



Narratives of water

Relationships of Dutch people to water in the landscape

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Narratives of water: Relationships of Dutch people to water in the landscape

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narratives, reflexivity

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Abstract

Water in the landscape is and has been an integral part of life in the Netherlands. Its management goes back to the year 800 when people started to build dikes to protect themselves and the country from the water. Since then, water management policies have been evolving into technological constructions, thereby creating an identity for the Dutch people as masters over water. However, the current trend shows that policies are moving towards nature-inclusive measures and views on nature are changing towards stewardship instead of mastery.

This study uncovers relationships of people to water in the landscape in the Netherlands and explores how people relate to this change in policies and views on nature. The relationships are constituted by social and ecological factors that were studied by listening to stories and walking through the landscape where these stories were located. Collecting and combining similar stories led to the identification of six narratives reflecting human-water relationships that were analyzed using cultural narrative analysis.

The Dutch identity of mastery over nature is still present in stories that people tell. It is connected to the question of responsibility of the water management. Participants saw a role for the State to protect citizens from floods and other water disasters. Individual experiences were mainly related to light, happy memories with the water that was close by. The stories showed also a high level of reflection from participants during the interviews. The social-ecological approach was beneficial for understanding the stories and their context better, as well as enhancing reflexivity of the researcher.

The narratives show how human-water relationships are closely related to concepts of agency and collectivity, where collective memory of water disasters contributes to the idea of the Dutch as both victims and heroes that conquer the water. Stewardship of water is limited to drinking water and water scarcity, but citizen science research provides examples of how community-based natural resource management can enhance the stewardship of nature. Applying this in the Netherlands could help increase awareness of and care for water in the landscape.

Keywords: narrative analysis, stories, social-ecological system, human-water relationships, the Netherlands, water in the landscape, narratives, reflexivity

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Abbreviations

Abbreviation	Description
CNA	Cultural Narrative Analysis
IWM	Integrated Water Management
IRM	Integrated River Management
SES	Social-Ecological System
NAP	Normaal Amsterdams Peil
VodF	Vrienden op de Fiets

1. Introduction

1.1 Subject of Research

Water has been part of Dutch living and culture since people started inhabiting the low land. Before the year 800, water was “just” part of the landscape. It came in the form of surface water, river water from the Rhine and Maas, sea water from the North Sea and groundwater throughout the whole country (Van de Ven, 1993). People lived on mounds in the countryside while cities started to grow. In this time and due to the presence of water, peatlands could grow and cover the whole country. After the year 800, the Dutch started performing water management with the reclamation of these peatlands, an event that would change the landscape and view on water forever. Reclamation of land caused soil subsidence throughout the country, making the land vulnerable to the tide and high river levels. Thus, the number of floods increased (Berendse & Brood, 2022). From then, the Dutch have been influencing the sea and rivers using dikes, dams and reclamation technologies. Changes in water management have often been caused by water disasters. These disasters can be slow, such as salinization of agricultural fields as a result of sea water coming in from the coast, but also sudden and impactful, such as the 1953 water disaster where 1.835 people lost their lives and which “made a deep impression and aroused emotions reminiscent of war times” (Van de Ven, 1993:262).

In her book ‘Water: A Dutch Cultural History’, Lotte Jensen describes the hard life of the people living in a low land where “the inhabitants of the Dutch coastal provinces and the river region often learned the hard way that they lived on a vulnerable delta” (Jensen, 2022/2024:12). The threat of the water – referred to as the “water wolf” – has been documented since the 17th century. This enemy was carefully tamed by well-organized interventions on local and national levels and with the use of ever evolving technologies (Jensen, 2022/2024; Lintsen, 2002). The overall idea of water being something to control at all times shifted during the construction of the renowned Delta Works, which started after the water disaster of 1953. Their main objective was to protect the people and country from water, but environmental awareness increased during the construction and public opinion shifted towards a more nature-inclusive view (Van de Ven, 1993).

This shift was also apparent in river management policies, coming from the overarching idea of controlling nature and going towards alternative, adaptive river management (Van Heezik, 2007). It shows how engagement of the public steers government policies, which is argued by Page & Shapiro (1983) to be stronger than policies influencing public opinion. In the case of the Delta Works, it was so strong that the construction was altered at the urgent request of citizens

who demanded that landscape values were maintained and nature conservation included in the construction.

The river management policies can be seen to express a political shift in human-nature relationships (De Groot et al., 2011). Van den Born (2007) identifies four types of human-nature relationships in the Netherlands:

Mastership over nature puts people above nature. People are allowed to change nature for sake of economic purposes and environmental problems can be solved through technological advances.

Stewardship of nature puts people above nature, but with the obligation to manage nature that has been assigned to them. Humans have to take care of the natural world.

Partnerships with nature puts people besides nature. They are of equal value and humans need to treat nature in a way that benefits both.

Participation in nature makes people an active part of nature on a biological and spiritual level. This relationship constitutes the human being.

A survey performed by Riyan van den Born (2007) showed how Dutch people moved from mastery over nature towards stewardship of nature. She argues that “if views on the human/nature relationship are really moving from mastership to stewardship and beyond, society and government should anticipate this development and change course” (p. 88). The Dutch relationship to water has been dominated by a mastery over water where admired and highly respected water engineers in the country experienced glorious days developing reclamation technologies and wind mills to pump water from the land (Van de Ven, 1993; Vandersmissen & Den Hengst, 1998). Stewardship of water is a relatively new concept in general, originating from the creation of the concept of the ‘water footprint’ by Tony Allan (Allan, 1998; Sojamo & Rudebeck, 2024). However, this is focused on water deficits and water stewardship of governmental and corporate entities to ensure water security. I want to focus on water in the landscape as how everyday people perceive it without assuming water-related issues such as deficits and see what relationships arise as a result.

Stories about water are able to caption human-water relationships and show nuances of experiences (Gearey, 2018; Klæbe, 2013). Stories about water from the Netherlands mainly reflect the mastery over nature view on human-water relationships. Jensen (2022/2024) describes how this manifests itself through narratives in historical and contemporary storytelling and how stories capture and store human-water relationships in the Netherlands. Fighting against water has been a central element of Dutch storytelling for centuries, shaping identity and history (Mostert, 2020). Dicke (2001) studied stories about water management from a policy perspective, looking into journals, study books and other water engineering collections. These stories reflect how water has to be controlled by

the Dutch and how they feel proud because of their work: “canals are dug, flood defenses are put up in celebration of the grandeur of the nation state” (p. 111).

In this research, I would like to put Dutch water management and its development next to changing human-water relationships in the Netherlands, using stories to reveal these relationships. Moezzi et al. (2017) found that using stories as data material provide a unique research lens as “they are immediately oriented to relationships, in particular between people and things, the present and the past, actions and consequences, etc.” (p. 7). Narratives capture patterns of claims and beliefs from these stories and narrative analysis in turn reveals how people make sense of events through storytelling (Van Hulst et al., 2024). The narrative analysis performed by Arnold (2018) offers a methodological framework for studying stories that arise from interviews, combining several approaches to narrative analysis in the Cultural Narrative Analysis (CNA). She considers a narrative to explain *how* a story is told and several diverse stories can have the same narrative. Stories about human-water relationships in previous studies have been found by asking directly to people’s views on nature (Van den Born, 2007). In contrast with these studies, I hope to find views on human-water relationships through stories that arise spontaneously.

