as the question of “what gets distributed, to whom, and how?” (Blue et al., 2021). What is distributed in these cases deals in both material and immaterial goods, e.g., money, ecosystem services, resources, environmental degradation, etc. This distributive theory of justice has been widely adopted throughout justice literature since its inception in 1971 and has proven a great service to formulating environmental justice as well. It is important here to emphasise again that the theory offers no concrete description of when any given situation is absolutely just but provides a framework of defining injustice and approaches at solving it.

Decades after Rawls’ seminal work, the concept of distribution is deeply engrained in the state-of-the-art of environmental justice. Building upon the original definition, several subdimensions of distribution have emerged and been researched within the literature. Drawing from the work of Althor and Witt, four general subdimensions within the distributional research can be discerned, namely social demographic-, environmental exploitation issue-, human well-being- and environmental hazard maldistribution (2020). These four subdimensions each contain another subset of categories in which the case can be placed (see table 1.). Notably, one case of injustice can entail several different subdimensions and categories of distributional injustice and is not limited to only one category per subdimension.

The broad range of sub dimensions and categories are of importance here specifically, as two cases of injustice were compared to one another. The chances of finding both similarities and differences are assumed to be maximised by casting as wide of a net as possible, which is what was attempted here. Furthermore, distribution is a relatively binary dimension, in the sense that equal distribution of costs and benefits in any given subdimension is either present or it is not. This is not to say that then the line itself when something is justly or unjustly distributed is absolute or clear, as this is something that is inherently subjective. This holds true even more so for this thesis as it only gathers peoples’ personal experiences of justice. Thus, the subdivision into these emergent and discernible dimensions and categories from the literature forms the first step in operationalisation of distributional justice in this research. This thesis only reviews two cases, meaning not all

subdimensions will be encountered or present in comparable prominence. Here, matters such as pollution, mining, (mental) health and governance feature most prominently.

One further theme featured prominently in distribution is that of the capitalist centre-periphery split (Smith, 2016). There appears to be a general trend in exploitation issues, where the cost-benefit distribution follows a defined pattern, in which the economic or capitalist centre benefits whereas its periphery, is left paying the costs of this exploitation (Bassey, 2012; Ekker & Start, 2022; Karel, 2012). This theme came forward in both cases reviewed here and is reiterated at several points in this thesis.

Table 1. Subdimensions of distributive justice and their subcategories based on benefits and costs, and where these are allotted, as found in the literature. Adapted from Althor & Witt (2020).

Distribution			
Social demographic	Environmental exploitation issue	Human well-being	Environmental hazard
Religious	Ozone depletion	Education	Over grazing
LGBTQ+	Hunting	Mental health	Extreme fire
Marital status	Hydro modification	Governance	Desertification
Rural	Fresh water degeneration	Spiritual/cultural	Land slide
Immigrants	Fishing	Social wellness	Erosion
Future Generations	Land degradation	Security/safety	Overfishing
Health/Disability	Vegetation clearing	Resource access	Amenity degradation
Farmers/Fishers/Hunters	Soil pollution	Livelihood	Intense storm
Children	Water pollution	Living standards	Deforestation
Indigenous	Mining	Health/mortality	Drought
Gender	Air pollution		Soil pollution
Employment	Climate change		Sea level rise
Age			Heatwave/stress
Education			Food quality/supply
Racial/ethnic			Flooding
Geographic			Disease

Economic status			Natural disaster intensity
			Water quality/supply
			Air quality

2.1.1.2. Recognition

Recognition has been argued for by several prominent authors on the subject of justice such as Fraser and Honneth (Fraser, 2000; Fraser & Honneth, 2003; Honneth, 1995). Building on the work of Rawls, they argue that justice solely as a matter of distribution is insufficient to achieve true justice. This argument is mostly made based on real-world cases, involving the socio-political complexity of reality. They display how lack of recognition is a prerequisite or fundament for distributive injustices. It is then argued that the underlying social and cultural statuses of those involved in issues of environmental justice matter significantly in whether justice is dealt.

Upon its inception, the concept of recognition was quickly adopted within the environmental justice discourse and is now a staple of the state-of-the-art (Blue et al., 2021; Coolsaet, 2020; Murphy et al., 2022; Schlosberg, 2007). Together with distribution and procedural justice it is often displayed as a separate dimension of justice, overlapping in part with both others (Langemeyer & Connolly, 2020). In other literature it is proposed more hierarchically, resembling a pyramid with recognition as a fundament, ensuring just procedures, which in turn result in just distribution (A. Martin et al., 2015; See & Wilmsen, 2022). The concept of recognitional justice is thus, like the other dimensions, not a fix concept within the discourse. In this thesis I utilise the non-hierarchical framework of recognition, as I wanted to study the injustices without making a pre-emptive assumption about the way they interacted (See figure 1.).

Although not previously established, concrete subdimensions do emerge from the literature. The discourse displays several clear themes which I use as further delineation of the dimension of recognition. Firstly, a general split in ‘recognition for nature’ and ‘recognition for humanity’ is observed (Holifield et al., 2018; Schlosberg, 2007). This thesis does not concern itself with the recognition for nature or ecological justice and as such this subdimension is not further explored. Within the discourse on recognition for humanity there is further subdivision into distinct dimensions. Holifield et al. describe how the origin of

misrecognition is the lack of acknowledgement or respect for differences. These differences can be categorised generally as social, cultural, economic, political and legal differences (Fraser, 1995; Holifield et al., 2018; P. Martin et al., 2015; Schlosberg, 2013) (see table 2.). The dimensions overlap in some parts, and surely interact, as misrecognition in one often snowballs into misrecognition in one or several others (Coolsaet, 2020). Here, I assume the misrecognition that takes place in Nigeria and Groningen to also take place in some or all these subdimensions. Taken together, these aspects of recognitional justice form a spanning set of subdimensions of recognition, well fit for the purpose of the research of this thesis. However, it is important to note that this list of subdimensions is likely not to be the only one in the literature, and not comprehensive as it was shown before that the definition of justice or recognition is not fixated and evolves over time (Fraser, 2000; Schlosberg, 2007).

This subdivision into 5 concrete and divisible subdimensions made it highly applicable in this thesis, as it allows for easy comparison between cases. Furthermore, the five subdimensions are understandable for laypersons and allowed for facile translation in the interviews. Thus, these five subdimensions form the first step in operationalisation of the subdimension of recognition.

Table 2. Subdimensions of the dimension of recognition as set out by Fraser, Holifield et al., Martin et al. and Schlosberg (1995; 2018; 2015; 2013)

Recognition	
Recognition for nature	Recognition for humanity
	Social
	Cultural
	Economic
	Political
	Legal

2.1.1.3. Procedure

The third dimension of procedural justice originates in the work of Fraser on participatory justice, and by Sen in the context of many empirical settings (Drèze & Sen, 2002; Fraser, 1998; Schlosberg, 2007). It puts forward the concept that justice is only attainable if society is arranged in a way in which all members interact with one another on a basis of equality. Fraser dubs this the norm of ‘parity of participation’ (Fraser, 1998). The

concept can then be framed with the question of “who participates in decision-making, and how?” (Blue et al., 2021).

However, with progression of the discourse, it became clear that even when participation is guaranteed, a fair outcome is not. There emerged a novel pattern indicating that the underlying structure of society and its mechanisms meant recognition and participation could exist without guaranteeing a fair outcome of a process (Coolsaet, 2020). This subsection of the environmental justice discourse has since grown into a definitive subdimension, often argued to contain the earlier mentioned concept of participation. Procedural justice is a complex dimension, strongly influenced by the dimension of recognition, but with its own distinct features. The authors Hunold & Young further explored the dimension, formulating 5 basic principles of procedural justice that can be operationalised as subdimensions. These are inclusiveness, consultation over time, equal resources and access to information, shared decision-making authority, and authoritative decision making (see table 3.) (Holifield et al., 2018; Hunold & Young, 1998). The formulation of these principles allowed for easy translation into interview questions in this research. They thus form the first step in the operationalisation of the subdimension of procedural justice in this research.

Table 3. Procedural justice with its subdimensions. Adapted from Hunold & Young (1998).

Procedure	
Inclusiveness	The inclusion of all affected social position and perspectives in discussion and decision making
Consultation over time	Having a decision-making process that allows for discussion and social knowledge gathering over time
Equal resources and access to information	Participants in the decision-making process having equal economic and informational opportunities and power
Shared decision-making authority	Egalitarian participation in the decision-making process of all participants, through equal authority

Authoritative decision making	The decisions made in the democratic process being considered binding and not subject to future tampering
--------------------------------------	---

Together with distributional and recognitional justice, these three dimensions form the triad of justice as put forth by Fraser (Fraser, 1998; Schlosberg, 2007). The postulated dimensions overlap and interact with one another but remain distinct the ways described earlier (see figure 1.)

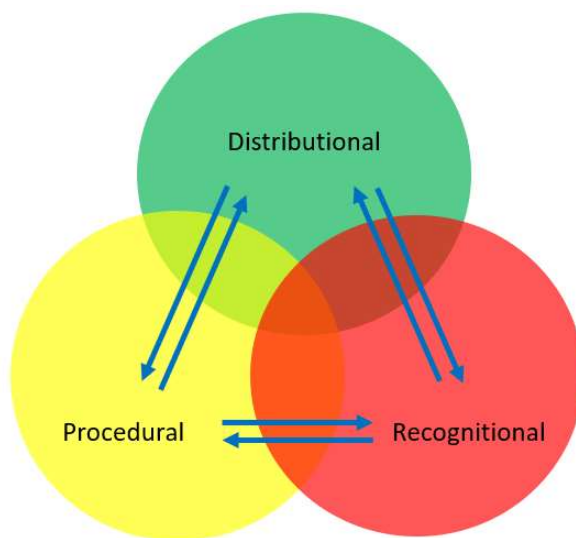


Figure 1. The triad of justice as put forth by Fraser. The arrows indicate the interactions between the three dimensions. Adapted from Gillard et al. and Langemeyer and Connolly (2017; 2020).

2.1.2. Capabilities

Parallel to the discourse on the triad, a fundamentally different view on justice is postulated in the form of capabilities. This framework is proposed to surpass the focus on what is possessed, material and immaterial as was done before, and asks the holistic question of “whether it is what is necessary to enable a more fully functioning life, as we choose to live it” (Nussbaum, 2006; Schlosberg, 2007; Sen, 2005). This concept has since proven highly operational in describing injustices of all manners, offering a lens that is more inclusive and broader than the definitions offered above. Specifically, it enables a description of environmental justice and injustice from a more indigenous perspective, as it emphasises the freedoms necessary to live in a manner of one’s own choosing, and not according to any

specific societal standard (Coolsaet, 2020; Holifield et al., 2018; Nussbaum, 2013; Schlosberg, 2007; Schlosberg & Carruthers, 2010).

Within the discourse, Sen and Nussbaum have contributed most significantly to setting up and expanding the concept of these freedoms. Here I will make use of the concept of the ten basic human freedoms/capabilities as set forth by Martha Nussbaum (2013). She writes that “a government has the job of making people able to pursue a dignified and minimally flourishing life. It follows that a decent political order must secure to all citizens at least a threshold level of these ten central capabilities” (Nussbaum, 2013). This essentially operationalises the dimension of capabilities into ten central notions (See table 4.). These ten central capabilities require very little further operationalisation to be applied in qualitative research. This made them a logical approach for this research to inquire into the impact of the injustices on participants’ capabilities.

Table 4. The ten central capabilities necessary for enjoying a just, dignified, and flourishing life. Adapted from Coolsaet (2020).

Capabilities	
Life	Being able to live a life of normal length
Bodily health	Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter
Bodily integrity	Being able to move freely from place to place; being free from physical assault and sexual violence; having opportunities for sexual satisfaction; having reproductive choice
Senses, imagination, and thought	Being able to use the senses to imagine, think, and reason in a way informed and cultivated by an adequate education; having freedom of religion and expression; being able to have pleasurable experiences, and to avoid non-necessary pain
Emotions	Being able to have attachments to things and people outside ourselves; being able to experience and express emotions; avoiding emotional trauma, abuse, or neglect

Practical reason	Being able to form a conception of the good and to engage in critical reflection about the planning of one's life, having liberty of conscience
Affiliation	<ul style="list-style-type: none"> - Being able to live with and toward others, to engage in various forms of social interaction; to be able to have empathy and compassion - Having the social bases of self-respect and non-humiliation; being able to be treated as human of equal worth; being free from various forms of discrimination
Other species	Being able to live with concern for and in relation to animals, plants, and the world of nature
Play	Being able to laugh, to play, to enjoy recreational activities
Control over one's environment	<ul style="list-style-type: none"> - <i>Political</i>. Being able to participate effectively in political choices that govern one's life, having protections of free speech and association - <i>Material</i>. Being able to hold property and seek employment on an equal basis with others; freedom from unwarranted search and seizure.

It is important to note here that this framework does not consider the conflict that exists between maximising freedom and taking responsibility, and solely focusses on the first. This is most explicitly found in aligning inter- and intra-generational justice, i.e., reconciling responsibilities towards the poor and underdeveloped, with the needs of future generations (Rauschmayer & Lessmann, 2013). I acknowledge this conflict, but it lies outside the scope of this thesis and does not lessen the functionality of this framework and as such will not be considered further. Furthermore, it is important to note that none of the subdimensions were quantified during the research. The scale of impact on the dimensions was compared in some capacity, but this is not to be interpreted as quantification of the subdimensions.

With this delineation of the capabilities approach and the triad of justice, the two foremost strands of discourse on environmental justice have been discussed and fit to the framework of this thesis (see table 5.).

Table 5. Environmental justice and its subdimensions as defined by either the triad or the capabilities approach (authors own).

Environmental Justice				
Approach	Triad of justice			Capabilities
Dimension	Distributive	Recognition	Procedural	N/A
Subdimensions	Social Demographic	Social	Inclusiveness	Life
	Environmental Exploitation Issue	Cultural	Consultation over Time	Bodily Health
	Human Well-being	Economic	Equal Resources	Bodily Integrity
	Environmental Hazard	Political	Access to Information	Senses, Imagination, and Thought
		Legal	Shared Decision-making Authority	Emotions
			Authoritative Decision Making	Practical Reason
				Affiliation
				Other Species
				Play
				Control over One's Environment

2.2. History and socio-cultural context

All cases of environmental justice are strongly influenced by their sociocultural context. Although historic determinism is a debated topic, there is no question that this context is shaped in part by its history (Lord & Shutkin, 1994). Matters such as the status of a

population, recognition of cultures, but also law, jurisdiction and political clout have a strong historical element (Coolsaet, 2020; Lord & Shutkin, 1994; Nussbaum, 2006, 2013; Schlosberg, 2007). As such, any case of environmental justice must be considered not only within its current context but is to be understood through its history. The importance of this historical dimension of justice is especially visible in the dimensions of recognition and procedural justice. Here, historical misrecognition often persists in some form into the present day. This in turn strongly influences the procedural dimension, which reflects in matters such as institutionalised racism or marginalisation. Consequently, this thesis contains a specific section, detailing the history of both the Nigerian case as well as that of Groningen.

2.3. Lived experience

Lived experiences are understood as the subjective, emotional dimension of a moment or longitudinal circumstance of human life (Given, 2008). This lived experience is found in the contexts of its physical, political, and historical circumstances (Ellis & Flaherty, 1992). The discourse on the subject explicitly tries to do justice to the subjectivity of those partaking in the research, making no claim to the principles of positive science such as reproducibility or generalisability. However, the stories captured in this manner are assumed to be explicitly suitable for “presenting the life of the individual for comparison with others” (Given, 2008). This makes it a logical choice for the research performed in this thesis. Furthermore, the emotional character of the research also explicitly exists to evoke an emotional reaction from those reading the eventual results, complementing the activist aim of this thesis (Ellis & Flaherty, 1992; Given, 2008; Reid et al., 2005).

This lived experience has a well-established, but rarely highlighted role within environmental justice research (Althor & Witt, 2020). Prominent authors such as Fraser and Schlosberg & Collins underline how justice and environmental justice is an inherently subjective matter, defined by how it is experienced (2000; 2014). This is further emphasised when returning to the subdimensions of justice delineated above. Matters such as recognition, human wellbeing, emotions, and senses, imagination, and thought are inherently subjective and a matter of pure experience (Fraser, 2000; Fraser & Honneth, 2003; Nussbaum, 2013; Schlosberg, 2007; Sen, 2005). As such, the lived experience of justice is an inseparable part of the existence of justice itself. In this thesis, the lived experiences form the primary data used in the analysis and comparison of the cases of Groningen and the Niger delta.

2.4. Framework

The goal of this study was researching whether Groningen might also legitimately qualify as environmental injustice. By developing this framework and using specific methods, the thesis also contributes to other parts of the discourse in ways described earlier. The legitimisation of Groningen as a case of environmental injustice may then contribute to the awareness of the reader that such injustice might befall anyone.