1.2 Research Aim and Objectives

Centuries of mastery over nature have formed and created the Dutch national identity, from where characteristics such as perseverance and cooperation originated (Mostert, 2020; Vandersmissen & Den Hengst, 1998). On the other hand, there is a growing literature on shifts in views on nature in general (Dunlap et al., 2000; Gaekwad et al., 2022) and how these are expressed through a shift in mastery over nature to stewardship of nature by the public in the Netherlands (M. De Groot et al., 2011; W. T. De Groot & Van den Born, 2003; Van den Born, 2007). These human-nature relationships include broad definitions of nature, depending on what the public considers nature. This research studies the human-water relationships without attributing any value to water beforehand. Instead, people are allowed to interpret water in the landscape how they want.

Through studying stories, I aim to find out what human-water relationships exist in the Netherlands and how they relate to the change in water policies from traditional water engineering to integrated water management. By studying stories of the present, I can formulate narratives that reveal patterns of how people talk about water in the landscape. By examining stories of the past, I can put the present-day stories into perspective and uncover differences and similarities. The environment in which the stories happen is considered to be a social-ecological system where human and natural, or social and ecological, factors both contribute to the creation of human relationships with water. Furthermore, this research considers both sea water and freshwater bodies and does not focus primarily on

major interventions or profound changes in the landscape, such as flooding or reclamation of land. Instead, the focus is determined by the participants themselves, which results in a wide variety of stories around water. The aim brings forth the following research questions:

Research question: What relationships between people and water in the landscape can be derived from stories in the Netherlands?

Sub question 1: What narratives appear from stories told by people in the Netherlands about water in the landscape?

Sub question 2: How does experiencing the social and ecological factors of the studied environment affect the understanding of stories, narratives and relationships?

2. Theoretical background

2.1 Stories and narrative in an environmental context

The terms narrative and storytelling are used interchangeably in literature, sometimes in the literal sense that they both mean the same thing (Brown, 2016; Van Hulst et al., 2024) or provided with the same definition in different literature. Brown (2016) shows that both ontological and epistemological considerations and the academic field influence the definitions of narrative and stories, and also within an academic field: it depends on who you ask how the terms narrative and storytelling are explained. In this research, creating and telling *stories* is the way that people to make sense of events happening in their life (Brown, 2016). *Narrative* can be considered as the overarching structure of the story including recurring themes and forms that can be applied to multiple stories. A narrative is built upon multiple stories and studying and repeating narratives can help in long-term transmission of these stories (Clara et al., 2024).

In an account of historical storytelling about the Rhine, narratives are described to “shape collective memories of recurrent events that are at play in a community” (Baake & Kaempf, 2011:430-431). In other literature, this description of narrative applies to storytelling as it allows for the creation of a historical account of personal narratives from the community in order to not forget what had happened (Holmes & McEwen, 2020; Klæbe, 2013). Arnold (2018) draws on the description of narrative by H.P. Abbott to make sense of the difference between story and narrative. The meaning of the story changes with the narrative, thus “the narrative becomes the representation of the story” (Arnold, 2018:62). This means that a story always comes with a certain narrative and multiple unique stories can have the same narrative.

Since the 1970s, narrative has been increasingly recognized as a means of explaining human behavior and especially in predicting pro-environmental behavior (Brown, 2016). Furthermore, stories are found to be valuable additions to analyzing factual data and that “those responsible for river management may include narrative texts collected from stakeholders reflecting the memorable language of local stories” (Baake & Kaempf, 2011:442). This is part of a movement called the interpretative turn, which has become important in the field of psychology to understand individual human action. The Cultural Narrative Analysis designed by Annika Arnold (2018) translates theoretical considerations of narrative and story into practical applications in climate change narratives. The structural elements of a narrative and story are considered to be the same, following Arnold's (2018:62) account of narrative analysis (Table 1).

Table 1. Structural elements of a narrative or story adapted from Arnold (2018)

Element of narrative/story	Explanation
Beginning-middle-end	Structure of a story
Unfolding events	Situations described in the story
Presentation of characters (hero-villain-victim)	Human and nonhuman entities that have a role in the story
Plot	The development of events
Moral/transformation	What can be learned from the events in the story

One addition to this list is in the category of character presentation. Uri Margolin studied the presentation of characters in literary narrative and identified basic conditions for a character to be recognized as such. Furthermore, he argues that “such a verbally constructed entity may also project an image of a possible human or humanlike individual with nonverbal properties and relations (Phelan) or a “homo fictus” (Hochman)” (Margolin, 1990:453).

Table 2. Basic conditions of character's existence adapted from Margolin (1990)

Basic condition	In the context of stories
Existence	The character needs to actively exist in the story world and not be a literary expression, such as a cliché or stereotype
Identity	The character needs to embody individual properties that distinguish it from other characters
Uniqueness	The character has a combination that is special for that character

The basic conditions of characters by Margolin (Table 2) show that something or someone can be a character in a story without fulfilling an active role of hero, villain or victim. They can also ‘just’ be present in the story. Thus, water as a character of the story does not have to be a hero, villain or victim, but can be categorized as a side character.

2.2 Stories of water from the Netherlands in history

Inspired by ‘Water: A Dutch Cultural History’ and ‘Verhalen van Stad en Streek: Sagen en Legenden in Nederland’, this section provides an overview of recurrent narratives of stories about water in the Netherlands from the year 1400 until 2000 (De Blécourt et al., 2010; Jensen, 2022/2024). Jensen found that all stories throughout the centuries pointed towards the same sentiment: the Dutch can overcome every water disaster. The narratives that she found in the stories were religious, technological and ecological narratives. The strongest narrative was the religious one, showing how people could overcome water by their belief in God and lead a life without sins. Dutch people were only small figures in the face of

God who wanted to punish them for their sins (Jensen & Duiveman, 2020). Sometimes, God provided the people with miracles, such as the rescue of a father and his two sons after they had been floating on the sea for two weeks (De Blécourt et al., 2010). Jensen (2024) found that “stories and poems offered consolation and lent a deeper meaning to the events by linking them with religious or moral lessons” (p.73).

The technological narrative shows how the Dutch can overcome water by developing water engineering projects, such as the Delta Works and the many dikes that protect from the sea as well as the rivers (Jensen, 2022/2024). There is a certain pride in controlling the water (Mostert, 2020). In this context of these stories, water is also described with the concept of ‘the water wolf’. Impoldering, the reclamation of land, was a weapon to fight the water wolf. Jacob Bartelszoon Veris designed maps for water management, including poems about the threat of the water wolf that needed to be fought by the lion, symbolizing the Dutch people, to emphasize the need for proper water management. The following was written on a map of the potential embankment of the Haarlemmermeer (Veris & Van der Laech, 1641):

The peasants on the moor, they raise a mighty roar,

And rise up one by one, to clamor and deplore

This wolf so cruel and foul, who cometh to devour them.