The framework used in this study was constructed specifically to achieve this goal, fitting comparison of cases of environmental justice and focussing on the universal human element. To do so, theory on lived experience and environmental justice were combined. Two strands of environmental justice discourse were taken and delineated, the first being the triad of justice and its three different dimensions. Gaining insight into the infraction in these dimensions offers a solid and comparable result of both cases. The capabilities approach then offers a more holistic approach, with justice considered from a more freedom centred and humanist perspective. As such it is fundamentally different from the triad but equally relevant. It was included here to broaden the perspective of environmental justice in the thesis and improving the chances of finding interesting differences and similarities in the comparison. Both were used to view the cases set out against their respective backgrounds. This culminated in the framework used for this thesis (see figure 2.).

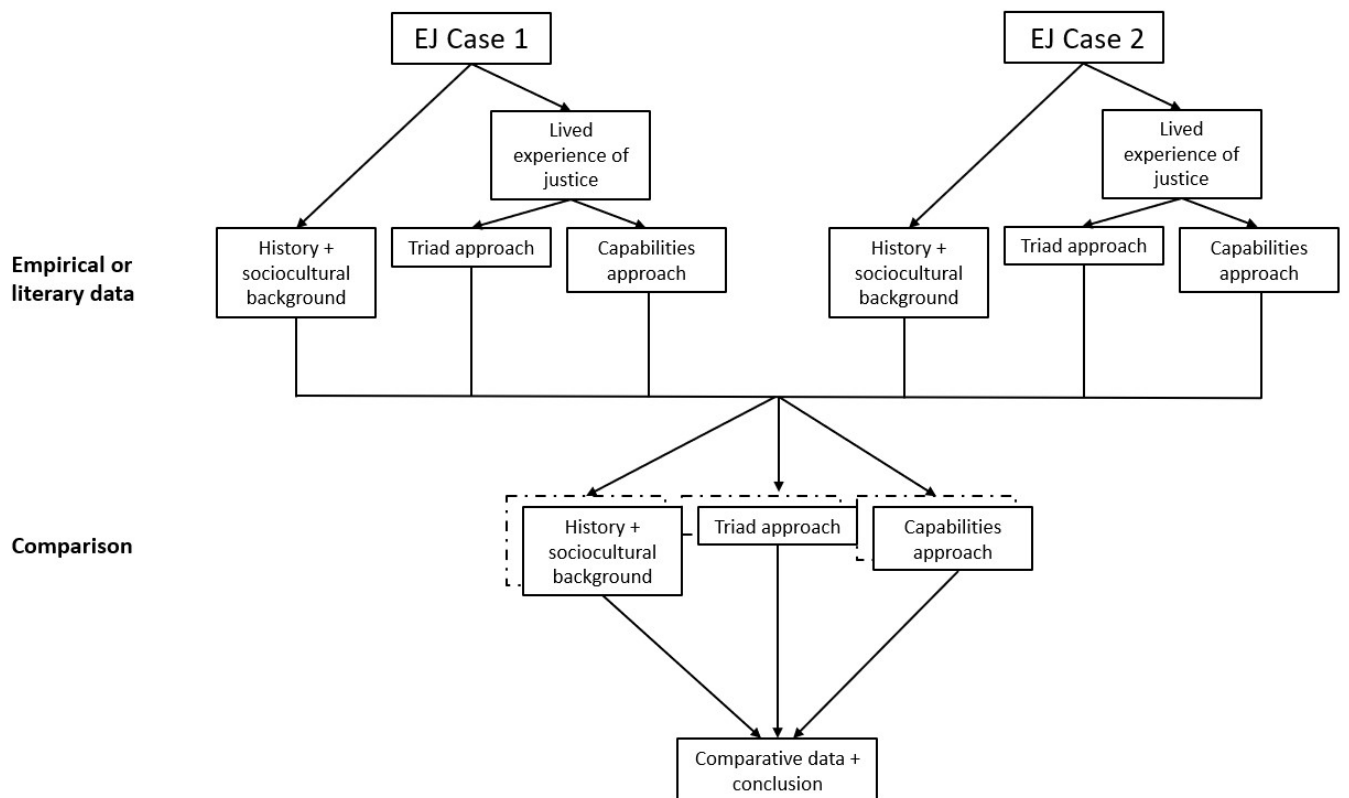


Figure 2. Research framework of the thesis (authors own).

Both the triad and more so the capabilities approach entail a large qualitative element due to their focus on subjective matters. This subjective element of the theory was operationalised in the framework through the theory on lived experience. The following section then delineates the methodological decisions which follow logically from this framework

3. Methods

This research is made up of qualitative field-data from the earthquake area of north-eastern Groningen, and data from exploratory interviews and a literature review into the case of the Niger Delta. To gather primary insights into the field research region and determine the best way of approach, a first round of 4 interviews and 1 focus groups with interest groups and organisations was held in Groningen. These formed the basis and access for our second round of 4 in-depth interviews and 3 focus groups with the inhabitants of the region, which forms the bulk of the data. To supplement the literature review into the case of the Niger Delta 3 interviews and 2 focus groups were held. This research was conducted following the reflexive paradigm of qualitative research, in which the subjectivity and contextuality of the research is made explicit.

The research here is part of a larger research by theatre producer Bright Richards and his company New Dutch Connections. This company produces theatre with a large societal

aspect, focussing on facilitating integration of recently arrived immigrants in Dutch society. The storytelling aspect of the theatre forms a fundamental aspect of this more activist aim of the company. The research into Nigeria and Groningen is part of a large new project of Bright, within which he attempts to tie these narratives together to instil a sense of connection and urgency concerning climate justice in the viewers. Simultaneously, his goal is to bring together artists, policy makers and citizens alike with his project to enhance their capacity to achieve climate justice. He is the primary writer and producer on this play, and as such he was present during most focus groups and interviews.

3.1. Rationale

This thesis has gathered field data through qualitative research. The main question of this research focused on the lived experiences of populations. As this was to be researched in the field, qualitative research through interviews and focus groups was the most logical approach. The methods of qualitative research allow for in depth study of the thoughts and feelings and thereby the experiences of those involved in the current injustices in Groningen and the Niger Delta (Hennink et al., 2020; Miles et al., 2013). This study explicitly delves into the nature of an experience, from the multi-faceted view of environmental justice, as we have seen above. The complexity of this framework and the individual nature of the experiences made the choice for semi-structured interviewing and focus groups self-evident, as questionnaires don't provide room for improvisation, and are less capable of describing personal experiences (Given, 2008; Horton et al., 2004; Stewart & Shamdasani, 2014), which is the focus of this research. These methods allowed the exploration of the responses of the participants during the interviews, instead of attempting to capture them within preconceived scales and questions. This, in turn, aided in answering the main question of this thesis.

3.2. Participant recruitment

The field research of this thesis focuses on a very specific part of a population; people with earthquake damages to their houses within the quake-region of Groningen. As such, nonprobability sampling, or purposive sampling, needed to be used. This is common practice in qualitative research, where true random sampling or recruitment is far more rare than searching for people within a specific group (Campbell et al., 2020; Etikan, 2016; Hennink et al., 2020). Within this group we then used maximum variation sampling wherein people

ranging from minimal damage to those having been placed out of their homes were selected (Rai & Thapa, 2015).

To find people with first-hand experience of the earthquakes, the damages, and the process of reparation we first selected organisations directly involved in the matter of the earthquakes. These were mostly interest groups in the region, representing the population we were interested in. More than ten organisations were approached, with 5 participating in the eventual talks (see Table 6.) Besides providing us with valuable knowledge of the region, they also provided us with help in gaining access to the target population. Thus, snowball sampling was partially done through their network. The second entryway was through my personal network. Through them, the people we met with the organisations and subsequent snowballing, we gained access to 11 participants in Groningen. This resulted in 9 interviews/focus groups with inhabitants of the area and another 2 focus groups with organisations involved in the area.

A parallel research plan had been drawn up to gather data in Nigeria, in an analogous fashion to that in Groningen. This however quickly proved to be impossible due to safety concerns in the Niger Delta. During the orientation on research in the Niger Delta 3 interviews and 2 focus groups were conducted (see table 6.), which did provide valuable insights into the region and are thus part of the results section of this thesis. 1 focus group and 1 interview were held digitally with locals of the region, the other remaining focus group and 2 interviews were held with involved individuals and organisations that resided in the Netherlands. These have been utilised to complement the literature review with field findings, although they were not interpretable through the framework and weren't recorded.

3.3. Organisational meetings

As part of the orientation on the fieldwork 5 meetings with organisations active within Groningen were had. These organisations were involved in Groningen in a different manner, but all had the overlapping interest of supporting the locals in some capacity. Milieudefensie also has a history of activity in the Niger Delta and supplied us with information on that region as well. One more meeting was had with Amnesty International, which has a long history of striving for justice in the Niger Delta (see table 6.). All meetings served the purpose of painting a picture of the region that was to be researched. I was aware as an academic researcher that most of these parties have certain vested interests in the case and may not have painted the most impartial image of the situation. To maintain neutrality in

Groningen we talked to parties like the Gasberaad or Leefbaar Groningen, which are respectively governmental and academically independent. For the Nigerian research, the impartiality was ensured through researching the compiled academic literature.

Table 6. List of participating organisations and their respective disposition in their locality.

Participating Organisation	Locality	description
Groninger Gasberaad	Groningen	Collective of societal organisations with the goal of representing the interest of Groningen to the Dutch government and its local institutions in Groningen
Leefbaar Groningen	Groningen	Independent and impartial knowledge platform and research group partly comprised of researchers of the Rijks Universiteit Groningen, conducting research into geophysical and socio-political effects of the earthquakes
Milieudefensie	Groningen/Niger Delta	Activistic climate organisation actively pursuing climate justice through societal channels and legal action
Kerk&aardbeving	Groningen	Religious platform formed by the churches in and around the quake area to unite people with damage and represent their voice as an organisation
Stichting Stut&Steun	Groningen	Foundation set up by Groninger Gasberaad and Groninger Bodem Beweging to support people with questions and those in need of mental support
Amnesty International	Niger Delta	International non-governmental organisation with the aim of fighting injustice and ensuring global human rights

3.4. Focus groups

For this research two different kinds of focus groups were conducted. The first set of two focus groups consisted of those conducted with interest groups involved in the area. These two groups were not recorded and transcribed in their completeness, and only notes were taken by me. These groups were conducted primarily to get to know the organisations involved and the situation I would be dealing with in the area. No interview guide was constructed beforehand, and the groups were conducted free form with the primary goal of gathering as much information about the area as possible. The second set of three focus groups, with the actual inhabitants of the quake area that partook in the research, were conducted in a semi-structured manner (see table 7.). An interview guide was developed beforehand based on the previously shown theoretical framework and used to gather information as described by Krueger & Casey, and Stewart & Shamdasani (2014; 2014). These focus groups were recorded in their entirety and transcribed afterwards for interpretation and coding.

Table 7. list of participants in the focus groups. All names are pseudonyms to ensure the anonymity of the participants.

Participants	Description
Anna & Tjerk	A couple that has lived in the vicinity of Loppersum for more than 3 decades but has not sustained major damage to their house
Gerard & Marie	A couple that has lived in Kolham since the early 90s that have sustained several damages to their homes since the onset of earthquakes
Hanna, Katrien, Frederik	A mother and daughter that live in the same house in Scheemda and another resident that lives close by. All have sustained small damages to their homes and requested repairs

For the case of the Niger Delta, two exploratory focus groups were held. One with two individuals from a local activist organisation that was introduced to us through

Milieudefensie. The second with two researchers at the University for Humanities in Utrecht, who had recently performed research in the region. Again, only notes were taken by me.

3.5. Interviews

The interviews of this research contain a similar split. One interview was conducted with a representative from the Groninger Gasberaad. This was done without an interview guide and served to get to know the area and gain access to the population with first-hand experience. For this interview I only took notes.

The second set of interviews, with the population that has first-hand experience with the quakes and the ensuing problems, were conducted in a semi-structured manner as described by Hennink et al., Horton et al., and Whiting (2020; 2004; 2008) (see table 8). These four interviews followed the same guide as was used in the focus-groups with the inhabitants of the quake area. These interviews were recorded in full and transcribed afterwards for interpretation and coding. All interviews lasted between an hour and an hour and a half and focussed on justice as described by both the triad and the capabilities approach.

Table 8. List of participants in the interviews. All names are pseudonyms to ensure the anonymity of the participants.

Participants	Description
Willemijn	Resident of Loppersum, living in a housing unit since a little more than a year after her home was selected for complete reinforcement
Jessica	Resident of Garrelsweer for more than 40 years, just moved back into her house after having lived in a housing unit for more than a year whilst her house was reinforced
Nina	Resident of Loppersum, living in a house selected for reinforcement. She will have to move to a housing unit at some point
Brigitte	Resident of Noordbroek, living in a housing unit in her own backyard while her house is being reinforced

For the case of the Niger Delta, three more exploratory interviews were held. These were all unstructured and took place as a means of establishing first contact and getting to know the region and the people there. One interview was with a member of Milieudefensie, which has a long history of involvement in the region, another with a local content producer and another with the ex-director of Amnesty International, who was also involved in the region during his time with the organisation.

3.6. Operationalisation

The first and largest step in operationalisation of the themes of this thesis was conducted in the theoretical framework with the delineation and summary of subdimensions of environmental justice (see table 5.).

For the literary research into the Niger Delta, no further operationalisation was needed. The clear structure of the framework derived from literature provided a clear means of interpretation of the literature by me as a researcher with an academic background.

For the fieldwork in Groningen, the concepts did require further operationalisation in the form of an interview guide (see appendix I). This meant that the themes delineated above were translated in such a manner that they would connect with the experiences of the participants in this research. As such, the themes of distribution, recognition, and participation for the triad of justice and of the themes of capabilities were adapted for the interviews. After the exploratory meetings with the organisations in the area the applicable subdimensions of the framework were selected for operationalisation into interview themes (see table 9.).

Table 9. Operationalisation of the interview themes.

Approach	Dimension	Interview themes
Triad of justice	Distribution	<ul style="list-style-type: none"> • Material damages to house • Immaterial/psychological damages of earthquakes • Profits of gas mining • Distribution of profits
	Recognition	<ul style="list-style-type: none"> • Feeling of being taken seriously • Perceived respect • own authority over situation

		<ul style="list-style-type: none"> • Perceived acknowledgment of difficulties
	Procedure	<ul style="list-style-type: none"> • decision making for Groningen • involvement in decision making in Groningen • relationship between themselves and decision makers • ease of access to information
Capabilities	N/A	<ul style="list-style-type: none"> • Capability to live life as wished • Influence of gas mining • Influence of governmental compensation • What is necessary to restore capabilities

The themes listed were those that came forward most during the exploration with the local organisations. Naturally, the scope of the eventual analysis of the interview and focus group data included all subdimensions as listed before.

3.7. Reflexive qualitative research

All interviews, focus groups and other means of data gathering used here involve me as a researcher making choices. These are based on my best judgement but are thereby inherently subjective and dependent on the context of the research. Although this involves arguably infinite complexities, it is worthwhile and necessary to make these known to some extent. Since we cannot exclude subjectivity, it must be made explicit and accounted for. Here, this is done by means of the reflexive tradition of qualitative research. This involves asking oneself a set of reflexive questions which clarify the position of the researcher and the research in context.

This reflexive methodology has grown since its inception to include a plethora of reflexive perspectives. The nature of reflexivity means that any part of research can be reflected upon, arguably into infinite detail and meta layers (Alvesson & Sköldberg, 2017; Finlay, 2002). However, this is not relevant in answering the question posed by this thesis. As such, I limit myself to the four most fundamental levels of reflexivity in research: personal-, interpersonal-, methodological-, and contextual reflexivity (Olmos-Vega et al., 2022). Each of these levels represents an important dimension in the context of the research, branching from the researchers themselves to those who are being researched and the context in which

the research takes place. These dimensions are best approached through asking oneself questions as explained by Olmos-Vega (2022) (see table 10.).

Table 10. Fundamental questions of the 4 dimensions of reflexivity for the researcher. Adapted from Olmos-Vega et al. (2022).

Reflexive questions for the researcher	
Personal	How is my unique perspective influencing the research?
Interpersonal	What relationships exist and how are they influencing the research and the people involved? What power dynamics are at play?
Methodological	How am I making methodological decisions and what are their implications?
Contextual	How are aspects of context influencing the research and people involved?

In the following section I ask myself these questions, thereby providing essential context and background information for the reader to understand subjects, data and interpretation in this thesis.

3.7.1. Personal

I am a white, male, Dutch student with a background in higher education. Importantly, I was raised in a family with concepts from the political ‘left’ in the Netherlands. In my education and personal development these ideals have advanced further left towards what could be considered more socialist concepts. Before starting this research, I already had a certain set of opinions on the problems facing Groningen and Nigeria, which I approached in part from a perspective of systems thinking and ideas of post-growth and post-capitalist concepts. This perspective is reflected here in my viewing the cases of this thesis as a certain set of problems brought forth by capitalism and its paradigm of prioritising economic gain above everything. During the interviews and focus groups I attempted to keep this out of my own discourse. My choice for the environmental justice framework, which intrinsically concerns itself with the problems of capitalism (Holifield et al., 2018; Schlosberg, 2007), meant that these themes were nonetheless a part of the subtext of my interactions with the participants.