Oh! is there not a lion to seize and overpower him,

To pounce upon his frame, and with his jaws agape,

To tear and shred his hide, or tread upon his nape.

Another example of Dutch storytelling where the technological narrative is present is the relatively new genre in Dutch literature called ‘Ziltpunk’, which loosely translates to salt punk, ‘zilt’ being water with a salt level between sweet and sea water. Technological advances and glorious water works are used to protect the Netherlands from extreme future weather:

Ziltpunk: grand science fiction ideas mixed with unadulterated Dutch Glory. The sea, dikes, windmills, commercial spirit and bombastic mega-technology. That's Ziltpunk! (Teng & Boekestein, 2018:6)

The last narrative is mainly found in contemporary stories: the ecological narrative. This narrative considers water to be part of nature, being an entity that has to be respected and set free to flow wherever it needs to. These narratives are found in some older stories, for example a story from the middle ages about the herring that showed up in the well showing how “the land was subverted by the water” (De Blécourt et al., 2010:47). The Dutch people take a humbler position and in contrast with the technological narrative, the Dutch are not in conflict with water but can work with it (Jensen, 2022/2024). Although this last narrative is increasing in stories, the technological and religious narrative are persistent in storytelling about water. Phrases such as ‘battling against water’ are still more common in public storytelling, for example in the media (Jensen & Duiveman, 2020).

2.3 Water management history in the Netherlands

For centuries, water management and governance in the Netherlands was primarily focused on building more and higher dikes and digging canals to divert excess water from areas that had to be dry to areas where the water could be stored (De Graaf et al., 2009; Van de Ven, 1993). Governance was issued within local communities that organized themselves in local water boards. While water works were getting larger and covering more land, there became a need for an overarching organization that would take care of organizing water management. Thus, a national government organization called Rijkswaterstaat was created in 1798 (Lintsen, 2002). In the 17th until the 20th century, a lot of land was taken back from the water with highlights being the reclamation of the Haarlemmermeer in 1852 and the construction of the Afsluitdijk in 1932 which turned part of the sea into a fresh water lake and added a whole new province to the country (Van de Ven, 1993). Including the creation of the Delta Works in the 1980s, the 20th century was primarily focused on hydro technology to create new infrastructures to deal with the water.

As a result of floodings in 1993 and 1995, water management officially shifted from the traditional technical innovations towards more sustainable, integrative solutions (Van de Ven, 1993; Van Heezik, 2007). Dike enhancement was no longer seen as a structural solution to face the consequences of climate change. Instead, water management included nature development and landscape characteristics to work *with* the water, not *against* it. The umbrella term for this new approach to water policy is called Integrative Water Management (IWM), which refers to alternative water management on several kinds of water bodies (Wolsink, 2006). One example of IWM is focused on alternative river management called Integrative River Management (IRM), including ‘Plan Ooievaar’ from 1987 which encouraged bringing back rivers’ natural flow (Van Heezik, 2007). This new approach to water policy was supported by most

governmental bodies, locally as well as on a national level. Although citizens living in the areas influenced by these new policies were not always compliant in the beginning, the growing attention for water quality through nature conservation in combination with water management ensured public support. 25 years after launching 'Ruimte voor de Rivier', its successor, called 'Ruimte voor de Rivier 2.0', has been brought to life to cope with new and expected challenges (Programma Integraal Riviermanagement, n.d.).

2.4 Theoretical framework

2.4.1 Social-ecological theory

Social-ecological theory represents the overarching view of this research on how to consider the interactions within the studied environment. It is a trans- and interdisciplinary theory that goes beyond applying social theory on natural sciences or vice versa. Instead, it considers an environmental problem to be situated in a world that consists of both social and ecological aspects, i.e. in a social-ecological system (SES), where the social and ecological concepts cannot be considered separately (Aarts & Drenthen, 2020; Clara et al., 2024; Redman et al., 2004). Aarts & Drenthen describe an example of what they consider to be social-ecological research where both natural and social aspects are studied within the whole system. In this paper, the authors use the 'living environments in natural, social and economic systems' (LENSES) as a tool for their integral approach, considering the whole system in the study (Middleton et al., 2020). In order to study environmental phenomena, the researcher needs to understand that they exist in a social-ecological context and that they can only be studied through an integrative approach (Redman et al., 2004). Furthermore, it has to be acknowledged that social and ecological processes happen on different temporal and spatial scales and frameworks for research cannot be copied from one SES to another, no matter how similar they might be.

I acknowledge that my research environment is a social-ecological system and methodology is customized to this in order to study the research objectives as part of the SES. Interdisciplinary collaboration within one person, in this case the researcher, can be achieved by conducting sufficient background and historical research of the environment that is central in the subject (Redman et al., 2004). Furthermore, the researcher will immerse themselves in the environment that is the expected context of the stories in order to gain a complete understanding, including social and ecological concepts, of the narratives that arise from the stories.

2.4.2 Social constructionism

The theoretical lens through which people's behavior is understood is that of social constructionism. Social constructionists argue that an environmental phenomenon cannot be fully understood without its social context, in fact they "propose that attention needs to be turned away from trying to ascertain 'objective conditions' through more data and better science" (Jones, 2002:248).

Furthermore, it argues that there is not one truth or reality, in fact people construct their reality through experience and available knowledge. Therefore, an event can have different meaning for different people based on how they view and make sense of it.

Critics of social constructionism claim that "social constructionists do not acknowledge the 'reality' and independent existence of nature, the environment or environmental problems" (Burningham & Cooper, 1999:299). Although many critics acknowledge some good sides of social constructionism, they do not agree with what they call the strict or extreme social constructionism, which argues that nothing exists independent of discourse. Furthermore, they argue that all claims of reality have to be taken as valid, which could lead to an inactive attitude towards environmental problems to the point where they do not exist anymore.

Burningham & Cooper (1999) argue that the contextual constructionist does acknowledge the presence of environmental problems and conditions, while the strict constructionist does not in any way assess the reality of the claims.

In this research, I take the stance of the contextual constructionists, who try to "maintain a distinction between what participants believe or claim about social conditions and what is 'in fact' known about the condition" (Burningham & Cooper, 1999:304). In practice, this means that I will listen to people's stories while making sense of the ecological aspects of the environmental phenomenon by actively engaging with this environment. Although I focus on people's stories, thus on their truth in the social reality, it is impossible to take a strict constructionist stance while acknowledging the environmental phenomenon being part of a SES. Social reality depends on context; thus the context needs to be taken into account.