Bright was born in Liberia, and only came to the Netherlands once the civil war there started. He is thus a refugee from a war-torn area himself and this partly determines his views as a researcher and theatre maker. This came forward clearly during the interviews, in which he puts a focus on the experiences of loss of home, loss of safety, and becoming a refugee in Groningen. He himself emphasises how these experiences influence the way in which he views the situation in Groningen and Nigeria and how he conducts the interviews and focus groups. During the data gathering he thus linked his own experiences with those we interviewed by sharing his own story and reasons for coming to the region.

We thus brought a slightly different perspective to the interviews. Mine was more academic and focused on the experiences and opinions of the participants. Brights' focus was solely on the emotions and the dramaturgic potential of these emotions. These different perspectives did however facilitate a good synergy between us and the interviewees as Brights questions supplemented my own and oftentimes revealed valuable stories that I might not have heard otherwise.

3.7.2. Interpersonal

I was familiar with two of the participants of the focus groups beforehand. However, we had only met once, and no noteworthy relationship existed between us. Bright knew none of the participants beforehand. No power dynamics that would be of note can be reported here. We are average Dutch citizens, much like them. I am arguably even lower on the societal ladder as a student who is dependent on them for the results of this research. The lack of any previous relationship between us and the participants however did not appear to negatively influence our interactions. All interactions were friendly and markedly open concerning the injustices that had befallen them and the accompanying sentiments.

Our presence and personalities also did not impact the interviewees in any significant way it seemed. This is notable, as Bright and I are exactly the 'westerners' the participants described in the interviews as not understanding them and not having any respect for their situation. This may however explain the hesitance of many people to initially speak with us.

For this research I have limited myself to talking to organisations mostly on the more activist side of the spectrum and respondents with damages. This means that the bias in this research, combined with what I have written above about my own perspective, would shift to a perspective favouring the opinion that injustice has taken place. To ensure the results contained as little bias as possible, I have reflected on this approach myself. Subsequent

consulting of literature, iterating the interview guide to contain only open and not leading questions and constantly having my work proofread by uninvolved academics in my personal circle has ensured I did everything I could to maintain an as neutral stance as possible. Inclusion of talks with the NAM, Shell, Exxon, Gasunie and the Dutch government would have been optimal, but fell outside of what was possible in the limited time I had to complete this thesis.

3.7.3. Methodological

The research was conducted from an interest in systemic injustices and their psychosocial impacts and was informed by literature on lived experiences of environmental justice. From the literature on the subject, and my personal interest in expanding my knowledge outside of quantitative research, the choice for qualitative research was evident. Primary considerations were made if a participatory action research (PAR) approach could be applied with the theatre play as the intervention. This would have been very interesting, as it allows for a more thorough integration over time of the researcher into the researched population. The building of relationships and reducing of any form of hierarchy between researcher and participant naturally contributes to the quality of the data. It would have been of great interest to combine academic research with a cultural intervention like this theatre play. Measuring the pre- post- engagement of viewers of the play with matters such as the climate, fossil fuels, and more so the predicament of their fellow countrymen in Groningen would have been of great academic interest. Furthermore, the PAR design would have been optimal in collusion with the goals set by New Dutch Connections for this research and play. However, this proved impossible due to time constraints of the thesis and the time it takes to develop the theatre play. Accordingly, I adjusted the methods to a more sober style of qualitative research with interviews and focus groups and an expanded reflexive section. This approach still allowed the necessary freedom to explore the participants' experiences of the injustices and their context, while also allowing them the freedom to express themselves. The methods applied here flowed logically from the theoretical framework of environmental justice, which portrays injustice in the broadest sense, including its societal context and the timeframe of the problems. The decision for this form of qualitative research were taken to sketch a picture of both cases broad enough to understand its respective context as well, but concrete enough to allow for a form of comparison of the results. Simultaneously, they were

also chosen to maximise the freedom of the participants, as we expected this to make them more comfortable to divulge their personal experiences.

The implications of these decisions have partly already been discussed earlier; in that it meant the research is primarily reliable for the region itself. Generalisation of qualitative data is indeed possible, but must observe some more caveats, as detailed by Smaling (2009). Simultaneously it meant that we had a broad space for the participants to express themselves, which would serve my research into their experiences and Brights capacity for dramaturgic ends simultaneously.

Another important factor in the research has been the use of grey literature in the form of well-established local journalist outlets such as the NOS in the Netherlands or Al Jazeera internationally. The choice to use these sources was one of necessity, as both the case of Groningen as well as that of the Niger delta are lacking recent scientific publications. As the current situation and relevance of both cases had to be reviewed for this research, I have had to rely on these journalistic outlets for data that was less than three years old.

3.7.4. Contextual

The research took place within a context of renewed attention for the gas region of Groningen, due to the war in Ukraine and the ensuing gas-crisis. Not every aspect of this attention was welcome for those inhabiting the area. There was a contract with Germany ‘forcing’ the Netherlands to extract more gas than was promised to Groningen by politicians earlier that year. Furthermore, the war with Ukraine and the following gas shortage made questions about natural gas of paramount importance to all European countries. Naturally, this raised the attention for the region further. Consequently, the situation with Groningen has become more pressurised again, as it is being pushed to answer the impossible questions about whether to reopen the gas tap and have their houses sink further to aid the Netherlands and Europe. Furthermore, a parliamentary inquiry had been initiated during the same time-window in which we conducted our interviews. This meant a further increase in media attention for Groningen and further pressure on the participants.

This pressure has driven down the willingness of the locals to participate in our research, as sensationalist talk was rising again. Scarcely any of the injustices they have coped with since the first earthquake have been solved permanently, only making them feel like this new turn of events again diverted attention away again from where they need it. Most people have had their fill of all the attention over the past ten years and have long since

grown weary of talking about the matter to anyone, as was reflected in several of the interviews. Specifically talking has made them tired, as that was the tactic to improve their situation for a long time, but it yielded no results in their experience. The political dealing with the situation worsened this further, as they learned that words and talking meant nothing in terms of actual improvement of their predicament.

It was thus quite clear that the context in which we as researchers were attempting to gather participants was suboptimal. It meant we had to do more work beforehand to gain insight and actual access to participants in the region. This involved talking to the local interest groups such as the Gasberaad and Leefbaar Groningen, who helped us adjust our communications style and provided further contacts that aided in the gathering of participants. Once in contact, and knowing through whom we established contact, the participants were not unwilling to talk. As such, the context fortunately only complicated the establishment of contact and not the eventual interaction between us and the participants.

3.8. Data analysis

In this research only the interviews and focus groups with the actual inhabitants of the quake area have been transcribed in full. The supplementary meetings with organisations involved in the area only have data in the form of notes I took. The transcriptions of the interviews and focus groups were analysed with the aid of NVIVO[®]. All transcription data was coded in this program through the primary codes and followed by another round of coding. Primary codes were derived from the theoretical framework beforehand, thus making these deductive codes. All primary codes were descriptive codes as described by Miles et al. (2013).

The data blocks naturally fit more than one code several times, as themes can and do overlap (see figure 2). As such, I made use of simultaneous coding during data analysis as well. The subsequent second order coding was done with sub coding, applying detail to the general deductive codes of the framework, and making visible any possibly unexpected themes or phenomena

During coding, following the gathering of field data several phenomena emerged. The novel patterns fit neatly within the previously set out primary coding categories and were added to the already existing primary codes. It is important to note that the secondary sub codes do not constitute a sub code of the primary sub code, but of the primary code itself (see table 11.).

Table 11. Table of primary deductive sub codes and secondary emergent sub codes.

Primary code	Primary sub code	Secondary sub code
Distribution	<ul style="list-style-type: none"> • Social demographic • Environmental exploitation issue • Human well-being • Environmental Hazard 	<ul style="list-style-type: none"> • Local maldistribution of compensation and repair
Recognition	<ul style="list-style-type: none"> • Social • Cultural • Economic • Political • Legal 	<ul style="list-style-type: none"> • Legitimacy & Acknowledgement • Honesty
Procedure	<ul style="list-style-type: none"> • Inclusiveness • Consultation over time • Equal resources and access to information • Shared decision-making authority • Authoritative decision making 	N/A
Capabilities	<ul style="list-style-type: none"> • Life • Bodily Health • Bodily Integrity • Sense, Imagination, and Thought • Emotions • Practical Reason • Affiliation • Other Species • Play 	<ul style="list-style-type: none"> • Reduced • Unaffected

	<ul style="list-style-type: none"> • Control over One's Environment 	
--	--	--

3.9. Ethics

Close interaction and data gathering on a sensitive subject such as this requires a certain set of ethics to which I've attempted to always adhere during the research. All participants were informed about their rights when it came to the interviews and the data. It was made clear beforehand what I was going to do with the data, how I was going to interpret it in this thesis and how the data would be disposed of afterwards. The participants were ensured anonymity to make them more at ease in participating in this research. As such, all interviews and interactions were performed by the protocol set forth by the University Utrecht (Madison, 2011).

For the interpretation, I have made sure to reflect upon myself and the way this research is undertaken, which is made more explicit through the paradigm of reflexive research. This is to ensure any bias or context sensitivity is made explicit and thereby harmless (Alvesson & Sköldbberg, 2017; Burawoy, 1998).

Furthermore, my cooperation with Bright raised no conflicts of interest. He was more interested in our participants from a dramaturgic point of view. However, this overlapped in large parts with my interest in their experiences, thoughts, and feelings on the injustices. His presence contributed in some instances as he engaged the participants in a different way from myself, which led them to divulge some matters which I may have otherwise missed out on in my own questions. Thus, our interests and approaches aligned for the most part and did not conflict in any matter.

4. Regional Context

Here I provide the historic and current state of the environmental justice case in Nigeria and subsequently Groningen.

4.1. Niger Delta

The regional context of the Niger Delta is inextricably tied to the history of colonialism of the entire African continent. Although I will not go into detail here, it is important to remember that from the 16th century onwards until the independence of the first republic of Nigeria in 1960, the country was a colony of Great Britain (Hill, 2012). Slavery continued within the colony until well into the 1930's (Afigbo, 2006). Notably, ten years before Nigeria gained independence, Shell had already started oil explorations within the Niger Delta, after having obtained the rights from the British colonial authorities. This naturally makes for a rich history in exploitation, racism, and marginalisation, sketching a classical background for a case of environmental injustice.

The history after independence is one marred with internal conflict, and political and societal instability. Between 1966 and 1993 a multitude of coups took place, making Nigeria switch back and forth between several military regimes and a republican state. In 1967 a part of the country also attempted to secede, forming the republic of Biafra. This led to a civil war, costing several million lives, and causing an ongoing humanitarian crisis for its duration and aftermath, leading into the eventual reclaiming of the territory by the country of Nigeria in 1970 (Hill, 2012). The military regime that executed Ken Saro-Wiwa and his compatriots in 1995 was that of general Abacha, which had come to power in the coup in 1993. Despite the international outcry after the executions, the regime only transferred power back to the government in 1999, after Abacha had died. This was the start of the republic of Nigeria as we know it today. Despite the increase in stability, civil and political unrests continue to this day, with ethnic violence and oil related conflicts in the Niger Delta and Boko-Harams military insurgency in the North of the country (Hill, 2012; Koos & Pierskalla, 2016). It is important to note here that despite all this upheaval, oil production never ceased and only fluctuated with the changes in the country. All regimes have gained significantly from the monetary income from the oil explorations and had vested interest in production continuing, no matter what. Thus, the production and pollution continued unfettered during this entire period up until the execution of the Ogoni Nine in 1995.

This history, combined with the oil exploitation in the Niger Delta has produced the most extensive body of literature on any environmental justice case at present (Hill, 2012; Ikporukpo, 2004; Koos & Pierskalla, 2016; Okonkwo, 2020; Osofsky, 2010; Sala-i-Martin & Subramanian, 2013).

4.2. Groningen

The province of Groningen has a history dating back more than 10 centuries, not all of which is relevant here. As such, we start in the 1800s, when the province transitions from peat colony and cattle land to large scale agriculture. This marks the start of the historic period in which Groningen became known as the ‘Graanrepubliek’.

This period starts with a plethora of factors and prerequisites of cultural change pushing farmers to change from cattle farming to crop farming. This had to do with matters such as cattle plague, leaping grain prices, modernisation of farming and cultural changes allowing the shift of tradition (Hofstee, 1985). It is here that some historians pinpoint the emergence of modern capitalist farming. This includes the origin of the ‘Herenboeren’ in the region, who possessed large swathes of arable land and allowed small farmers to live and work on their lands (Hofstee, 1985; Karel, 2012). This marked a steeping increase of inequality in the province between the Herenboeren and the small farmers working for them. The dissatisfaction amongst the local farmers thus grew and proved fertile soil for the onset of communism in the region. This naturally led to a rift with the national government which was capitalist in its ideals. It is here that Karel notes “there is some reason to assume historical determinism in easter-Groningen” (2012, p.5). During the interviews, the participants would also often mention the Graanrepubliek as an analogy for their current situation.

The inequality further increases during the 20th century due to the industrial rise in the west of the country. This was furthered by globalisation and the formation of the ‘Randstad’ as the new economic and political centre. As fusions in the 70s and 80s cluster industry in the west of the country power is also drawn away from the east. This made the previously thriving industry in Groningen obsolete and meant the closing of large factories in favour of those in the west. This shift is viewed as being caused by the inability of the eastern industries to upscale like those in the west, when the time came due to globalisation, and its subsequent inability to recover. This change also marked a shift in the national perspective on the province by the rest of the country, as it got to be portrayed as chanceless (Duijvendak et al., 2009; Karel, 2012).

Come 1959 the gas fields are discovered and drilled to great economic gain for the Dutch state. This is viewed quite positively until the first small earthquakes began in 1991. This marks the start of the fight to keep the origin of the quakes unknown as the Government, and Shell and Exxon Mobil, i.e., the NAM, attempt to prevent the linking of the gas mining and the earthquakes. This is done relatively successful until the quake in 2012 in Huizinge,

which caused irreversible toppling of the public perception of the gas mining operations and forced them to admit the extraction of gas causes the seismic activity in the region (Hakkenes, 2020; Ministerie van Algemene Zaken, 2022; Muntendam-Bos & De Waal, 2013).

In the decade following the Huizinge quake, the environmental injustice case slowly starts to build. Upon having to acknowledge that the mining activities do cause the quakes, the Dutch state and the NAM start to entrench themselves in bureaucratic and legal procedures. The responsibility to repair the damages and reinforce the houses of the inhabitants of the quake region is shifted back and forth without any clear conclusion. Even today, no clear and easy way exists for those affected to be indemnified for the material and immaterial damages that they have suffered (Ekker & Start, 2022; Hakkenes, 2020; Voort & Vanclay, 2015).

During those years the Dutch state decided that the gas mining should indeed cease (Ministerie van Algemene Zaken, 2022), which it almost did. However, on February 24th, 2022, Russia invaded Ukraine after having annexed Crimea in March 2014 (Bigg, 2022). Although not bordering any of these countries, the Netherlands is dependent on Russian natural gas for a significant proportion of its necessary imports, which run through Germany but originate in Russia (Centraal Bureau voor de Statistiek, 2022; World Economic Forum, 2022). One of the first sanctions concluded upon by the EU and the Netherlands was the minimisation or complete cessation of importing Russian natural gas (NOS, 2022b). These developments have reopened the discussion on whether to resume pumping the Groningen field might be a viable option to span the winter in which gas consumption is increased significantly. This is despite the fact that scientific evidence has shown that further pumping of the field cannot be done whilst guaranteeing the safety of the inhabitants (Ministerie van Algemene Zaken, 2022; Muntendam-Bos & De Waal, 2013). The history of the province thus provides an important and relevant background to the current case of environmental injustice in the quake area.

This provides the historical and current context for the fieldwork done in the province and the comparison with the case of Nigeria in this thesis.

5. Results

This section of the thesis delineates the results of the fieldwork. It has been structured to reflect the way in which the interviews were conducted (see Appendix I). Consequently, the dimensions of justice are reviewed in the same order: distribution, recognition,

participation, and capabilities with their respective subdimensions. The results are based on the conversations with the organisations in the region and the actual interviews and focus groups with participants. A clear image of people's experiences emerged during data gathering and analysis. By the end of the fieldwork data saturation appeared to have been reached. This was visible in the fact that the stories of the participants started to overlap.

The field research investigated primarily how the people in the earthquake areas of Groningen had experienced the injustices. From the first talks with organisations, it became clear that the case was indisputably about injustice. The fact that reputable organisations such as Milieudefensie, Greenpeace and Amnesty International have been involved in the region for several years now and have taken a stance for the Groningers emphasised the gravity of the case. The regional organisations such as the Groninger Gasberaad and Kerk & Aardbeving made this even clearer, with one of them stating that what the government was doing in the region was “factually illegal and even pumping one more cubic meter out of the soil is a forfeiting of their obligation to safeguard their civilians”. The organisations we spoke to gave the impression of being simultaneously combative and hopeless. This was a sentiment which pervaded some of the later interviews as well and showed up prominently in the subsequent analysis through the framework. Concomitantly, a literature review was conducted on the Niger Delta case and supplemented with exploratory meetings. These proved we would not be able to visit the Delta but still provided valuable first-hand experiences and insights into the case. As such, the results section is divided into two parts, the first detailing the results from the fieldwork in Groningen and the second describing the findings of the fieldwork and literature review into the Niger Delta.