2.4.3 Agency and collectivity

The concepts of agency and collectivity are a red thread throughout the narratives, repeatedly recurring in narratives in different shapes. The concept of agency is closely related to that of power. In his power analysis, John Gaventa describes the relationship between agency and power as the following: "The power 'to' is important for the capacity to act; to exercise agency and to realize the potential of rights, citizenship or voice" (Gaventa, 2006:24). In the context of water management, it is also interesting to look at the duality of structure and agency defined by Anthony King in his chapter 'Structure and Agency':

For sociologists now, society consists of two divisible elements; structure and agency. On the one hand, stand the cold institutions of the modern society and, on the other, the creative individual.” (King, 2005:5)

Thus, when the ‘power to’ is with the structure, individual agency is low and vice versa. The institutions that represent the structure within water management are for example the regional water boards and Rijkswaterstaat, the national water board. Looking at the history of water management in the Netherlands, one can argue that individual agency was higher before Rijkswaterstaat was founded, when citizens had to take care of their local water management. This does not imply that in social society, only structures and individual agency exist to explain how social relations are constituted. King (2005) goes as far as distancing himself from ‘sociologists now’ by saying that society is built from human relations and “even the vast and apparently faceless institutions of modern society are ultimately reducible to the social relations between humans” (p. 23). Whether or not structure and agency constitute the social world is not within the scope of this research, but they are useful concepts to make sense of the differences and similarities between narratives.

Another duality that helps in understanding the narratives is that of individuality and collectivity. This applies both to experiencing the story and how stories are remembered. Michael Kenny studied how traumatic events in history are remembered on an individual or collective level. First of all, he states the way that they are connected:

All experience is individual in that collectivities do not have minds, or memories either, though we often speak as if they did. Yet it is also true that individuals are nothing without the prior existence of the collectivities that sustain them, the cultural traditions and the communicative practices that position the self in relation to the social and natural worlds. (Kenny, 1999:421)

Not only experiences or stories contribute to a collective memory, but also the joint action towards a common goal brings people together (Jensen & Duiveman, 2020; Sutton, 2008). Jensen (2022/2024) describes how an idea can also be part of a collective memory: “At least as firmly anchored in the collective memory is the idea that the Dutch are better than anyone else at controlling water, thanks to their pioneer spirit, cooperation skills, and technological innovations” (Jensen, 2022/2024:13). Repeatedly facing water issues and the continuous improvement of water management adds to a collective memory which leads to collective action (Jensen & Duiveman, 2020). Applying the concepts of individual memory, collective memory and the interrelation between the two to stories of water helps with illustrating how people make sense of their experiences.

3. Methods

3.1 Study preparations and conducting interviews

3.1.1 Combining social and ecological approaches to research

Qualitative research methods into environmental phenomena are a valuable toolkit for understanding the attitudes people have towards these phenomena (Kalof, 1997), to reveal patterns of discourse and narrative in society (Baake & Kaempf, 2011; Kaufmann & Wiering, 2022) and to uncover personal emotions (Severin et al., 2022). De Groot et al. (2011) also emphasize the importance of qualitative research through interviews “to uncover the qualitative richness of people’s visions at specific locations” (p. 27). This research aims to perform qualitative research methods within a SES, meaning that social and ecological concepts are not considered something that you can combine, but something which cannot be taken apart in the first place (Aarts & Drenthen, 2020). This study takes place in a SES, but to examine it from a story perspective, I take the two aspects apart from each other. However, they are always considered to be part of the same reality and influencing each other. In the discussion, I will take them together and reflect on the social-ecological approach as part of the methodology.

In order to do research within the SES, I immersed myself in the environment of the participants by hiking roughly 500 kilometers through the Netherlands. The experiential method of fieldwork has two benefits for this research: 1) it allows me to find participants for the interviews, and 2) I can develop a unique understanding of the stories being told in the interviews. The route that I took is called the NAP-route (figure 2). The NAP (Normaal Amsterdams Peil) is the measurement of water level in the Netherlands and it corresponds to the sea water level (Rijkswaterstaat, n.d.). The NAP-route is the line where $NAP=0$, thus equal to the sea water level and corresponding to the line where the sea water would reach if there were no dikes. By taking this route, an additional layer is added to the overall understanding of the role of water in the Netherlands and to the interviews, because it reminds me and possibly the participants of the vulnerability of the country. I kept a field diary during the hike to capture my



Figure 1. NAP route Bad Nieuweschans-Breda.
Source: author

impressions of the ecological environment and how it interconnected with the social aspects of the SES. I analyzed these fragments by reading through them after identifying the narratives to see how these related to each other and to the overall research.

3.1.2 Participants and interviews

The network of Vrienden op de Fiets (VodF) provided accommodation as well as access to participants of the research. It is a wide network of people that open up their own house to provide a bed and breakfast for hikers and cyclists. In total, 8 semi-structured interviews were held with people along the NAP-route throughout the whole of the Netherlands (Table 3).

Table 3. Overview of interview participants. Source: author

Participant	Gender	Age	Profession	Living location (north/middle/south)	Duration of interview
I	Female	72	Retired	North	39:30
II	Female	81	Retired	South	36:27
III	Male	71	Retired	North	31:50
IV	Female	74	Retired	North	52:59
V	Female	66	Occasionally nursing	Middle	41:13
VI	Female	86	Retired	Middle	42:22
VII	Male	72	Ferryman	North	1:11:36
VIII	Female & Male	43 & 48	Supermarket sales & courier service owner	South	58:07

Semi-structured interviews allow for open answers and can take the structure of a conversation as in unstructured interviews without straying from the topic (Leech, 2002; Lung, 2017). Participants were found when asking for accommodation. The interviews lasted 30 to 70 minutes and followed an interview guide (Appendix I). Besides the beforehand determined questions, the use of prompts to deepen the answers is an important part of an interview (Leech, 2002). They are follow-up remarks sometimes formulated as a question, in the case of formal prompts, but in other cases limited to one word that stimulates the participant to continue talking. In the email that was sent to the potential participants, it was not mentioned what route was taken or what the whole aim of the research was (Appendix II). Before

the interview, as little information about the research objectives as possible was given away to maintain an unbiased point of view from the participants.

The interview was considered to be an open conversation where the participant was allowed to go deeper into side subjects as long as the main topic remains water. Therefore, the follow up questions and prompts were an important part of the interview, allowing me to gain a deeper understanding of the participant's experience and understanding. There is space for stories outside the scope of this research, but it is important to keep the research objectives in mind and to realize that not all stories are useful to answer the research questions (Baake & Kaempf, 2011). For example, when a participant goes into drinking water issues in East Africa, the conversation is steered by the interviewer towards other experiences or stories about water in the landscape. This demands an open-minded attitude that applies the method of active listening, which "requires the listener to avoid common responses when listening, even internally, and these are very difficult habits to break" (Robertson, 2005:1053).

I argue that active listening goes hand in hand with the reflection-in-action concept explained by Yanow & Tsoukas (2009). This concept shows how it is possible to reflect while still being in the event on which is being reflected. In this case, the event is the interview, and I, as the researcher, have to reflect on the answers, my questions and my own thoughts and interpretations. Reflection-in-action allows me to quickly respond to the participant while keeping in mind the research objectives.