5.1. Groningen

This section of the results chapter describes the findings of the interviews and focus groups in Groningen, supplemented with the data from the organisational meetings. It has been ordered with the triads approach first, followed by the capabilities approach.

5.1.1. Distribution

Distribution of costs and benefits of the gas mining was a much-bespoken topic for our respondents. Not everyone had a similar experience in this dimension, but everyone had some tale of maldistribution or told of the general injustice in distribution that they saw and experienced. The codes of social demographic, environmental exploitation issue, Human

well-being and environmental hazard were useful in describing this maldistribution that came forward from the interviews. During a second round of analysis, I noticed a pattern of ‘local maldistribution of compensation and repair’, which I then included as a secondary code.

Distributional justice turned out to be an important aspect in the lived experiences of our respondents. All 11 participants and all organisations were interviewed spoke of unjust distribution of the costs and benefits. They were all aware that gas had been won since 1959 and, despite the estimate differing from person to person, all were aware that the state and the gas companies had earned billions of euros. Gerard and Marie told of a conversation with a damage expert:

Marie: “So, Gerard asked this first expert whether the NAM would actually be able to compensate all the damages and repair in this province? He (the NAM expert) responds ‘well, the NAM can actually buy the three northern provinces with the money they made’. That’s really what he said!”

Gerard: “and then they would still have made a profit.”

This illustrates the magnitude of profit that was made through the gas mining. In turn, it also shows the experienced maldistribution, as the billions earned with the gas do not seem to be available for necessary indemnification in the region.

In the case of Groningen, a clear pattern of geographic maldistribution emerged in the descriptions of the participants. Almost all mentioned a great maldistribution between their province or the place where the gas was extracted, and the west of the country. This was captured in words such as ‘de Randstad’ ‘the west’ or ‘Den Haag’, which are all localities in the west of the country and part of the political and economic centre. When we asked Nina to describe the distribution of profits, she described it as follows:

“Well, we know how that went! Those all went to the ‘Zuidas’ (locality in Amsterdam housing many multinational companies) and Utrecht, and certainly not to Groningen! That’s just obvious! (...) Mister Nijhof (local farmer that testified at the parliamentary enquiry) made it very clear there where the money went, and it wasn’t this region, and it still isn’t! Even when ten years ago the NCG emphasised that money was needed to indemnify locals, restore economic perspective, and just to invest in the province. Zero comma nothing!”

Primarily, this appears to be a case of geographic maldistribution, as the region was not specifically targeted, but just happens to be on top of the gas-field and thus bears the costs. However, the subsequent maldistribution of profits is also befitting of the ‘rural’ subcategory of the subdimension of social demographic maldistribution. The participants described only experiencing the general benefits of the Netherlands becoming richer, which all Dutch profit from, while they bore far greater costs. This fits, as those in the economic periphery experience the costs of the environmental exploitation whilst the economic centre profits. In this case it meant the economically less important region of Groningen bears most costs, whilst the west of the Netherlands, from Utrecht to Amsterdam benefitted most.

The environmental exploitation issue that was the cause of the troubles in the region was clearly of the ‘mining’ category. There is no dispute amongst any of the parties involved in the case anymore that it is the mining that caused the earthquakes. The maldistribution here lies in that only the province of Groningen experiences these quakes and how it has been handled subsequently. Anna described:

“If any of this had happened in Amsterdam like it is happening here then everything would have been entirely different. Remember the north-south line? One house got cracks and the entire project was paused immediately!”

This experience reflects the sentiments and stories found throughout our research, in which the distribution of the costs and profits of the mining were felt to be gravely maldistributed and still are.

Consequently, the maldistribution detailed above is reflected in several subcategories of human well-being as well. Here, we found people experienced living standards, safety, social wellness, and mental health to have decreased the most by the distribution. Logically, the impacts in these categories proved more intense when people lived close to epicentres of quakes. Those on the fringes of the area mentioned some struggles with the bureaucracy but expressed more concern about what they had heard and seen in the most heavily impacted areas. There, we talked with Willemijn, whom we visited in her temporary housing unit where she lived as her old house was broken down and rebuilt completely. We asked her about the impacts the quakes had had on her life, and she described the following:

“Well, you are truly displaced. The place you call home is suddenly declared unsafe. Our house was built with the roof lying on top and they were scared that the walls would move apart, and the roof would fall into the house”

The living unit she was then placed into was many times smaller than where she had lived before. We spoke with her after she had been living in this unit for more than a year, where she was told it would only be 9 months when she had moved in with her family. She continued describing how the circumstances had changed her family and community emotionally:

“This feeling of solidarity, in what was once a cohesive village, that’s now gone. This feeling that people don’t grant each other a single inch anymore. Yes, people must leave their houses and live somewhere, as long as it’s not in my backyard! (...) Then at one point my husband got a burn-out and this whole debacle is not helping him get better at all. And we are also parents. We came to live here and then I have to see my son slip into depression. Corona did not help but he said ‘I’m locked in here! This is half of what I had back home, being stuffed and condemned to this 2.5 by 2.5!’ Well that really breaks your heart. It’s such a horrible feeling of not being able to provide my child with a safe environment”

Her story involved some of the most far-reaching consequences we encountered but, she was not the only one in this predicament. All those we spoke to in the earthquake area have similar stories, only varying in degree of impact on their well-being.

The locals mentioned another problem they experienced frequently, which was the illogical distribution of indemnification in an area, coded as ‘local maldistribution of compensation and repair’. This theme featured prominently in the experiences of many of the participants, where the local differences in monetary or material compensation differed greatly and seemed to defy logic. Some houses get repaired for several hundred thousand euros worth, whilst other must fight for a few thousand euros in repairs one participant told. Several others spoke of how many houses that are structurally the same and have comparable damage get completely different repairs, one side of the street getting reinforcements while the other side doesn’t and even 2 houses that share the same roof getting assessed and reimbursed differently. They described how everything depends on what bureau assesses your house and how it is never the same person twice. Gerard described: “Like the

reimbursement based on postal codes. Your neighbour gets a sum of money, you live 10 meters further down the street and get nothing. Tell me that's not ridiculous!". They told how this negatively influenced the social cohesion in their neighbourhoods and villages, further damaging the social wellness of the locals.

Interestingly, despite these obvious discrepancies in the distribution of profits, most of the participants indicated that they were alright with money being spent in other parts of the country. Their anger and disappointment were primarily focussed on the fact that repairs and restitutions were such a problem. There was a broad awareness that the repairs stand in no comparison to the profits made and it has even been acknowledged by now that the money of the gas mining mostly went into building infrastructure in the 'Randstad'. Most people quoted numbers ranging between only 1 to 4% of all profits of the mining remaining in the province, which was experienced as a grave injustice as they only needed a small sum of the profits to repair and reinforce their houses. Not one of the participants was alright with the distribution of the costs and benefits, as even those with nigh unnoticeable damage to their homes were still aware and of the opinion that the government and companies were in the wrong here. Those with larger damages and those who have had to leave their house also spoke of far larger and more emotional experiences with this maldistribution of profits and costs between Groningen and the rest of the Netherlands.

5.1.2. Recognition

The experience of recognition turned out to have diminished significantly over the past decade in the province. We were told many accounts of misrecognition, spanning almost every subdimension of social, cultural, economic, political, and legal recognition. Whilst interpreting the accounts of the respondents, the theme of legitimacy and acknowledgement also featured heavily in their experience of recognition. This was often spoken of in the context of honesty by the government and the fossil fuel companies and was thus included in the analysis of the data.

During the preliminary work with the organisations recognition already came up as a theme, both in the political context as well as the emotional and personal. The social worker of Stut & Steun expressed great concern at how the suffering of the people was not taken seriously, whilst the member of Groninger Gasberaad had to admit that politically things were moving slowly, and authority was seemingly absent. The interviews with inhabitants of the region only further confirmed this result.

We found the first subcategory of social recognitional justice to be present within many of the interviewee's experiences. From their stories, there emerged a general pattern in which the fact that they were socially somewhat far removed from the rest of the Netherlands resulted in a lack of recognition for the injustice of their situation. When asked about the respect that Groningen was receiving Marie told us:

“Dutch people just want to cook and have a warm house really. What happens here is just very remote for most of them. Two years ago, Rutte (the Dutch prime-minister at the time) went on television and said ‘well, we can’t just have the Netherlands freeze over the winter’. Well that really just says it all. He was boo-ed for saying that by some, but that’s honestly exactly how the Dutch think about this.”

This theme of not being recognised as fellow Dutch citizens and humans with the same needs as the rest of the country featured prominently in almost all interviews. Many participants mentioned not feeling like they were part of the Netherlands and like no-one understood or respected what was happening to them, emphasising the lack of social recognition.

In many of the interviews we talked about the lack of recognition for economic differences and how these played out against the inhabitants of the quake area. Many mentions were made of the significant maldistribution of benefits as displayed earlier in this section. Adding to this injustice, the recognition for the difference in economic power between the Groningers and the NAM and the government was mentioned often. This came forward most in the form of how the latter two parties have incomparably more economic power than the locals of the region. The participants experienced this in several manners such as e.g., the established bureaucracy, the capacity of them to fight lengthy lawsuits with inhabitants of the quake area, and even the NAM influencing the government itself. When interviewing, local politician Jessica had the following to say about the parliamentary enquiry:

“I’m actually scared of the results. We might learn far more about the redacted records. We might find out that an entire population here in the north just doesn’t matter that much. That they’ve played with people’s safety and still do. (...) And then just this week the newspapers confirm that the NAM but also our ministry of economic affairs has tried to cover up these problems. This does beg the question how

much influence capital has on the behaviour of our government and large companies?
And at what costs do they do this?”

This and several other conversations with locals reflected this lack of recognition for the economics of the case of this injustice. Thus, they expressed experiencing a general sense of powerlessness as they cannot match their opposition in terms of financial strength but seemed to be expected to.

This sense of powerlessness was very pervasive in the legal and political subdimension of recognition as well. Especially the political lack of recognition was mentioned explicitly time and again by both the organisations as well as the locals we interviewed. In our orientation with the organisations, some of which were explicitly formed to enhance political clout for the locals, the lack of recognition quickly came forward as a prominent issue. These organisations, such as the Gasberaad or Milieudefensie, expressed a frustration with the situation and their lack of progress over the past decade. They mentioned prominent figures within their own organisation leaving due to frustration and politicians that attempted to help them also falling short of their goals. One such example is Susan Top from the Gasberaad, who mentioned having to stop due to the frustration and disillusion with the whole case and it taking its toll on her family life. When talking to the locals, similar sentiments emerged. The frustrations with the case and the experienced lack of political or legal recognition had caused them to feel alienated from their country and they did not feel represented politically. A pervasive part of the discourse was the ‘distance’ between Den Haag and Groningen and how politicians did not seem to care about them. Nina, who is locally involved in the handling of mining damage, said the following:

“Everyone has been here by now to visit, all the ministers, the secretary of state. Everyone. All of them full of understanding, ‘things have to be done differently’, ‘we will do this’, ‘we should do that’. It doesn’t happen. After a few years they’re gone again and someone else takes their place. (...) by the time they are halfway back to Den Haag they’ve forgotten everything already. I have no faith in them anymore and there is no relationship to speak of.”

This is representative of the experiences other participants had as well. Many voiced experiencing Groningen as not being a part of the Netherlands at all anymore, recalling the provinces’ politically deviant communist past and joking about seceding or starting their own

Graanrepubliek. The lack of political recognition is then reflected in a subsequent lack of legal recognition. Almost none of the participants had anything positive to say about the legal proceedings that were involved in the indemnification of damages. Only Hanna, Katrien and Frederik, who lived on the fringe of the quake area, were somewhat satisfied with the legal handling of damages. All other participants told of large problems of legal misrecognition. Nina had the following experience when attempting to solve a dispute in the rapport on damages in their house:

“Firstly, the inspection was in 2017. In 2019 we ask for our rapport, which we receive in 2020. And when we look at the date it shows the inspection was in June 2017 and the rapport was finished in December 2017. And we receive it June 2020? How are we supposed to feel recognised in this way? (...) And then we needed to dispute a part of it. Then the IMG (governmental institute for mining damages) has 15 months to respond. I then get 6 weeks to dispute it. After a few months we get a hearing and after that they commonly decide to stay with the primary verdict anyway! That means two years have gone by and you get nothing! That’s not recognition. That’s not acknowledgment.”

This story is in line with the general experiences we were confronted with when asking our participants about their perception of legal recognition and what was needed to make them feel recognised.

During analysis, a further two themes emerged when asking our participants about recognition. These were ‘legitimacy and acknowledgement’ as the Groningers felt strongly their problems received neither. The second being ‘honesty’ as they felt especially politically, they were being lied to consistently, which we have seen reflected in the stories above. Both these themes can be viewed as a fitting into the social and political subdimensions of the framework used here.

Thus, all people interviewed had experiences concerning a lack of recognition, whether it involved not being taken seriously, being lied to, or not being granted any legal authority. Legitimacy of the injustices inflicted on them rarely ever seemed present in their dealings with the authorities, companies, and their fellow countrymen. Even the visible material damages the quakes had done to their homes was a cause for debate and were not taken seriously, with one participant describing how an infamous damage assessor once unironically asked “this crack in your door frame, did you drop a bowling ball here?”

Notably, they commonly compare their situation to ‘the west’ again and conclude that if it had happened there, everything would have been taken seriously and solved years ago already. Furthermore, they describe that the rest of the Netherlands does not take them seriously either, with one participant mentioning earthquake tourism, i.e., people coming to the region in hopes of experiencing a quake.

Notably, as described there was a pattern where the inhabitants that lived further away from epicentres had far fewer grave experiences with lack of recognition. Some had positive stories about their experienced sense of authority in their own situation. However, these participants did emphasise that they had just been lucky with their situation, which contractor they were assigned and which ‘cost expert’ validated their case. They all seemed to have a general sense of solidarity in facing the injustices in the region. This showed in those interviewed who had not experienced many problems still expressing great concern at the general lack of Groningen receiving recognition.

It is thus clear that the entire earthquake region experiences scarcely any recognition for their situation. All subdimensions except cultural recognition were shown to have many experienced injustices in the region. There is a general sentiment that the inhabitants are not taken seriously, and they do not experience any authority over their own situation. Consequently, the social, economic, political, and legal subdimensions all appear significantly unjust in the current situation.

Notably, when asking the interviewees whether they were still capable of living their life in the way they wished, several did indicate they had no problems with this. More than half of them did indicate that this general capacity was unaffected at that moment, and they felt capable of living the way they wished. However, all but one of them told of one or several points during the process of the quake damages and reparations at which they felt significantly hindered in living the way they wished due to the circumstances caused by the gas mining.

5.1.3. Procedure

Procedural justice was a matter of great frustration in the stories that our respondents told. It quickly became apparent that the decision-making process around the mining and compensation was unanimously done without the participation of the locals. This had little to do with their willingness to be a part of it but was inhibited by seemingly structural procedural injustice in their experience. Their tales included much reference on inclusion, but

far less on consultation over time, equal resources and access to information, shared decision-making authority and authoritative decision-making.

The first prerequisite for procedural justice is the inclusion of all involved parties in the process of decision-making. During the preliminary conversations with the organisations in the region we were already told that inclusiveness was not a given in the decision-making process there. Some organisations such as the Gasberaad had explicitly been founded to improve the inclusiveness of the process. However, they also spoke more of frustration rather than results. The experiences of the inhabitants of the quake area itself only emphasised this image of lacking inclusion in the process. They spoke of how no clear means of inclusion had been provided in the first place, and when looking for a way in, they were met with enormously bureaucratic processes that did not result in actual improvement. Marie, who also works for the government, told us the following when asked about her inclusion:

“There really isn’t any. Or I certainly wouldn’t know where at least. The government decides everything for us. And then this isn’t even the worst area. If you live in Loppersum, everything is decided for you. Those people don’t have anything to say about anything at all.”

This sentiment was echoed by most of our other interviewees. Several had no intention at all of partaking in decision-making as they felt it was useless in the first place, whilst others expressed frustration about their powerlessness. Notably, several of them had partaken in the protest marches surrounding the injustices of the mining as they felt that was the only way to achieve any manner of inclusion.

The subdimension of consultation over time did not provide very significant results. Some participants did mention how information concerning the process of indemnification was hard to get, if available at all. However, as basic inclusion in the process of decision-making was virtually absent, any form of discussion or knowledge gathering over time was considered to be useless by most participants and rarely featured in our conversations. The process of repairs and restitution was considered very slow by all participants, but this was not a positive feature according to them, but more of a hindrance in continuing with their lives and getting the restitution that they were owed.

The third subdimension of equal resources and access to information did feature far more prominently in the interviews. Perhaps logically, there was an emergent theme of the participants feeling very small in their fight against the NAM and the government, who

possess practically infinitely more economic resources and information than them. They first indicated experiencing this in the capacity of the NAM and the government in keeping the cause of the quake hidden for several decades, after which it turned into them being outmatched by legal teams of the NAM and being kept in the dark about what was to happen to their houses and the future of the gas field. All this has led to them suspecting that the economic force of the NAM might even push their government in certain directions. Local politician Jessica said the following about these powers:

“They should stop making up these pretty stories like saying ‘we won’t open the field again because of Putin’, and I’m sure the government does not want to. But then there’s Shell behind that in the form of the NAM and there is still so much money to be made there, so in how far can that even be stopped? I don’t know. Those forces are so large.”