3.2 Data analysis

3.2.1 Interview transcription and coding

The interviews were transcribed using the automatic transcriber function in Microsoft Word and manually corrected where needed. The interviews were then coded in the coding software ATLAS.ti. The interviews were coded using a combination of deductive coding, top-down coding with predetermined codes, and inductive coding, bottom-up coding creating new codes, while writing memos about the text, codes and concepts. Predetermined codes include the following list, based on methods of Arnold (2018):

- Beginning – middle – end
- Storyteller
- Struggle
- Character (hero-villain-victim)
- Plot
- Events

- Moral

Initially, the codes were grouped in either ‘content’ or ‘structure’, following the CNA model. However, for many codes it was not completely clear to which of the CNA components they belonged to and the forced categorizing slowed down the coding process. Thus, I decided to leave out the components and focus on the creative process of coding guided by techniques and procedures of Corbin & Strauss (2008). They emphasize the value of open and iterative coding which “requires searching for the right word or two that best describe conceptually what the researcher believes is indicated by the data” (p. 160). Furthermore, taking a step back and looking at the data from different perspectives keep the creative process of coding and analysis on a high level, almost creating a dialogue between the researcher and the data.

Part of the creative process of coding was also to let go of codes that were not helping in categorizing the text. This was the case for the codes concerning the structure of the story: beginning, middle and end. Most of the stories that came forth from the interviews were not clearly structured in the way that Arnold portrayed, which made it hard if not impossible to compare them on this level. Instead, codes that were more useful included reflections and emotions of participants and the shape and value of water. These both highly contributed to interpreting the human-water relationships.

During the coding, I created memos to comment on and discuss codes, concepts or other interesting findings. The memo writing was not only a way of reflection of the data, but also of expressing thoughts on paper that enhanced what Menary (2007:622) calls “the cycle of processing that constitutes a mental act”. I created one memo for each code that was present in the interview with a description of what that code meant in the interview. After coding all of the interviews, I was able to search through the memos to easily find similarities, differences and patterns (Figure 2).

emotions					
Name	Type	Grounded	Density	Groups	
Emotions	Code 3	0	0	[1-4-2025 Int. 1]	
Emotions 2	Code 3.2	0	0	[7-4-2025 Int. 2]	
Emotions 3	Code 3.3	0	0	[7-4-2025 Int. 3]	
Emotions 4	Code 3.4	0	0	[8-4-2025 Int. 4]	
Emotions 5	Code 3.5	0	0	[8-4-2025 Int. 5]	
Emotions 6	Code 3.6	0	0	[8-4-2025 Int. 6]	
Emotions 7	Code 3.7	0	0	[8-4-2025 Int. 7]	
Emotions 8	Code 3.8	0	0	[9-4-2025 Int. 8]	

Figure 2. Example of memo list of the code 'emotions' (Int. = Interview). Source: author

3.2.2 Cultural Narrative Analysis

To analyze the stories that came forth from my interviews, I used the qualitative method of analysis developed by Arnold (2018) called the Cultural Narrative Analysis. It is an interpretative approach, which means it acknowledges the role of the researcher in understanding and interpreting text (Van Hulst et al., 2024). CNA integrates three different narrative analysis approaches drawing on a structural model of narrative, narrative policy frameworks and on genre. Each of these frameworks highlights a small number of important aspects of narrative, which is useful in the sense that it allows the researcher to focus on these aspects only and provide in-depth analyses. However, as Arnold (2018) points out, all three analyses are also incomplete because of this. Where the structural approach does not sufficiently consider the content, which leads to gaps in interpretation, the narrative policy framework does not take into account structural aspects of the text, thus putting aside valuable analysis possibilities. Finally, the genre framework bridges the gap between the other two, but does not adequately take into consideration the different spatial and temporal scales on which narratives originate and change. Arnold (2018) argues that different forms can exist in one narrative based on the interaction with content and structure. In other words: content and structure shape the spatial and temporal scales on which the form of the narrative is then based. This analysis of the components of a narrative resulted in the model of CNA (Figure 3).

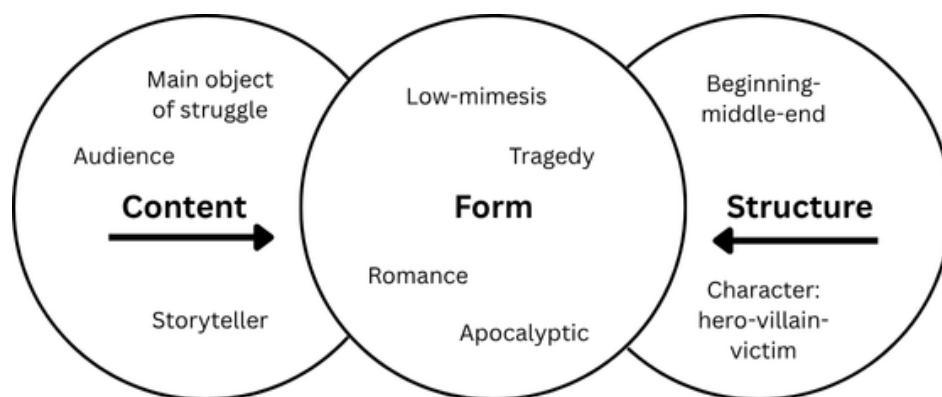


Figure 3. Cultural Narrative Analysis model combining content, form and structure adapted from Arnold (2018)

The forms that Arnold put in her model for CNA were low-mimesis, tragedy, romance and apocalypse. Low-mimesis stories have little plot, do not contain extreme emotions and play in a local setting. In contrast, both tragedy and romance are characterized by strong tragic emotions caused by a struggle. However, while in tragedy there is no solution and no hope, the romantic form believes that change is made through action and is thus more hopeful. In the

apocalyptic form, the struggle transforms into a conflict that keeps getting bigger and plays on a global scale. It would be too general to state that all forms that are listed above exist in all narratives in my research, because this would detract from the complexity and the presence of nuance in the narratives.

3.3 Ethical considerations

In research where people are involved, it is important to acknowledge the ethical considerations that have to be taken into account with data collection and processing (Robson & McCartan, 2015). This includes following a code of conduct that respects the research participants and the role of the researcher. The following sections discuss the different phases of this research regarding 1) the ethical considerations that were made, and 2) how they were met in that specific phase of the research.

3.3.1 Study preparation

When a study involves people, they always have to be asked for consent to participate in the research including specific information of what the research plan is, i.e. what will happen with their information. To prevent the participants from developing ideas and thinking about the subject beforehand, I decided to not share the Research Objectives and the fact that I was hiking the NAP line. I described the methodology of doing interviews and collecting personal information in the consent form to ensure that the participants were able to give informed consent. Consent was asked in the same email that also asked for accommodation (Appendix II). This letter also included information about their right to withdraw at any moment during the interview.

3.3.2 Data collection

Data collection entailed conducting interviews with participants that agreed beforehand on partaking in the research. These people were not only participants of the research, but also my hosts. In every new house, I had both the role of researcher and guest. As the guest, I wanted to make the host at ease and talk about things that they brought up and not cause any possible tension. However, as researcher, I wanted answers on my questions that would help me to achieve my research aim. I separated these two roles by taking the role as researcher only in the interview. Before and after the interview, I was a guest and depending on the participant and the subject of the interview I refrained from talking about possibly distressing subjects, except if the participant themselves brought it up.