This sentiment pervaded that of all people we interviewed, as they all saw the NAM as too powerful to resist. These accounts clearly show the experienced imbalance in both economic power and access to information by the inhabitants of the earthquake region.

This experienced lack of inclusion and power imbalance is then reflected in a virtual absence of shared decision-making authority. As the locals do not appear to be included in decision-making in the first place, there can be no talk of shared authority in that process. Several of our participants mentioned the sentence: “They talk about you, but not with you.” This clearly illustrates the experienced total lack of participation in any part of the procedure by the inhabitants of the region. Consequently, there was also no mention of authoritative decision-making, as the interviewees never felt included in decision-making in the first place.

When describing the process itself the participants said any part in which they wanted to partake meant that they had to go through several forms, and several people which were all unclear to localise. A second factor making participation harder was that the people that they were assigned to, who did have authority in the process, were constantly being replaced, resetting any progress that was made beforehand. Several participants told comparable stories about the frequency of turnover for their ‘resident counsellor’, which is the formal first point of contact for residents in the repairs and reinforcements. Willemijn had one of the most striking stories:

“We have had 8 resident counsellors so far. These are the people from the NCG who decide what will be done with your case. We have been dealing with them since 2017 (...) come last year we get 2 new resident counsellors. We would get special treatment and everything but suddenly everything goes quiet again. Last Monday I had a conversation with a new resident counsellor *again*. (...) You see, the good ones all go even faster, as they are empathetic and can’t deal with the suffering of the people here. They can’t do anything right for them even though they want to.”

This constant turnover of counsellors is matched by the turnover of organisations that they have had to deal with to get repairs and restitutions. Since the beginning of the process in 2012, there have been several different institutions directly and indirectly responsible for the process, such as the ‘Nationaal Coördinator Groningen’, ‘Instituut Mijnbouw Groningen’, ‘Centrum Veilig Wonen’ and others. The switching of these organisations involved new people, the resetting of procedures, changing of protocols and other impracticalities for those already halfway into the process of repairing or reinforcing their house. In turn, this has made most of our participants feel that even attempting to participate was useless.

Most participants describe how the government and the NAM use their power to make individuals powerless to participate. As an illustration of how this is done one participant described “to get any influence we had to get angry, involve the municipality, involve the ombudsman”. This was just for matters concerning their own house, and decisions on the level of the province were far out of their reach. Questions about equality, or parity of participation, were unanimously answered with “no!”, “no equality, no dialogue, no honesty” and “all they care about is the money”.

Thus, the experienced injustices in the procedural dimension were great amongst inhabitants of the earthquake region in Groningen. A general sense of powerlessness and frustration pervaded all our conversations with them with not one voicing a positive opinion on the procedures.

5.1.4. Capabilities

The second approach of the framework yielded slightly more varying results. As assumed in the theoretical framework, the capability to live as one wishes to live proved to be less dependent on the other three dimensions of justice here. However, when talking with the participants, the themes discussed above do reflect significant impacts in some

subdimensions of the capability's framework. Matters such as Affiliation bodily health, control over one's environment and emotions were obviously affected, whereas subdimensions such as life, bodily integrity or practical reason remained unaffected.

Starting with bodily health, which includes adequate shelter, we found that several of our participants did experience varying degrees of impact. They were physically healthy but their concept of- and actual physical safety in their homes was impacted by the quakes. Those closest to the epicentre experienced the worst impact in this subdimension. This was illustrated most clearly by Willemijn, who had to move into a housing unit:

“We came home at one point and found sand on the stairs. But it wasn't sand, it was concrete, and an actual stone had come falling out of our ceiling. Our houses had actually physically moved apart. My son was sleeping one room over, that does make one think.”

This shows the reduced physical safety some participants had to deal with before moving out of their houses or receiving reinforcement, as several others spoke of cracks in the walls, movement in their fundamentals, windows bursting and plaster dropping off the wall.

The experiences that were reviewed in the section on the triad of justice reflect in this approach as well in the subdimension of emotions. The ability of those living in the earthquake region to avoid emotional trauma or neglect was clearly impacted. The earlier described sensations of powerlessness and fear over their safety, their house's integrity and their futures all impact this subdimension as well. Notably, the emotional trauma came forward during several interviews when speaking of the youth in the region, as Gerard and Marie described:

Marie: “We hear stories from Loppersum of children who are now too scared to sleep. Those who have actual cracks in their bedroom walls.”

Gerard: “yes, just the fear amongst children seems grave. A colleague of mine lives in Loppersum and his daughter now asks him every time before going to sleep ‘daddy, my bed isn't going to collapse, right?’ Those are grim stories to hear”.

This fear about what this trauma might do to the children was echoed in several of the interviews and focus groups and has even been picked up by local journalists (Minnema, n.d.).

The impact seen in the subdimension of emotion is reflected in that of affiliation, specifically the experience of not being of equal worth to others. Most of the respondents we talked to in the earthquake area felt strongly they were not treated as being of equal value as those in other parts of the country. This is visible in many of the accounts displayed earlier in this results section, in the mentioning of the ‘Randstad’ being of far greater importance than them or Groningen not even being a part of the Netherlands. One pressing account of the lack of human treatment was given by Jessica:

“It resembles the allowance-affair (a debacle that toppled the previous government) in a sense. People are being treated with suspicion even though no one goes to report damages for fun. It’s such a hassle. (...) Just treat people fairly. When you see the queueing for those needing that ten-thousand-euro subsidy, even though the government already knows who has a right to that. Why make them come request it? It’s compensation for the damages they suffered because of the government in the first place!”

This shows the inconvenient, unfair, and sometimes humiliating ways in which people have experienced treatment by their government in the earthquake region.

The final subdimension that showed significant impact in this approach was control over one’s environment, specifically politically and materially. The approach states that effective participation in political choices that govern one’s life needs to be ensured for a just environment. This means it is essentially no different from the dimension of procedural justice as described in the triad of justice approach. As such, no new results of note can be described here on the political aspect, as it was already shown that the participants in our study experienced little to no effective participation in these choices. The participants material control over their environment also came up as an important issue. Logically, the damages to their homes were the primary concern that came up when we inquired into this subject. The damages to their houses ranged from small and harmless cracks in the walls, to windowsills cracking, to their roofs moving and the house becoming unsafe altogether. This in turn forced some people to be removed from their homes entirely and moved to a housing

unit, as the government decided the houses needed reinforcement or rebuilding. This meant any semblance of control over their home environment disappeared as Willemijn told us:

“We’ve lived here for a year now. Center-parcs we call it! It’s like a vacation home in that sense. You can’t do anything you want here. We are not even allowed to put a pin in the wall to hang a towel from!”

Other participants told us how this meant that almost all your belongings would be put in storage and be inaccessible for the time of your stay, and that oftentimes the period in the unit would be extended during their time living there. Others again told us how it was unclear at first whether the government would want to reinforce their houses or wreck and rebuild them. Not all the people we spoke with always agreed with these plans and told us how stopping or changing them meant they had to work their way through the institutes and bureaucracy mentioned earlier and how much suffering this caused them. These stories clearly display the loss of material control over their environment by the participants. Interestingly, those who got placed in these units have differing experiences of their lives there. Not all units are the same, with some being bigger than others. It once again became clear that every situation was different with specific particularities, where one participant described “we’re alright really. We’re in a safe housing unit. Every child has his own room. I can do my job.” What is important to note however is that, although the participants reporting that they are currently living as they wish, all told of a period earlier in which it “ruled their lives for a while” after which it subsided again.

Thus, the capabilities approach gave a different view of the problems in the earthquake region, focussing on the presence of necessary capabilities to live a full life instead of a focus on the absence of justice. It then showed that the capabilities of emotion and control over the environment were most prominently lacking in the experiences of the participants.

5.2. Niger Delta

This section details the results of the literature study and the exploratory field research into the lived experiences of the inhabitants of the Niger delta.

5.2.1. Distribution

The first subdimension of distribution to be studied was social demographic, asking which demographic the injustices were inflicted upon. The Niger Delta houses many different ethnic communities, of which the most renowned is the Ogoni as described earlier (Naanen, 2012). The literature shows that the pollution and violence that have plagued the region over the years have had a clear marginalising effect on the ethnic minorities in the delta. This is reflected in their lived experiences, documented in the literature and the writings e.g., Saro-Wiwa (Hill, 2012; Konne, 2014; Saro-Wiwa, 2018; Udogbo, 2021). This marginalisation is reflected in the political and social discourse of the country. There, the historical tensions between ethnic groups are visible in a lack of willingness to help the marginalised ethnic minorities in the delta. As such, the maldistribution in the Niger delta clearly has a strong discriminatory component against ethnic minorities. Furthermore, an argument can be made that it falls in the geographic subcategory, as the injustices inflicted upon them also have to do with the coincidence of them happening to live on a large oil field.

The literature then shows that mining is the environmental exploitation issue that occurs in the region, in this case for crude oil. The primary mining for the oil does not appear to have had that much of an impact. However, the transport of the oil takes place through unmaintained pipelines that are also subject to sabotage and have frequently been laid straight through the indigenous communities living spaces. More recent studies are lacking in this area, but investigative journalism such as that of FRANCE 24 (2021), Huys (2021), Al Jazeera (2020) or interviews with local politicians show the continued severity of the problem (Abade, 2018).

These pipelines and their maintenance then cause the actual environmental hazards found in the literature. Due to corrosion and sabotage the pipes and wells have sprung leaks over the years. Lack of maintenance and repairs have ensured that these leaks caused severe damage to the environment (Abdulkadir, 2014; FRANCE 24 English, 2021). The soil is polluted, as well as the water and the air. This in turn has diminished crops and made fishing nigh impossible (Lindén & Pålsson, 2013). The representative of Amnesty International we spoke to illustrated this, commenting that on his visit to the delta region “the entire place always smelled like a gas station”, indicating how omnipresent the pollution is.

These environmental issues and the historical and current context of conflict and violence are connected to severe impacts in human well-being. Almost all subdimensions laid out in the framework have been affected in this case of environmental injustice: the oil pollution increases (child)mortality and decreases general health in the area and makes

farming and fishing impossible, destroying livelihoods. The pipelines have been laid through communities, destroying homes, and pushing apart the communities through subsequent pollution, decreasing social wellness. Once again, more recent academic accounts of these lived experiences are lacklustre or absent and as such I have had to rely on recent investigative journalism of Al Jazeera and Huys for first hand accounts of the experiences (Al Jazeera English, 2020; Huys, 2021; Koos & Pierskalla, 2016). This was historically accompanied by regimes openly using violence to sequester any unrest that these mining related externalities may have caused in the communities (Hill, 2012). Furthermore, the dire circumstances in the region have resulted in the emergence of more organised crime, including sabotage, the stealing of crude oil and kidnappings and gang violence. This was underlined by our exploratory talk with a local unnamed environmental activist group that we got connected to through Milieudefensie. When speaking of our possible visit to the area he mentioned specifically: “Everyone needs to be able to follow orders. The region is not particularly safe and people of your (the author’s) complexion (white) are a favourable target for kidnapping.” This illustrates the lived experience of the current situation in the region and the unstable safety and security of its inhabitants.

The state of Nigeria however made enormous profits of the mining and selling of this crude oil. As the costs were and are borne by the inhabitants of the delta, higher officials of the government and Shell/Exxon’s local subsidiaries stood to gain millions in profits from the oil exploitation. The maldistribution in costs and profits amongst those involved in the case thus clearly favours those not inhabiting the region (Koos & Pierskalla, 2016; Sala-i-Martin & Subramanian, 2013; Wulo et al., 2017).

5.2.2. Recognition

Nigeria and the Niger Delta are an ethnically diverse area. The power division between these ethnicities is historically and currently still a precarious balance, often resulting in injustices of many kinds (Hill, 2012; Naanen, 2012; Udogbo, 2021). This ethnical background to the problems is reflected in the lived experiences in the social and cultural subdimensions documented in the literature. The history of the Niger Delta region is wrought with conflict, which has revolved primarily around oil since the exploitation started in the 1950s. Within Nigeria itself, this has resulted in oppression of the minorities in the delta by those that stood to benefit from the oil exploitation and thereby the marginalisation of those living in the area. Socially, the indigenous people of the Niger delta experienced being

perceived as less important by their fellow Nigerians, who have benefitted far more from the oil extraction. As such, they experience little to no recognition of their equal value as humans in their own country. In line with this perception of the minorities in the delta, the marginalisation of the delta's minorities and their culture only increased with the emergence of the oil conflict in the region. They experienced being the target of violence, both physical and mental, specifically for their ethnicity and culture as literature shows (Abade, 2018; Minority Rights Group, 2015; Udogbo, 2021).

Economically, the people of the Niger delta fared no better as was derived from the literature. The economic centre of Nigeria is found in the urbanised regions, far outside the delta. The delta itself is populated mostly by rural settlements and small villages of subsistence farmers who were of no great economic power before the oil exploitation began (Kpoturu, 2021; Udogbo, 2021). Upon the inception of oil mining in the region, the ensuing destruction of communities for oil infrastructure, and subsequent widespread pollution their livelihoods were quickly destroyed. This impoverished the region to the extent that many saw no other option but to leave, as fighting the injustice was experienced as impossible in part due to the government and the oil mining companies possessing infinitely larger financial means to fight them (Huys, 2021; Konne, 2014; Minority Rights Group, 2015; Udogbo, 2021; Wulo et al., 2017).

This economic disparity is reflected in the final two subdimensions of political and economic misrecognition. Here too, the documented lived experiences in the literature display a significant lack of recognition for the difference in political and legal clout of the minorities inhabiting the delta. Politically the country is primarily run by the ethnic majorities, resulting in underrepresentation of its less numerous ethnicities in politics (Hill, 2012; Udogbo, 2021). The inhabitants of the Niger delta region all belong to these ethnic minorities, most only making up a few percent of the Nigerian population or less (Central Intelligence Agency, 2022). Consequently, there exists scarcely any political recognition for the people of the Niger delta. This is accompanied by a legal system which is historically notoriously unfair and offers no means for economically less fortunate citizens to litigate against any of the injustices inflicted upon them (Amnesty International, 2022; Minority Rights Group, 2015; Pols, 2021; Udogbo, 2021). Logically, this means that any form of legal recognition within the fight for environmental justice by the people of the delta has remained far out of their reach.

5.2.3. Procedure

Upon researching the third dimension of the triad in the literature, comparable results with the first two were found. Logically following what was described before, any form of procedural justice was equally absent in the experiences of the inhabitants of the Niger Delta.

Studying the literature revealed that the primary inclusion of the minorities in the Niger delta has been neglected all throughout the years. The process of the case over the past 7 decades shows no trace of any form of this inclusion, with decision-making only including those at higher levels in the government and strongly influenced by the oil companies (Konne, 2014; Kpoturu, 2021; Naanen, 2012). Those living in the areas of the oil exploitation itself never experienced being given any means of being included in decision-making. This has led to resistance amongst the locals of the Niger delta, but any attempt to be included was then met with systemic violence (Hill, 2012; Koos & Pierskalla, 2016; Kpoturu, 2021; Udogbo, 2021).

With the experienced lack of primary inclusion in any form of decision making, the subsequent dimensions of procedural justice are naturally unfulfilled as well, as they involve subcomponents of the decision-making process. There is no notable case of any experienced consultation over time, shared decision-making authority or authoritative decision-making in the Nigerian case. It is only noteworthy that in this case too, the locals experienced being powerless in any procedure as they came from very poor backgrounds but had to match their government and multi-national oil companies in terms of resources (Amnesty International, 2022; Huys, 2021; Okonkwo, 2020; Saro-Wiwa, 2018; Udogbo, 2021). This illustrates the further lack of justice in the subdimension of equal resources and access to information. This imbalance in resources has ensured that over time, they were almost entirely incapable of using legal procedures to call their government and oil companies to justice. Only with the international attention that followed the execution of the Ogoni Nine, and the subsequent involvement of organisations such as Amnesty International or Milieudefensie did the locals gain any means of equal resources. This resulted in cases being brought to court against the oil companies. However, here they were still outmatched by the legal means available to these companies, resulting in the court cases taking years, with some dragging on to this day (Amnesty International, 2022; Konne, 2014; Pols, 2021). This displays the definitive lack of any experienced procedural justice in the case of Nigeria and supplements the already unjust distribution and recognition.

5.2.4. Capabilities

The capabilities approach then further illustrated the injustices already put forward in the triads approach, although from a more human perspective. Not all subdimensions were equally impacted but generally, the locals experienced severe impacts on their capability to live their lives to their own wishes.

Starting with the subdimension of life, the literature shows the impact of the oil mining and pollution clearly in the fact that the violence and pollution have significantly driven down life expectancy. Simultaneously, the pollution has driven up the infant mortality in the region and shortens the life span of adults. It has dwindled crop yields and made fishing nearly impossible, undermining the capacity of local communities to provide themselves basic healthy nutrition. Furthermore, the wanton violence from the government or local gangs, drives down life expectancy even further (Amnesty International, 2022; FRANCE 24 English, 2021; Hill, 2012; Huys, 2021; Lindén & Pålsson, 2013; Udogbo, 2021). These effects are similarly notable in the subdimension of bodily health, as it was shown that the inhabitants of the region are incapable of having good health and their reproductive health equally declining. The pollutions effect on farming and fishing described earlier also reflects in the impact on bodily health.