Another unique part of my interviews was that I was able to ease in and out of the interview, because I had some conversation before and stayed with them afterwards. This created a safe space and it allowed the participant to voice any

thoughts or opinions off the record that might have lingered after the interview. Especially the subject of water threat and safety can scare people or cause worry. Giving the participant the possibility to talk about it or completely change the subject gave me the reassurance that I did not leave them with an uncomfortable feeling. It is not possible to know for sure, but the duality of my roles of researcher and guest might have been beneficial for the interview and thus for the research.

3.3.3 Processing data & future research

The participants were anonymized using an online anonymizer tool. Information about their current or past environment was kept vague in data analysis when needed. In the consent form was stated that personal information is destroyed after the thesis is finished and graded. The data from the interviews is allowed to be kept by SLU in case of relevance for further research. This is confidential and cannot be accessed without the right authorization.

3.3.4 Role of the researcher

The role of researcher was alternated with the role of a guest. Being a researcher made the role of guest a vulnerable one: would any disputes in the interview influence the attitude of the host towards the researcher as guest? This made the balance between researcher and guest even more precarious. I had to trust that people who are a member of VodF are in general good people that can be trusted to provide with food and accommodation as promised despite any disputes about the research. For safety reasons, I shared my location 24/7 with my parents and kept in contact with my supervisor through text messages. Although I was in a vulnerable role, I tried to not let this influence my questions too much. This went hand in hand with the notion of having respect for participants and not push for answers.

4. Results

4.1 From narrative to analysis

In this research, I performed a Cultural Narrative Analysis designed by Arnold (2018) to find out and distinguish between different stories that were told in the interviews. Through these narratives and their connection to water, I hoped to find a way to conceptualize and concretize the relationship of Dutch people towards water. Through a combination of deductive and inductive coding, studying the interviews closely and brainstorming on connections, differences and similarities, I came to six narratives that reflected the stories that were told in the interviews. An overarching theme that came forward in several narratives was the reflection of the storytellers towards themselves, their (in)actions or regarding their connection to water (Section 4.3).

Throughout analysis of the interviews, I found two other concepts that illustrated the relation between the narratives. Both concepts refer to the relationship of the interviewees to water. First, there is the concept of collectivity or individuality in experiencing interactions with and relations to water. Second, there is the concept of agency of the individual or collective, which entails how much influence the individual or collective has in the interaction with or relations to water. This ranges from having no agency to having full agency. I then mapped the six narratives onto a 2-dimensional space (Figure 5) to illustrate how the narratives expressed aspects of agency and collectivity. These positions provided information about the main trend in this interview regarding agency and collectivity, which means that outliers are possible depending on personal experiences of participants.

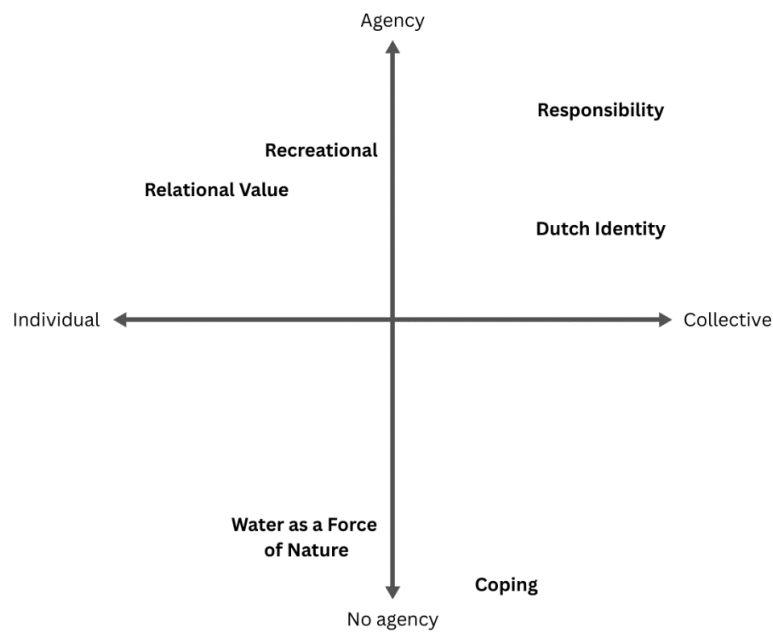


Figure 4. Narratives on the scale of agency and collectivity based on main trends from interviews. Source: author

Following Arnold's Cultural Narrative Analysis, the narratives that are presented below are explained through the concepts of content, structure and form. They address different views on water that show the variety of stories that exist among Dutch people. The content sections elaborate on information about the storyteller, events that were typical for this narrative and the setting in which the story takes place. The structure sections elaborate on the characters that were playing a role in the narrative. The form sections describe which of the four forms is present in the narrative: tragedy, romance, low-mimesis or apocalyptic. As Arnold explained in her discussion of the study, multiple forms can be present in one narrative based on the interaction between content and structure.

4.2 Narratives

4.2.1 Dutch identity

When interviewees talked about water or the relationship with water, they often referred to how the Dutch in general are related to water and how they treat water. They felt connected to dike builders and the history of water management from the Netherlands.

Content

Two interviewees emphasized how they assume that the Dutch are looked at from foreign countries:

The Netherlands has become somewhat famous worldwide for water. Beautiful projects. Rotterdam, the Meuse, but also the delta works, the dam system at Maassluis. Good work. And Rotterdam yes, the ports and without water Rotterdam would not be Rotterdam. (V: 19)

One interviewee compared the Dutch approach to water issues to that of Bangladesh. He realized after visiting the country that the mentality regarding water issues is different:

I heard there quite often: bad luck, what to do? So that whole mentality is very... It's predestined. If Allah has devised that with you, then that is your destiny. Whereas in the Netherlands we have a different approach to tackling that problem of water. We have become endlessly good at that, that we have to maintain palm beaches all over the world and salvage submarines and I don't know what. Building dikes. Storm surge barriers. (VIII: 475)

As the quote above hints at, there is a long history of creating and improving water works in the Netherlands. As one interviewee claimed: "If we had no locks and no dikes, half the Netherlands would be under water." (IV: 161)

Not only the waterworks are part of the Dutch Identity narrative, also the floods are. Five interviewees brought up water disasters, including the disastrous water disaster in 1953, a huge flood in the southeast in the 1990s and a recent big flood in the south in 2021. One interviewee talked about how his father was stimulated as a child to help the children in the affected area:

He remembered that they had collections for those children and he had saved up tickets. That was his most precious possession and he gave it away. (VIII: 563)

One of Jensen's (2022/2024) conclusions after reading stories on water from the Netherlands was that water disasters give the Dutch the identity of the people that fight against the water. One of the interviewees indicated this too:

When I lived in Rotterdam, at one point in the 1990s, which was that? Towards the Betuwe, it was all flooded there too. That was pretty intense. [...] That does belong to the Netherlands with all the rivers and dikes. (V: 207, 215)

Structure

The most important character in this narrative is the Dutch people as a collective. The Dutch take their identity from being the victim of floods as well as acting as the hero when trying to conquer the water. A side character that was particular for this narrative is the former Queen Beatrix. This interviewee talked about the floods of 1998 in her area:

In 98, then it was very critical, but then it didn't... Or yes, there were some streets flooded here. Because Beatrix was also there, she didn't come just like that. (I: 85)

The presence of the former Queen served as a symbol for this interviewee for how great the despair was during and after these floods.