The third subdimension of bodily integrity also showed significant impacts because of the oil exploitation. Most notably the freedom from physical assault and sexual violence proved to be virtually absent in the experiences documented in the literature. There is a wealth of documentation on how the government together with the army used physical violence to quell uprisings against the injustices in the region, also involving waves of sexual assault on women (Hill, 2012; Koos & Pierskalla, 2016; Kpoturu, 2021; Sala-i-Martin & Subramanian, 2013; Udogbo, 2021). This was underlined further by our exploratory talks with locals from the region. They mentioned how they themselves need to be careful in their environmentalist work, as it incurs more danger of a violent reaction from both the government and local gangs that are dependent on the oil. There was mention of how these gangs would kidnap people who were involved with oil, and harm or sometimes kill those who outspokenly opposed the oil exploitation in the region.

This explicit violence against those who were outspoken in their opinions shows the impact in the subdimension of senses, imagination, and thought. The people in the region have experienced severe repercussions for attempting to enforce their right to free speech. Much of this was documented and also illustrated by the life and death of Ken Saro-Wiwa who was executed as part of the Ogoni Nine in a mock trial aimed at silencing the uprising of

the minorities in the delta (Hill, 2012; Huys, 2021; Kpoturu, 2021; Ojo-Ade, 1999; Udogbo, 2021).

Emotionally, the people of the Niger delta fared no better. The subdimension explicitly states avoidance of emotional trauma and abuse, which has clearly not been capable here. The injustices of the mining, the pollution and the violence surrounding it have had severe emotional impacts. Subsequently, the expression of these emotions was also made impossible or at the very least dangerous, due to the dangers involved with opposing the oil exploitation (Abade, 2018; Bassey, 2012; Koos & Pierskalla, 2016; Udogbo, 2021). This was reiterated in the exploratory interviews we conducted in which the emotional impact of e.g., losing a child to pollution or becoming separated from family was mentioned as a common occurrence in communities.

From these accounts it follows that being treated as a human of equal worth is not a given in the region. This is a prerequisite for the capability of affiliation which is thus also violated in this case. It is clear that the people of the Niger delta have not been treated as humans of equal worth, neither by their government, the oil companies, nor the international community that continued to request the Nigerian oil, despite being aware of how the country and its regimes treated its people (Amnesty International, 2022; Bassey, 2012; Hill, 2012; Naanen, 2012).

The pollution in the region then even made outdoor recreational activities a danger to bodily health. An illustrative scene from the documentary made by Huys, shows a group of children playing football with the ball ending up in the polluted water nearby. As they take it out, they attempt to wash the ball, which is now completely covered in crude oil, which is known to be toxic (Huys, 2021; Ordinioha & Brisibe, 2013) This shows how even playing in the region has suffered due to the mining and the following pollution.

The final dimension of the capabilities approach emphasises the importance of control over one's environment, both political and material. Neither of these was found to be present in this case either. The capacity to participate effectively in politics has already been discussed and shown to be completely absent for those living in the oil affected areas. Furthermore, material control was also shown to be absent, as the government and oil companies laid oil infrastructure through entire communities and the communities have had little to no means to effectively combat the pollution in their environments (Lindén & Pålsson, 2013; Minority Rights Group, 2015; Naanen, 2012; Ordinioha & Brisibe, 2013; Udogbo, 2021).

6. Discussion

This chapter interprets the results of the research by placing them in the context of the literature. This is done through the comparison of the case of Groningen with that of the Niger delta, as proposed earlier in this thesis. Specifically, the two approaches to justice are compared based on their results in the two cases researched in this thesis. Based on this analysis the sub and main questions of this research are answered.

6.1. Comparison

This part of the thesis compares the results of the research conducted in Groningen to that of the data gathered on the Niger delta case. By analysing both cases through the same theoretical framework the results are fit for comparison per dimension.

6.1.1. History

History was shown to be an important underlying determinant in cases of environmental justice. In the case of Groningen, the literature shows that there are some reasons to assume that the current injustices of the gas quakes are linked to the modern history of the province. The surge of Marxism in the province in the time of the Herenboeren grounded a sentiment in the province that they are separate in a sense from the central government, which grew increasingly capitalist in the following decades. The subsequent abandonment of Groningen as an industrialist centre in favour of the Randstand solidified this split and the perceived cultural distance to fellow countrymen. This history and theme of not being a part of the Netherlands featured frequently in the experiences of the respondents, as the treatment by the government following the earthquakes appeared to underline this distance. It is impossible to state here whether this history of the province is the cause of the duration and injustice of the treatment by the government in the earthquake case, but it is certainly experienced in that way by those who are dealing with the consequences of the gas mining operations.

In the case of Nigeria, the history displays a clearer link to the present predicament of those inhabiting the Niger delta. It is impossible to view the injustices inflicted since the oil drilling started in the 1950s as something completely unrelated to the history of colonialism in Africa, subsequent military regimes, political instability, and the resource curse. These historical elements of injustices perpetrated in the past have ensured that at present the ethnic minorities of the delta are still marginalised to maximise profits on oil and minimise spending

on indemnification. These themes were stated several times as causes for the current situation in the delta in our exploratory interviews as well.

When comparing these histories to one another it is notable that both feature tales of marginalisation of one part of the country in favour of another. Both histories continue with a tale of resource extraction at the cost of the people that are located on top of that resource. The comparison furthers in the subsequent emergence of damages and the inadequate treatment of the government when called to justice by those dealing with the externalities of the extraction. The broader themes of the case of Groningen and the Niger delta thus do display significant similarities. It is however important to note that the history of marginalisation and injustice in the Niger delta is one of far greater magnitude. Colonialism and slavery in Nigeria are for instance not comparable to the emergence of Herenboeren and their oppression of small farmers in Groningen in terms of the inflicted violence and injustices. Furthermore, Nigeria has been shown to be an unstable state until very recently, still subject to uprisings and resistance to its democracy, whereas the Netherlands has been a stable state for more than a century.

The histories of Groningen and the delta thus show interesting resemblances and notable differences. Based on this study alone, there is no reason to assume that the case of Groningen would have unfolded in a more just manner, had the history been different. There are important indications here in the form of the political history of the province, it's grown distance from the capitalist centre of the country. This is a theme that does indeed recur throughout literature of environmental justice, such as the work of Smith (2016). The current situation with the war in Ukraine then also plays some role in the injustice in the province. These factors then resemble those observed in the Niger delta case and show how a comparison between the cases may legitimise that of Groningen. However, it is important to acknowledge that the Netherlands is one of the most socially secure countries in the world, with a large legal infrastructure ensuring all manner of rights for its citizens. This makes the current situation unexplainable from the historic perspective alone, where in the Niger delta it explains the current situation to a far more significant extent. This analysis and the sections on Groningen shown before also constitute the answer to the first sub question concerning the history and status of the Groningen and Niger delta case.

6.1.2. Distribution

Distribution showed some very clear patterns between cases, most strongly that of the capitalist centre-periphery split discussed earlier in the theoretical framework, which is a prevalent theme throughout environmental justice literature (Hofstee, 1985; Karel, 2012; Smith, 2016). When comparing the results of the distribution between Groningen-Randstad and the Niger delta-Abuja region clear patterns emerge. Both populations suffered from the exploitation issue of mining, and subsequently disproportionate costs in several subcategories of human well-being. The clearest similarities between cases were the declining mental health, living standards and social wellness between cases. In Groningen participants indicated their mental health suffering from increased anxiety about the future and frustration at their powerlessness against what the government and oil companies were causing with the earthquakes in their communities. This was only strengthened due to the clear divide in how the profits of the gas mining had not been distributed equally. This strongly resembles the experiences documented in the literature about the Niger delta, showing similar sentiments of anxiety due to the oil operations, the subsequent pollution and its effects, and frustration at the Nigerian government and oil companies due to lack of reparations and obvious self-enrichment.

Conversely, there are also several differences between the cases. Firstly, the case of the Niger delta does involve historic and current marginalisation of several ethnic minorities, in this case the ethnic groups living in the Niger delta. Second, the externalities of the environmental exploitation in the Niger delta are proportionally far more extreme in a quantitative sense. E.g., the decline in health of an inhabitant of the quake area in Groningen compared to an inhabitant of the oil polluted area in the Niger delta is several factors worse. The latter being exposed to known carcinogens daily, significantly increased child mortality, being forced to eat polluted produce and fish etc., throughout the unfolding of the case. As such, their health is down, and mortality rate up by several factors more than that of the people in the worst hit areas of Groningen. It is noteworthy though, that the decrease in lifespan in Groningen has not been established within academic literature yet, as the study is yet to be published (Ekker & Start, 2022). This difference in magnitude and scale is seen across all subcategories of distribution, with mental health, social wellness and security/safety having declined in the Niger delta to far deeper lows than would ever be realistically possible in a country such as the Netherlands. In these terms of magnitude, the cases are not comparable. This difference in scale and magnitude emerged in all other dimensions analysed here as well.

The distribution thus shows a pattern of broad overlap in the general themes of both cases. The social demographic experiencing the injustice is different, with the subsequent subdimensions of distribution which were impacted by the injustice emerging as analogous to a significant extent. The literatures description of distributional injustice thus fit the description of both cases as set forth by Rawls (1999) and Althor and Witt (2020), considering that they differ in the social demographics and more importantly, the scale and magnitude of impact. This last point is important to underline here, as it also displays a limitation of the framework that was used here. The description of maldistribution that was used here was more categorical and did not facilitate capturing the quantitative differences between the cases.

6.1.3. Recognition

When reviewing the dimension of recognition, a similar pattern as with distribution emerged. The cases of Groningen and the Niger delta display striking similarities in the social, economic, political, and legal dimensions of recognition. Socially, the distance of Groningen to the rest of the country and the perceived lack of connection with the province resemble the way the delta is perceived in Nigeria. This is reflected further in a seeming lack of equal human value of Groningers, which featured often during interviews, much like the people in the Niger delta are treated as less valuable humans. Economically, the cases proved comparable as well, if to a lesser extent in magnitude. Groningen is economically far removed from the economic centre of the Randstad, resembling the distance of the Niger delta to the area of the capital Abuja. Consequently, both regions proved to be economically incapable of defending themselves from the subsequent exploitation by the government. As such, the lack of recognition in the economic subdimension is reminiscent between cases as well. Logically, this lack of recognition was present as well in the political subdimension and proved comparable between the delta and Groningen as well. Here, neither population received political recognition. The delta is actively ignored and marginalised, with the misrecognition of Groningen being more subtle in the form of lies and broken promises to the inhabitants of the quake region. The end effect is the same in the form of little to no political recognition for either case. Consequently, the legal system offered no form of recognition for neither the delta's inhabitants nor Groningers either, though for different reasons. The legal system of Nigeria simply offers no form of access and is notoriously unfair. The Dutch legal system does provide easier access for civilians and those less economically affluent.

However, when taking the government or a multinational to court, they are completely outmatched by the legal team of the defendants, making for an unjust legal proceeding. In this manner, the legal misrecognition is similar too, as the end effect is the same, with no just option for legal recognition in either case.

The most noteworthy difference between the cases in the dimension of recognition was that of cultural misrecognition. This was clearly only present in the Niger delta case, where it presents itself in the form of marginalisation of the ethnic minorities present in the delta. These are underrepresented in politics and actively discriminated against by the government and the ethnic majorities of the country. This is a phenomenon which is not present in the Groningen case, where there appears to be no cultural misrecognition. The Groningers are also of the same ethnicity as the rest of the Netherlands. The second most noteworthy difference between the cases is again the scale and magnitude of the misrecognition. Neither case receives the recognition they deserve, however, in the delta this is far more overt, where marginalisation of ethnicities is common and broadly accepted and the cost of the misrecognition is far greater in terms of mortality and quality of life.

When reflecting on the literature, this lack of cultural recognition is a highly common theme in environmental justice cases, where it has been shown to usually originate from historical misrecognition of culture. It is thus important to underline that Groningen differs in a fundamental trait that is commonly presumed to be present in ‘normal’ cases of environmental injustice. The description of these cases provided by Temper and other contemporaries of the discourse is thus notably not applicable to Groningen (Schlosberg, 2007; Temper et al., 2018).

However, the analysis and comparison of the dimension of recognition in total does reinforce the narrative of Groningen as a case of environmental injustice through its comparability to the Niger delta case. The experiences of recognition between both cases proved to differ little, with neither population feeling recognised. Notably, the misrecognition has the same end effect but takes place in a far more subtle, less visible way in Groningen. There, the society should provide all the tools and circumstances for justice to be present but frustrates in them not working to attain justice in the case of the gas mining.

6.1.4. Procedure

The third and final dimension of the triad of justice displayed a similar pattern as the previous two, when comparing the case of the delta to that of Groningen. The first

subdimension of inclusiveness displayed clear similarities between cases. Neither population experienced inclusion in the decision-making process surrounding the case of the environmental injustice. The exclusion from this process was again more overt in the delta, where democratic partaking in political decisions is simply absent. In Groningen the highly complex and bureaucratic procedure ensures exclusion of the local population, ensuring the same end effect as in the delta. The access to information in both cases follows the same pattern, where it is simply absent in the delta, it is complex and hard to come by in the case of Groningen. Equal resources in the process were more similar in the sense that both the delta's population as well as Groningen have to face the infinitely more affluent adversaries of their governments and the oil companies. The similarities continued in the absence of consultation over time or shared decision-making authority and authoritative decision-making. These were absent in both cases as there was no primary inclusion in the decision-making to begin with. Both populations consequently expressed experiencing the whole procedure as highly unfair, undemocratic, and not inclusive. As such, no noteworthy differences in procedural justice were found in the experience of procedural justice between cases. They are different in the direct sense, but in the more abstract procedure, little difference was found.

Following suit of the first two dimensions, the comparison of procedural justice between Groningen and the Niger delta provides further argumentation supporting Groningen as a case of environmental injustice. The literature on the subject of procedural justice described the case of Groningen to great extent, with the dimensions of Hunold and Young (1998) featuring prominently in both cases reviewed here. What contrasted interestingly for the case of Groningen again was the lack of historic misrecognition that is often assumed to lead to this unfair procedure such as described by Martin (2015) and See and Wilmsen (2022). Notably, the experiences in this dimension were found to differ the least between the two cases in both approaches, citing no noteworthy difference between the cases.

6.1.5. Capabilities

The capabilities approach to environmental justice provided a more varied image of the injustices in both cases than that of the triad discussed before. In Groningen, five dimensions of the approach were notably impacted, whereas in the delta eight were found. This is not entirely outside expectations, as the more human centred approach is better adapted to describing experiences than the more abstract triads approach. As was described

before, the magnitude and scale of the injustice is far greater in the delta, which is reflected in the higher number of dimensions impacted when compared to Groningen.

The decrease in life expectancy is far greater in the delta than it is in Groningen, although both are indeed lowered when compared to the country's average. This once again reflects the inability of this approach to describe important quantitative differences between cases. This proportional decrease is reflected in bodily health as well, where Groningen only has a diminished capability of adequate shelter. The Niger delta on the other hand has dwindled capabilities of good health, nourishment, and shelter, all due to the omnipresent pollution. Bodily integrity was only infringed upon in the case of the delta. There, all manner of crimes against humanity took and still take place. Overt crimes against humanity are nigh impossible in a socially secure country such as the Netherlands, and as such did not feature at all in the experiences of respondents from Groningen. Consequently, the dimension of senses, imagination and thought was also only impacted in the delta case. Again, this has to do with the fact that oppression of certain basic freedoms is not possible in modern western countries in such an overt manner. Matters such as the threat of physical violence by one's government upon speaking out against the mining are commonplace in the delta but are conversely unthinkable in a country like the Netherlands. It is important to note here that the criminal element that is present in the delta is also absent in Groningen, further reducing the physical threat. The emotional impact of the injustices however overlapped strongly between the countries. Especially the experienced neglect and abuse feature heavily in both cases, where injustice takes place and subsequently, the respective governments neglect their obligation to protect their citizens. Again, it is important to note here that the scale of the emotional trauma is far greater in the delta than it is in Groningen. In the dimension of affiliation, a further parallel is visible in that both populations are not being treated as humans of equal worth. In the delta this included discrimination, marginalisation, and actual crimes against humanity, whereas in Groningen the maltreatment was shown to be of a far more subtle nature. The resulting experience of not being of equal value however featured heavily in both cases. The dimension of play was then found to be the third and final dimension only infringed in the delta. Control over one's environment was the last dimension to be impacted in both cases. Both Groningen and the Niger delta experienced significant loss of control in both the political as well as the physical sense. The lack of political control in both cases has already been reviewed and compared above in the procedural and political recognition section. The loss of control over their physical surroundings was experienced in the demolishing of

villages for pipelines in the delta and the eviction to housing units in Groningen in which neither population had any say.

Coupling back to the literature, these results have primarily underlined the capacity of this framework to describe injustices from a human perspective. The literature study on the Delta and the fieldwork in Groningen both proved interpretable through this framework and in turn were comparable through the dimensions as postulated by Nussbaum (2013). Furthermore, this approach proved slightly more capable of expressing a difference in scale and magnitude of impact. When comparing the cases however, neither approach could sufficiently describe the difference in scale. Groningen is a more local or regional case, whereas the delta is a region twice the size of the Netherlands itself. This quantitative difference is not measurable through either approach and may give a distorted view of how comparable cases are through this lens.

6.2. Discussion of the research

The model described in the framework performed very well overall. Both the literature reviewed beforehand, and the field data proved compatible with the model and provided clear categories for interpretation. The codes that were derived through operationalisation of the dimensions of environmental justice described the data adequately. Sub coding was thus only a matter of providing further detail and describing the emerging phenomena within the categories. I did however notice during the analysis that the sub dimensions and categories in the dimension of distribution were very categorical and less capable of in-depth description of the lived experiences of the actual maldistribution. In future research, a revised set of subdimensions better fit to describe these experiences should be considered. This is important as the aim of the framework was to describe lived experience and not to solely categorise it.

A second limitation of this research was the limited number (N=11) of participants in Groningen. A pattern suggesting data saturation was reached by the end of data collection, but one or two more participants would have ensured this. The time that was spent on exploring the Niger delta meant no further participants could be gathered in Groningen. This did however result in valuable primary data on the Niger delta which was included in the thesis as well.

Furthermore, it became clear that the capabilities approach is a more logical choice in case of qualitative research such as that performed here. This is due to the more human

focused nature of the approach. This thesis inquired into the lived experiences of people living with environmental injustices, which is more in line with the sensuous nature of the dimensions delineated by the capabilities approach. This is not to say that the experiences could not be described by means of the triads' approach as was demonstrated earlier in this thesis.

A final important point that emerged throughout the analysis and comparison was that cases appeared very comparable in several senses, giving the impression that the grand total of injustice might be comparable as well. This underlined the need for a quantitative approach to the cases, as that of the Niger delta is of a quantitatively far larger scale and impact which did not come forward through the interpretation with this framework . As such it would indeed be interesting and worthwhile for future research to conduct a mixed-methods approach to the comparison.

6.3. Future research

Further research can take several avenues. The limitation of environmental justice cases to the global south and the historically marginalised will only decrease as climate change phenomena spread worldwide and become more extreme. As such, the critical and reflexive application of the framework in the global North and otherwise privileged cases should continue to expand the theoretical and practical capacity of the framework to describe cases. Furthermore, it may be interesting to compare north-north cases to see how these compare in the infringement on the dimensions and the underlying patterns fuelling the injustice. Understanding the problems through this lens and the underlying drivers may in turn contribute to resolving them.

One other specific avenue of further research that emerged from the fieldwork in Groningen is the need for an investigation into the effects of the injustices in Groningen on the children there. All except for one of the participants mentioned specific concern and worrying anecdotes about the impact the quakes and the governmental response were having on the children living in the region. There is clearly a specific knowledge gap here that has a high societal priority of being researched.

7. Conclusion

In finding an answer to the main question the first sub question proposed to describe the historic and current situation of the injustice in Groningen and the Niger delta. The data from the interviews did indeed show that participants experienced a certain connection

between the history of the province and their current situation. However, no direct link between the history and the current situation could be established, which provided an important contrast to what is common in the literature of environmental justice.

Answering the second and third sub question through the comparisons did however illustrate significant overlap in the experiences of both populations across all dimensions and both approaches of the framework. The strongest resemblances were found in peoples' experiences of being betrayed by their government, the insufficient or absent indemnification, the highly unfair economic balance, and the underlying theme of being treated as a human of lesser value than others. The triad provided a more abstract and theoretical approach to the subject matter, which interestingly made both cases more comparable, as it proved less capable of describing the scale and magnitude of the impact of the injustices. Subsequently, the more human focussed lens of capabilities made it easier to capture this impact and magnitude of the injustices. Consequently, this made the differences between the cases more visible in the capabilities approach. Nonetheless, the similarities seen in the triads approach resurfaced in the capabilities approach as well amongst novel similarities due to the different approach. As such, the comparison of Groningen and the Niger delta serves to solidify the former as a case of environmental justice as well.

This provides one of the most important conclusions of this thesis, namely that it was shown here that historic marginalisation is not a prerequisite for actual environmental injustice to occur. This thus argues against the definition provided of environmental justice in the introduction of this thesis as defined by Temper (2018) and other contemporaries of the discourse (Lord & Shutkin, 1994; Schlosberg, 2007). This contrast may be explained by the history of the discourse, in which the most visible cases were often those with a long history of marginalisation that increased the gravity of the situation and thereby the visibility (Coolsaet, 2020). Novel insights such as those described here then adjust the definition over time to reflect the state-of-the-art of the discourse.

In answering the main question, the research showed that both frameworks were indeed capable of describing the lived experiences in Groningen in a comparable manner to the Niger delta. The extent to which it proved applicable through the comparison was most significantly limited in the capacity to describe the difference in scale and magnitude of impact. In this case meaning that the Niger delta case involved significantly further reaching impacts for far more people which is not reflected when only analysing respondents lived experiences, as was done here. It was thus shown that the limits of these frameworks in this case emerged in describing the more quantitative aspects, which are necessary to give a more

complete image of the comparability between cases. This underlines the importance of future research in environmental justice utilising a mixed methods approach, which was argued for by Althor and Witt (2020) as well in their review of distributive environmental justice literature. Nonetheless, it was shown that the framework of environmental justice can be applied to describe a case such as Groningen.

Returning to the relevance stated at the start of this thesis the research provided novel insight into the gas quake debacle in Groningen from the scientific perspective of environmental justice. This showed it to be a case of environmental injustice and provided an in-depth study of the experiences of the inhabitants of the area from a modern perspective of justice. The results and analysis have shown that the problems in Groningen are interpreted well through the frameworks and are even comparable to a well-established case of injustice like the Niger delta. This conclusion may serve as a call to further research in the region, which appeared necessary to stress the importance of the case. The comparison further showed that the capitalist centre-periphery split from the literature of environmental justice (Bassey, 2012; Coolsaet, 2020; Smith, 2016) emerged prominently in the case of Groningen as well, even proving comparable in a distributional sense to the case of the Niger delta. Concomitantly, the research has contributed to the discourse of environmental justice in providing a rare and valuable qualitative perspective on injustice, tying it in with the suggestions of Althor and Witt (2020) for qualitative research in environmental justice.

Beyond the scientific scope, this thesis had the primary societal aim of further legitimising the case of Groningen as injustice through a comparison. Through the work presented in this thesis I hope to have contributed to a sense of legitimacy and urgency concerning the troubles in Groningen. Here, it was shown to be comparable in several senses to the case of the Niger delta, which is generally viewed as abhorrent exploitation and neglect, whereas Groningen is right under our noses. Embedding the case of Groningen in the discourse of environmental justice should not only reflect its academic relevance but also its political urgency. The impact of this is further enhanced by the research of this thesis being an integral part of the upcoming theatre play by New Dutch Connections, which will incorporate these themes in hopes of inspiring the viewers. Furthermore, I hope to have shown that the striking similarities between these cases has further implications. Not only involving those who would read this, but also to impress the concept that these cases are connected through a more general, global pattern, in which profit is prioritised above people and ecological wellbeing. This brings back the themes from the introduction of the global connection between cases, mentioned by authors such as Miller and Spoolman (2016) and

Schlosberg (2007), and my own role as not just an academic but also an activist as described by Frickel (2004). I thus hope to have contributed to an understanding of the universality of the problems discussed in this thesis and the conclusion that there is a need for equally holistic solutions to these issues.

8. Bibliography

- Abade, E. (2018, June 18). 'Failure of Ogoni cleanup is marginalisation, oppression of Nigeria's minority ethnic groups.' *The Guardian Nigeria News - Nigeria and World News*.
<https://guardian.ng/interview/failure-of-ogoni-cleanup-is-marginalisation-oppression-of-nigerias-minority-ethnic-groups/>
- Abdulkadir, A. B. (2014). The right to a healthful environment in Nigeria: A review of alternative pathways to environmental justice in Nigeria. *Journal of Sustainable Development Law and Policy (The)*, 3(1), Article 1. <https://doi.org/10.4314/jsdlp.v3i1>
- Afigbo, A. E. (2006). *The abolition of the slave trade in southeastern Nigeria, 1885-1950*. University of Rochester Press. <http://0-www.cambridge.org.pugwash.lib.warwick.ac.uk/core/product/identifier/9781580466684/type/BOOK>
- Al Jazeera English (Director). (2020, January 5). *Nigerian Oil and the Disappearing Money | Start Here*. <https://www.youtube.com/watch?v=SnqLPSCWads>
- Althor, G., & Witt, B. (2020). A quantitative systematic review of distributive environmental justice literature: A rich history and the need for an enterprising future. *Journal of Environmental Studies and Sciences*, 10(1), 91–103. <https://doi.org/10.1007/s13412-019-00582-9>
- Alvesson, M., & Sköldböck, K. (2017). *Reflexive Methodology: New Vistas for Qualitative Research*. SAGE.
- Amnesty International. (2022). *Shell in Nigeria—Olievervuiling en armoede in de Nigerdelta*. <https://www.amnesty.nl/wat-we-doen/themas/bedrijven-en-mensenrechten-3/shell-in-nigeria>
- Banzhaf, S., Ma, L., & Timmins, C. (2019). Environmental Justice: The Economics of Race, Place, and Pollution. *Journal of Economic Perspectives*, 33(1), 185–208.
<https://doi.org/10.1257/jep.33.1.185>

- Bassey, N. (2012). *To Cook a Continent: Destructive Extraction and the Climate Crisis in Africa*. Fahamu/Pambazuka.
- Bick, R., Halsey, E., & Ekenga, C. C. (2018). The global environmental injustice of fast fashion. *Environmental Health*, 17(1), 92. <https://doi.org/10.1186/s12940-018-0433-7>
- Bigg, M. M. (2022, September 13). Russia invaded Ukraine more than 200 days ago. Here is one key development from every month of the war. *The New York Times*.
<https://www.nytimes.com/article/ukraine-russia-war-timeline.html>
- Blondin, S. (2019). Environmental migrations in Central Asia: A multifaceted approach to the issue. *Central Asian Survey*, 38(2), 275–292. <https://doi.org/10.1080/02634937.2018.1519778>
- Blue, G., Bronson, K., & Lajoie-O'Malley, A. (2021). Beyond distribution and participation: A scoping review to advance a comprehensive environmental justice framework for impact assessment. *Environmental Impact Assessment Review*, 90, 106607.
<https://doi.org/10.1016/j.eiar.2021.106607>
- Bryman, A. (2012). *Social Research Methods*. OUP Oxford.
- Burawoy, M. (1998). The Extended Case Method. *Sociological Theory*, 16(1), 4–33.
<https://doi.org/10.1111/0735-2751.00040>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Centraal Bureau voor de Statistiek. (2022, August 10). *Waar komt ons gas vandaan?* [Webpagina]. Centraal Bureau voor de Statistiek. <https://www.cbs.nl/nl-nl/longread/diversen/2022/waar-komt-ons-gas-vandaan-?onepage=true>
- Central Intelligence Agency. (2022). Nigeria. In *The World Factbook*. Central Intelligence Agency.
<https://www.cia.gov/the-world-factbook/countries/nigeria/#people-and-society>
- Coolsaet, B. (2020). *Environmental Justice: Key Issues*. Routledge.
- Curry, P. (2011). *Ecological Ethics: An Introduction*. Polity.

- Drèze, J., & Sen, A. (2002). *India: Development and Participation*. Oxford University Press.
- Duijvendak, M., Feenstra, H., Hillenga, M., & Santing, C. (2009). *Geschiedenis van Groningen III. Nieuwste Tijd-Heden*.
- Ekker, H., & Start, R. (2022, September 23). *NPO Radio 1/NOS Gronings gas: Gewonnen of verloren?*
- Ellis, C., & Flaherty, M. G. (1992). *Investigating Subjectivity: Research on Lived Experience*. SAGE.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5, 1. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research*, 2(2), 209–230.
<https://doi.org/10.1177/146879410200200205>
- FitchRatings. (2022, September 11). *Netherlands Credit Ratings: Fitch Ratings*.
<https://www.fitchratings.com/entity/netherlands-80442202>
- FRANCE 24 English (Director). (2021, July 5). *Polluted by the oil industry: Life in Nigeria's Ogoniland* • *FRANCE 24 English*. <https://www.youtube.com/watch?v=zP2OJmFsvp4>
- Fraser, N. (1995). From Redistribution to Recognition? Dilemmas of Justice in a “Post-Socialist” Age. *New Left Review*, 1/212, 68–93.
- Fraser, N. (1998). *Social justice in the age of identity politics: Redistribution, recognition, participation* (Working Paper FS I 98-108). WZB Discussion Paper.
<https://www.econstor.eu/handle/10419/44061>
- Fraser, N. (2000). Rethinking Recognition. *New Left Review*, 3, 107–120.
- Fraser, N. (2012). On Justice. *New Left Review*, 74, 41–51.
- Fraser, N., & Honneth, A. (2003). *Redistribution Or Recognition?: A Political-philosophical Exchange*. Verso.
- Frickel, S. (2004). Scientist Activism in Environmental Justice Conflicts: An Argument for Synergy. *Society & Natural Resources*, 17(4), 359–366. <https://doi.org/10.1080/08941920490278809>

- Friends of the Earth. (2017, March 24). Shell accused of concealing damage to health from Nigerian oil spills. *Friends of the Earth Europe*. <https://friendsoftheearth.eu/news/shell-accused-of-concealing-damage-to-health-from-nigerian-oil-spills/>
- Garvey, J. (2008). *The EPZ Ethics of Climate Change: Right and Wrong in a Warming World*. A&C Black.
- Gillard, R., Snell, C., & Bevan, M. (2017). Advancing an energy justice perspective of fuel poverty: Household vulnerability and domestic retrofit policy in the United Kingdom. *Energy Research & Social Science*, 29, 53–61. <https://doi.org/10.1016/j.erss.2017.05.012>
- Given, L. M. (2008). *The Sage Encyclopedia of Qualitative Research Methods: A-L ; Vol. 2, M-Z Index*. SAGE.
- Gonzalez, C. G. (2015). Environmental Justice, Human Rights, and the Global South Symposium: Environment and Human Rights. *Santa Clara Journal of International Law*, 13(1), 151–196.
- Hakkenes, E. (2020). *Gas: Het verhaal van een Nederlandse bodemschat* (1st ed.). Bezige Bij b.v., Uitgeverij De.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative Research Methods* (2nd ed.). SAGE.
- Hickel, J., & Kallis, G. (2020). Is Green Growth Possible? *New Political Economy*, 25(4), 469–486. <https://doi.org/10.1080/13563467.2019.1598964>
- Hill, J. (2012). *Nigeria Since Independence: Forever Fragile?* (1st ed.). Palgrave Macmillan UK. <https://books.google.nl/books?id=J8o6zwEACAAJ>
- Hofstee, E. W. (1985). *Groningen van grasland naar bouwland, 1750-1930: Een agrarisch-economische ontwikkeling als probleem van sociale verandering*. Pudoc.
- Holifield, R., Chakraborty, J., & Walker, G. (2018). *The Routledge Handbook of Environmental Justice* (1st ed.). Routledge, Taylor & Francis Group.
- Honneth, A. (1995). *The Struggle for Recognition: The Moral Grammar of Social Conflicts*. Polity.
- Horton, J., Macve, R., & Struyven, G. (2004). Qualitative research: Experiences in using semi-structured interviews. In *The real life guide to accounting research* (pp. 339–357). Elsevier.