The other important character in this narrative was the water, acting as the villain in these stories. In both roles of the Dutch, as victim and hero, the water was the villain that needs to be beaten.

Form

The form of this narrative was both a tragedy and a romance. When Dutch people were portrayed as the victims of water disasters, which Arnold describes as “innocent suffering” (Arnold, 2015:105), the narrative took the form of a tragedy. It included strong emotions connected to water disasters. However, when the storyteller talked about Dutch people as heroes that build water works to protect the country from the water, the narrative shifted towards a romantic form that applauds action to change the situation. Interviewee VIII described this well: the Dutch have a more hands-on mentality and build dikes and water works to protect themselves. This romantic form in the Dutch identity narrative was also connected to a trust in the heroes and a safe future.

4.2.2 Responsibility

In all interviews, there seemed to be the idea that something could be done about the water issues that are troubling the Netherlands. Considering a narrative to be a way of making sense of a situation, interviewees used the responsibility narrative to make sense of the future and who is in charge of dealing with the water issues. Then there were also more everyday situations where individuals had more influence in how they handled water.

Content

The interviews revealed that when talking about this subject, interviewees felt and spoke from the Dutch people as a collective. The Dutch people were either mentioned as ‘we’:

Yes, worrying. We live in a prosperous country. The farmers are getting hit hard, but just look around here in the neighborhood what kind of cars are driving around and is that all necessary? Take the bike, I would say. We could do with less. That’s all emissions. Traffic produces enormous emissions and we can really do something about that. (V: 187)

Or as ‘they’:

Yes, I’m curious about that, because on the one hand they think, they have to build the dikes higher and higher, more and more. They’re going to build at the lowest points in the Netherlands, I think that’s really nonsensical. (III: 147)

Although interviewees did not always see themselves part of the collective, resulting in a ‘we’ or ‘they’ as protagonist in the story, there was usually the collective that could change something. The idea that lived with many interviewees was the trust in the state to provide dike builders and water engineers to keep the water out:

You grew up with: we are very good at building dikes and it is regulated by the State and we are safe. (VIII: 293)

The same interviewee elaborated on this idea of responsibility and how it related to her life:

In my life, I wonder if it will come to this point. Another 50 years or so, I don’t know. But then you also think about your children and possibly your children’s children. Also, with the conviction in your upbringing that you think: it will be okay or then they are going to make those dikes higher. [...] On the one hand, I’m not really busy with it, but I do think about it more. Like, is it really that dangerous in our situation? It also feels naive to say: it won’t be that bad. (VIII: 319)

The building and reinforcing of dikes seemed to be the main form of water management that interviewees knew:

Then we also see that those dikes have to be reinforced. You also see that the sea water of course, or the water level of the sea, is getting higher anyway, all that water. So those dikes just have to be strengthened, because otherwise you really have floods, that really won’t work out. (IV: 137)

The husband of one interviewee was employed by the State to help “making mats for the dikes, to reinforce the dikes with yews” (VI: 299).

Although the interviews revealed a collective responsibility to protect the Netherlands from the water, they also pointed to the State as having the duty to initiate these projects. Interviewees also shared an understanding of the possibility of too little water in the future. Although this was more related to drinking water and not so much to water in the landscape, it showed that there is awareness of individual responsibility regarding water by showering less, collecting rainwater for the garden, collecting the first cold water from the shower and turning off the faucet when brushing the teeth (II, III, IV, V). However, when it came to long term solutions, one interviewee claimed that “engineering and science will have to do that. They will have to make it right” (II: 406).

Structure

There were many characters at play in this narrative, ranging from experts to laypeople. The heroes were the dike builders and water engineers that protect the country:

I hope we still have good bridge builders and good delta builders. I don't worry that that won't work out for the Netherlands. (I: 327)

Besides engineers and constructors, there were also the water boards that played an important role in the water management in the Netherlands:

The water level in the Netherlands is entirely determined by the water boards with pumping stations, because otherwise we still don't keep it... (III: 175)

The interviewee living in the polder also mentioned the pumps and pumping stations as something that explained their trust as necessary to be able to live there:

You can get so worked up about it, but that won't get you anywhere. (VI: 518)

Another hero in this narrative was a Dutch historian called Maarten van Rossem who was mentioned in two interviews as an example of taking individual responsibility:

Yes, and I find it funny, because I listen to Maarten van Rossem. He doesn't take a shower every day, he does it with a washcloth. (II: 477)

This shows how well-known people could be an example for others to change their behavior and thus become important characters in other people's stories.

Form

This narrative brought forth an interesting mix of romance and apocalyptic form. On the one hand were the heroes, being the water engineers like in the Dutch identity narrative, who gave hope for a safe future with collective action. This resulted in a romantic form, characterized by strong emotions against water and the focus on action for change. However, some participants also voiced worries about the future that takes the form of an apocalyptic narrative. This happened for example when interviewee VIII talked about the future of their children. The narrative shifted from a romantic one to an apocalyptic one where the participant emphasizes the uncertainty of the future in relation to other characters in the story. Furthermore, interviewee IV addressed how the sea water was getting higher and how the Dutch need to build more dikes to prevent big floods. This statement leaned towards an apocalyptic form where flooding became a national problem where the hero, the Dutch people, might not be able to overcome the villain, the water.

4.2.3 Water as a force of nature

The following narrative showed how interviewees also recognized a different side of water where they feel less agency than in the previous narratives. The images drawn in these stories show how water can be scary, unpredictable and dangerous.

Content

One interviewee touched upon the human-nature relationship that is dominant in the Dutch society: “because we think we are the boss, but forget it, nature is the boss” (II: 249). The intensive water management in the Netherlands of the past centuries show the idea of the Dutch conquering the water. However, this narrative shows that this way of thinking is not always supported and depends on time and space, i.e. when and where you ask someone.

One interviewee lived nearby the area that flooded in the water disaster of 1953 where more than 1800 people died. She remembered that night vividly:

We could hear the cows roaring above the water. [...] It was horrible. And cold. And windy. The weather was horrible. (VI: 97, 101)

Another interviewee also recognized the dangers of the sea, being a sailor and often sailing from the main land to one of the islands in the north west.

But near Vlieland [the island], it can be quite spooky. Then you really have to be careful. Then every morning you sit and watch to see if you see other ships sailing and then you think, I must be able to do it too. You have to know what kind of weather it is. You can't leave if the weather is bad within a few hours. Then you shouldn't leave. Those are things you really have to pay attention to. (VII: 161)

This story showed a more submissive attitude towards water than the ‘Dutch identity’ narrative: it is a force to reckon with. The same interviewee later elaborated on a story where he himself got into trouble at sea, because there was “too much wind and too much current” (VII: 173).