- Hunold, C., & Young, I. M. (1998). Justice, Democracy, and Hazardous Siting. *Political Studies*, 46(1), 82–95. <https://doi.org/10.1111/1467-9248.00131>
- Huys, T. (Director). (2021, May 12). De Beerput van Olie (No. 4) [Documentary]. In *De Waarde van de Aarde*. NPO. https://www.npostart.nl/waarde-van-de-aarde/12-05-2021/KN_1726213
- Ikporukpo, C. O. (2004). Petroleum, Fiscal Federalism and Environmental Justice in Nigeria. *Space and Polity*, 8(3), 321–354. <https://doi.org/10.1080/1356257042000309643>
- Jude, C. (2011). Charting Pathways to Development in Nigeria's Niger Delta. *Africana*. https://www.researchgate.net/publication/301637735_Charting_Pathways_to_Development_in_Nigeria's_Niger_Delta
- Karel, E. H. (2012). Oost-Groningen: De eeuwige periferie? *Lezing Gehouden Voor Het Sociaal Historisch Centrum Limburg, Maastricht 1 March 2012*.
- Konne, B. (2014). Inadequate Monitoring and Enforcement in the Nigerian Oil Industry: The Case of Shell and Ogoniland. *Cornell International Law Journal*, 47, 181–204.
- Koos, C., & Pierskalla, J. (2016). The Effects of Oil Production and Ethnic Representation on Violent Conflict in Nigeria: A Mixed-Methods Approach. *Terrorism and Political Violence*, 28(5), 888–911. <https://doi.org/10.1080/09546553.2014.962021>
- Kopas, J., York, E., Jin, X., Harish, S. P., Kennedy, R., Shen, S. V., & Urpelainen, J. (2020). Environmental Justice in India: Incidence of Air Pollution from Coal-Fired Power Plants. *Ecological Economics*, 176, 106711. <https://doi.org/10.1016/j.ecolecon.2020.106711>
- Kpoturu, S. (2021). *OGONI: The Struggle for Justice*. New Generation Publishing.
- Krueger, R. A., & Casey, M. A. (2014). *Focus Groups: A Practical Guide for Applied Research* (5th ed.). SAGE Publications.
- Langemeyer, J., & Connolly, J. J. T. (2020). Weaving notions of justice into urban ecosystem services research and practice. *Environmental Science & Policy*, 109, 1–14. <https://doi.org/10.1016/j.envsci.2020.03.021>

- Lindén, O., & Pålsson, J. (2013). Oil Contamination in Ogoniland, Niger Delta. *AMBIO*, 42(6), 685–701.
<https://doi.org/10.1007/s13280-013-0412-8>
- Lord, C. P., & Shutkin, W. A. (1994). Environmental Justice and the Use of History. *Boston College Environmental Affairs Law Review*, 22(1), 1–26.
- Madison, D. S. (2011). *Critical Ethnography: Method, Ethics, and Performance*. SAGE Publications.
- Martin, A., Akol, A., & Gross-Camp, N. (2015). Towards an Explicit Justice Framing of the Social Impacts of Conservation. *Conservation and Society*, 13, 166–178.
<https://doi.org/10.4103/0972-4923.164200>
- Martin, P., Bigdeli, S. Z., Daya-Winterbottom, T., Plessis, W. du, & Kennedy, A. (2015). The search for environmental justice. *The Search for Environmental Justice*, 1–20.
- Masson-Delmotte, V., Zhai, P., Pirani, A., Connors, S. L., Péan, C., Berger, S., Caud, N., Chen, L., Goldfarb, L., Gomis, M. I., Huang, M., Leitzell, K., Lonnoy, E., Matthews, J. B. R., Maycock, T. K., Waterfield, T., Yelekçi, O., Yu, R., & Zhou, B. (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. *Intergovernmental Panel on Climate Change*, 6, 630. <https://doi.org/10.1017/9781009157896>
- Mignolo, W. D. (2011). The global south and world dis/order. *Journal of Anthropological Research*, 67(2), 165–188. <https://doi.org/10.3998/jar.0521004.0067.202>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE Publications. <https://books.google.nl/books?id=p0wXBAAAQBAJ>
- Miller, G. T., & Spoolman, S. (2016). *Living in the Environment* (19th ed.). Cengage Learning.
- Ministerie van Algemene Zaken. (2022, June 20). *Afbouw gaswinning Groningen—Gaswinning in Groningen—Rijksoverheid.nl* [Onderwerp]. Ministerie van Algemene Zaken.
<https://www.rijksoverheid.nl/onderwerpen/gaswinning-in-groningen/afbouw-gaswinning-groningen>
- Minnema, E. (n.d.). *Verscheurde jeugd; 10 jaar na Huizinge*.

- Minority Rights Group. (2015, June 19). *Delta minorities*. Minority Rights Group.
<https://minorityrights.org/minorities/delta-minority-groups/>
- Muntendam-Bos, A. G., & De Waal, H. (2013). *Reassessment of the probability of higher magnitude earthquakes in the Groningen gas field*. State Supervision of Mines.
- Murphy, S. P., Cannon, S. M., & Walsh, L. (2022). Just transition frames: Recognition, representation, and distribution in Irish beef farming. *Journal of Rural Studies*, *94*, 150–160.
<https://doi.org/10.1016/j.jrurstud.2022.06.009>
- Naanen, B. (2012). The Nigerian State, Multinational Oil Corporations, and the Indigenous Communities of the Niger Delta. In S. Sawyer & E. T. Gomez (Eds.), *The Politics of Resource Extraction: Indigenous Peoples, Multinational Corporations and the State* (pp. 153–179). Palgrave Macmillan UK. https://doi.org/10.1057/9780230368798_8
- NOS. (2022a, January 15). *Duizenden Groningers betogen in fakkeloptocht tegen gaswinning*.
<https://nos.nl/artikel/2413211-duizenden-groningers-betogen-in-fakkeloptocht-tegen-gaswinning>
- NOS. (2022b, May 13). *Russische tegensancties op gas: Hoeveel blijft er straks over voor de winter?*
<https://nos.nl/artikel/2428689-russische-tegensancties-op-gas-hoeveel-blijft-er-straks-over-voor-de-winter>
- NPO. (n.d.). *Waarom zijn er aardbevingen in Groningen?* NPO Kennis. Retrieved September 20, 2022, from <https://npokennis.nl/longread/7463/waarom-zijn-er-aardbevingen-in-groningen>
- Nussbaum, M. C. (2006). *Frontiers of Justice: Disability, Nationality, Species Membership*. Harvard University Press. <https://doi.org/10.2307/j.ctv1c7zftw>
- Nussbaum, M. C. (2013). *Creating Capabilities: The Human Development Approach*. Harvard University Press.
- Ogwu, F. A. (2012). *Environmental justice, planning and oil and gas pipelines in the Niger Delta region of Nigeria* [Thesis, Newcastle University].
<http://theses.ncl.ac.uk/jspui/handle/10443/1406>

- Ojo-Ade, F. (1999). *Ken Saro-Wiwa: (A Bio-critical Study)*. Africana Legacy Press, Incorporated.
- Okonkwo, E. C. (2020). Assessing the Role of the Courts in Enhancing Access to Environmental Justice in Oil Pollution Matters in Nigeria. *African Journal of International and Comparative Law*, 28(2), 195–218. <https://doi.org/10.3366/ajicl.2020.0310>
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 0(0), 1–11. <https://doi.org/10.1080/0142159X.2022.2057287>
- Ordinioha, B., & Brisibe, S. (2013). The human health implications of crude oil spills in the Niger delta, Nigeria: An interpretation of published studies. *Nigerian Medical Journal : Journal of the Nigeria Medical Association*, 54(1), 10–16. <https://doi.org/10.4103/0300-1652.108887>
- Osofsky, H. M. (2010). Climate change and environmental justice: Reflections on litigation over oil extraction and rights violations in Nigeria. *Journal of Human Rights and the Environment*, 1(2), 189–210. <https://doi.org/10.4337/jhre.2010.02.03>
- Pols, D. (2021, January 29). *Historische uitspraak: Nigeriaanse boeren en Milieudefensie winnen olievervuilingszaak van Shell* [Persbericht]. Milieudefensie. <https://milieudefensie.nl/actueel/historische-uitspraak-nigeriaanse-boeren-en-milieudefensie-winnen-olievervuilingszaak-van-shell>
- Rai, N., & Thapa, B. (2015). A study on purposive sampling method in research. *Kathmandu: Kathmandu School of Law*, 5.
- Rauschmayer, F., & Lessmann, O. (2013). The Capability Approach and Sustainability. *Journal of Human Development and Capabilities*, 14(1), 1–5. <https://doi.org/10.1080/19452829.2012.751744>
- Rawls, J., John 20000710Rawls, & Rawls, P. J. (1999). *A Theory of Justice: Revised Edition*. Harvard University Press.
- Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived Experience. *The Psychologist*, 18, 18–23.

- Sala-i-Martin, X., & Subramanian, A. (2013). Addressing the Natural Resource Curse: An Illustration from Nigeria†. *Journal of African Economies*, 22(4), 570–615.
<https://doi.org/10.1093/jae/ejs033>
- Saro-Wiwa, K. (2018). *Silence Would Be Treason: The Last Writings of Ken Saro-Wiwa*. Daraja Press.
- Schlosberg, D. (2007). *Defining Environmental Justice: Theories, Movements, and Nature*. OUP Oxford.
- Schlosberg, D. (2013). Theorising environmental justice: The expanding sphere of a discourse. *Environmental Politics*, 22(1), 37–55. <https://doi.org/10.1080/09644016.2013.755387>
- Schlosberg, D., & Carruthers, D. (2010). Indigenous Struggles, Environmental Justice, and Community Capabilities. *Global Environmental Politics*, 10(4), 12–35.
https://doi.org/10.1162/GLEP_a_00029
- Schlosberg, D., & Collins, L. B. (2014). From environmental to climate justice: Climate change and the discourse of environmental justice. *WIREs Climate Change*, 5(3), 359–374.
<https://doi.org/10.1002/wcc.275>
- See, J., & Wilmsen, B. (2022). A multidimensional framework for assessing adaptative justice: A case study of a small island community in the Philippines. *Climatic Change*, 170(1), 16.
<https://doi.org/10.1007/s10584-021-03266-y>
- Sen, A. (2005). Human Rights and Capabilities. *Journal of Human Development*, 6(2), 151–166.
<https://doi.org/10.1080/14649880500120491>
- Smaling, A. (2009). Generaliseerbaarheid in kwalitatief onderzoek. *KWALON*, 14(3).
<https://doi.org/10.5117/2009.014.003.002>
- Smith, J. (2016). *Imperialism in the Twenty-First Century: Globalization, Super-Exploitation, and Capitalism's Final Crisis*. NYU Press. <https://www.jstor.org/stable/j.ctt15zc7jb>
- Stevens, P., Lahn, G., & Kooroshy, J. (2015). *The Resource Curse Revisited* (p. 50). Chatham House, The Royal Institute of International Affairs.

<https://www.chathamhouse.org/sites/default/files/publications/research/20150804ResourceCurseRevisitedStevensLahnKooroshyFinal.pdf>

Stewart, D. W., & Shamdasani, P. N. (2014). *Focus Groups: Theory and Practice*. SAGE Publications.

Temper, L., Bene, D. del, & Martinez-Alier, J. (2015). Mapping the frontiers and front lines of global environmental justice: The EJAtlas. *Journal of Political Ecology*, 22(1).

<https://doi.org/10.2458/v22i1.21108>

Temper, L., Demaria, F., Scheidel, A., Del Bene, D., & Martinez-Alier, J. (2018a). The Global Environmental Justice Atlas (EJAtlas): Ecological distribution conflicts as forces for sustainability. *Sustainability Science*, 13(3), 573–584. <https://doi.org/10.1007/s11625-018-0563-4>

Temper, L., Demaria, F., Scheidel, A., Del Bene, D., & Martinez-Alier, J. (2018b). The Global Environmental Justice Atlas (EJAtlas): Ecological distribution conflicts as forces for sustainability. *Sustainability Science*, 13(3), 573–584. <https://doi.org/10.1007/s11625-018-0563-4>

Torres, P. H., Leonel, A. L., Araújo, G., & Jacobi, P. (2020). Is the Brazilian National Climate Change Adaptation Plan Addressing Inequality? Climate and Environmental Justice in a Global South Perspective. *Environmental Justice*, 13. <https://doi.org/10.1089/env.2019.0043>

Udogbo, S. T. (2021). *An Exploration of the Ogoni People's Resistance in Nigeria: A Participatory Action Research Approach* [Phd, National University of Ireland Maynooth].

<https://mural.maynoothuniversity.ie/14945/>

Vedder, M. (2019). *From 'not in my backyard' to 'not on my planet': The potential of Blockadia for the climate justice movement: a case study of fossil fuel resistance in Groningen, the Netherlands*. <http://lup.lub.lu.se/student-papers/record/8982818>

Voort, N., & Vanclay, F. (2015). Social impacts of earthquakes caused by gas extraction in the Province of Groningen, The Netherlands. *Environmental Impact Assessment Review*, 50, 1–15. <https://doi.org/10.1016/j.eiar.2014.08.008>

Whiting, L. S. (2008). Semi-structured interviews: Guidance for novice researchers. *Nursing Standard (through 2013)*, 22(23), 35.

World Economic Forum. (2022, November 10). *These charts show Europe's reliance on gas before the war in Ukraine*. World Economic Forum.

<https://www.weforum.org/agenda/2022/11/europe-gas-shortage-russia/>

Wulo, I. B., Mohammed, Y., Djauro, Y., Muhammed, D., Usman, U. A., Sadiq, H., Kodomi, M., Gazali, A., Kamale, I., & Ibrahim, Y. (2017). Comparative Analysis Of Oil Company's Corporate Social Responsibility Operating in Different Environments (Nigeria and USA). *IOSR Journal of Environmental Science, Toxicology and Food Technology*, 11, 34–41.

<https://doi.org/10.9790/2402-1106033441>

Zelenin, E., Bachmanov, D., Garipova, S., Trifonov, V., & Kozhurin, A. (2021). The Database of the Active Faults of Eurasia (AFEAD): Ontology and Design behind the Continental-Scale Dataset. *Earth System Science Data Discussions*, 1–20. <https://doi.org/10.5194/essd-2021-312>

Appendices

Appendix I. Interview guide

The interview guide, as it was used in the fieldwork in both the interviews and focus groups in Groningen.

Interview guide:

1. Voorstellen:
 - a. Tobias, onderzoeker UU, master sustainable development
 - b. Onderzoek over milieurechtvaardigheid in Groningen met betrekking tot de aardbevingen
 - c. Het interview zal opgenomen worden
 - d. Alle data zijn u ten alle tijden toegankelijk, naam wordt geanonimiseerd, is verder ook niet van belang voor het onderzoek
 - e. Alle data worden na het onderzoek gewist van mijn persoonlijke opslag alleen de interpretatie in de vorm van de thesis en het toneelstuk blijven bestaan
 - f. Voel u vrij op enig moment zelf vragen te stellen of het interview te onderbreken
2. Waar woont u momenteel?
 - a. Hoe lang woont u daar al?
3. Hoe veel aardbevingen heeft u meegemaakt?
- 4. Distribution**
5. Heeft u materiële schade ondervonden?
 - a. In welke vorm?
6. Welke gevolgen hebben deze aardbevingen gehad, naast de schade aan uw huis?
 - a. (gevoelig onderwerp, voorzichtig aankaarten en respectvol doorvragen)
 - b. Hoe was dit voor u?
 - c. Hoe was dit voor de mensen om u heen? Gezin, buurt, familie in zelfde locatie
7. welke invloed heeft de gaswinning verder op uw leven gehad?
8. Heeft u baat gehad bij de gaswinning?
 - a. Hoe zien deze baten eruit? (voorbeeld)
9. Wie heeft er naar uw idee het meeste baat gehad bij de gaswinning?

10. Hoe zijn deze baten van de gaswinning verdeeld naar uw idee?
- Zijn ze eerlijk verdeeld?
 - Zo niet hoe zou dit verdeeld moeten worden om eerlijk en rechtvaardig te zijn?

11. Recognition

12. Heeft u het gevoel dat u in deze situatie serieus bent genomen door betrokkenen?
- Naasten
 - Betrokken organisaties
 - De overheid, lokaal en landelijk
13. In welke mate is er respect getoond voor Groningen en de Groningse situatie?
14. Hoe zou u uw mate aan zeggenschap in deze situatie beschrijven?
- Over uw eigen leven
 - Over uw leefomgeving
 - Over de beslissingen die genomen zijn met betrekking tot de gaswinning
 - Over de beslissingen met betrekking tot de compensatie
15. Op welke manier zouden de betroffenen Groningers erkend moeten worden om het eerlijk te maken?

16. Procedure

17. Hoe worden beslissingen over gaswinning in Groningen nu gemaakt?
- Met betrokkenheid van welke partijen/mensen?
18. Op welke manier bent u betrokken geweest bij het nemen van beslissingen?
- Hoe had dit anders gekund of gemoeten?
19. Hoe zou u de verhouding beschrijven tussen de mensen die de beslissingen nemen en degenen die de gevolgen daarvan ondervinden?
- Hoe ziet u de gelijkheid tussen deze groepen?
20. Wat zou er moeten gebeuren om deze gelijkheid in het maken van beslissingen te waarborgen? Hoe zou dit beter kunnen?

21. Capabilities

22. In welke mate bent u in staat uw leven te leven zoals u zou wensen?
- Hoe heeft de gaswinning dit beïnvloed?
 - Hoe heeft de nasleep en compensatieregeling dit beïnvloed?
23. Wat zou er nodig zijn om u weer in staat te stellen te leven zoals u wenst met betrekking tot de gaswinning en de gevolgen daarvan?

- a. Bijvoorbeeld het stoppen van de gaswinning, betere compensatieregeling, het repareren van huizen enzovoorts

24. Conclusie

25. Vindt u het goed om uw contactgegevens op te geven zodat wij naderhand nog contact zouden kunnen hebben over de resultaten, het gebruik hiervan en indien nodig verdere vragen zouden kunnen stellen?
- a. Door de structuur van mijn onderzoek kan het zo zijn dat ik naderhand misschien nog enkele vragen zou hebben waar ik u graag voor zou kunnen contacteren
26. Het staat u altijd vrij om ons te contacteren met verdere vragen over het onderzoek
- a. Contactgegevens geven aan participant
27. Heeft u momenteel verder nog vragen?
28. Zou u nog iets kwijt willen over de onderwerpen waar wij over hebben gepraat, of over het interview zelf?
29. Heeft u nog tips?
30. Kent u nog mensen die ook deel zouden willen nemen aan dit onderzoek?