The image of the Dutch conquering the water was also contradicted by the water itself. After considering the consequences of the water disaster in the province of Limburg in 2021, interviewee VIII says:

It is also kind of unreliable. You grow up with: we are very good at building dikes and it is regulated by the government and we are safe. I think that's how it's taught to you, while I also find water very unpredictable. Undercurrents, this kind of camping situation¹. That can catch you off guard. (VIII: 293)

¹ The camping situation she talks about refers to when she and her family went on holiday in the south of the Netherlands. It had rained a lot in those weeks and the camping was fully drowned, causing discomfort and worry.

Not only past water events and current struggles with water seem to be on people's minds, but also what might happen in the future is a source of worry:

I hope they don't flood the place if it comes to war, because then we will be pretty screwed. (VI: 461)

Structure

The title of this narrative revealed one important character: the water. It was the villain that threatened the Netherlands, making victims of the Dutch people. The water came and water issues could not always be fixed:

The situation is serious and cannot be solved completely. You can make the water management so good, but the moment they don't get it right in France, it comes rushing through the Meuse. Or if they don't get it right in Germany, it will come rushing through the Geul and you'll be stuck with the same problem. (VII: 291)

The Dutch people were portrayed as victims. For example, the women that were the main characters in a story from interviewee IV about a dike breach:

We had here, which is another story, years back 4/5 ladies and they were hiking. They were from Wilnis. Wilnis is somewhere in North Holland I think. It's in a polder. Then it was very dry and then it dries up. Then a dike broke. In the morning, we heard the news. [...] I say: I don't want to worry you and I don't believe it is very serious, no accidents happened. I say: you are from Wilnis, but a few of those dikes have broken through, so there is something under water at your place. That was panic, of course. So, she called home and yes, there was. One person's car was under water and the other person's living room. (IV: 299)

Form

This narrative was characterized by a tragedy form of narrative. Water as a force of nature was recognized as an uncontrollable entity that puts people, who are again the innocent suffering, in danger. Although some stories were not about water as destructive in itself, for example the statement of interviewee II talking about nature as being "the boss", they still followed a tragedy narrative where people have little agency over what happens to them regarding water.

4.2.4 Coping with the threat of water

In order to make sense of and process what might happen in the future regarding water, people tended to look away from what might actually happen with water. Instead, they saw an alternative future, claimed they like to live in the moment or plainly accepted their future whatever it may look like. Stories following this narrative seemed to involve a coping mechanism in order to not be confronted all the time with the possibility of a water disaster.

Content

The first of three different ways that interviewees coped with the threat of water is to see an alternative future that could potentially be worse than a water disaster, whether that is on a national level or on a personal level:

Surely you are experiencing a nuclear war. [...] Probably, but of course anything can happen to you. (VII: 335, 339)

Another interviewee stated that we are “more likely to be in a war than anything else” (VI: 389). After this, he and his wife looked back on experiences in the war:

Yes, there was just nothing. Those few stores that were there, they were just empty. Then there would be another stock and people would have coupons and then I would go to Breda with my mother, because there would be something for sale that she liked, but we would get there and everything was already gone, so we could go back home. You actually remember that quite well. (VI: 405)

Other worries about the future were rooted in current political developments in the United States that cause uncertainty and frustration:

I’m much more worried about Trump. That with the Dutch, I believe all that. But that that man is in power there and in a climate treaty just says: it’s signed in Paris, but I’m not participating and the coal plants have to start generating energy again. They are already the most polluting country in the world. That’s much worse, that problem is much bigger. (VIII: 379)

The second type of coping mechanism regarding the threat of water is to not look at the future, but instead focus on what is happening now:

With time comes wisdom. I sometimes think ahead, but that’s more to plan fun trips. But I’m not a doomsayer, definitely not. No. Then I just say: it is what it is and live in the moment. (II: 547)

Lastly, there was coping through acceptance. Interviewees recognized the water threat, but choose to accept the possible consequences:

If it gets destroyed, then I think: then it has been good. I’m not leaving because of that. (I: 129)

Interviewee VII shrugged his shoulders when asked what he would do:

That’s already quite a difference, because I wonder if it will be that much different here. I keep dry feet on the fifth floor. [...] Then you have a boat. (VII: 307)

Structure

The role of water in this narrative was comparable to that of the ‘water as a force of nature’ narrative. It was the villain of the story that comes into the lives of citizens, the victims, creating uncertainty and destruction:

Because I do think that the sea level is going to rise and of course the risk increases that we will have a problem here. (VIII: 323)

And:

You can also see that the sea water of course, or the water level of the sea, is getting higher anyway, all the water. So those dikes just have to be strengthened, because otherwise you really have floods, that doesn’t end well. (IV: 137)

Furthermore, one interviewee argued that “water always surprises you” (V: 203). Thus, water management might be sufficient, it was uncertain what the water in the future might bring. Another interviewee mentioned the change in gulf stream dynamics and potential consequences:

I am more worried about the Gulf Stream changing than the sea level. That sea level will take a while, but if the Gulf Stream changes... (VIII: 329)

This showed how the water is considered to be a rather slow villain who will take a while to do real damage. Many interviewees were also reluctant to change their lifestyle based on current and future water issues, thus accepting the potential consequences:

Then it must be life threatening, but otherwise no. (III: 159)

Interviewees referred to their living area as a place where they will “keep dry feet” (IV, VII). The only interviewee that would change their lifestyle was the couple with young children:

I think you will have to. Rather sooner, because otherwise we will all start thinking the same thing. Actually, it’s better to do it now, right? (VIII: 449)

These quotes reveal the way water is seen as a force that cannot always be stopped and how Dutch people are victims of that. However, there was not a hero in this narrative.

Form

This narrative showed how content and structure come together to create rather pessimistic forms of narrative. Depending on the scale of the coping mechanism, the narrative is either apocalyptic or tragedy. In case of sketching an alternative

future, e.g. the changing Gulf Stream or political developments, it is a more apocalyptic narrative where the problem suddenly becomes global. The other way of coping that was shown through this narrative is more local. Participants acknowledge the potential harm that might be inflicted upon them, but choose to accept this tragedy.

4.2.5 Recreational

Stories that followed this narrative were characterized by light, happy memories of positive experiences with water. They included recreational activities where the interaction with water was the main subject of the story, for example swimming, ice skating, walking, surfing or playing near the water as children.

Content

Recreational activities that came forth from stories ranged from childhood memories to present day trips with family. Interviewees often talked fondly about their childhood.

We were always playing at the ditches of course, tadpoles and I don't know what. We were always playing at the ditches. I grew up at the water. (IV: 97)

These memories as a child could be quite vivid and clear in the memory. One interviewee even remembered the exact day of the year that her story took place:

When we were 9, we went to my grandfather's farm and then my father made us learn to swim. September 18, we came out of school at night and they put a rope on our belly and then there was a very big pond for when there was a fire on the farm that they had water to put [it] out. So that one was pretty deep, so we couldn't stand there anymore. Do it this way, he says. I can still see him standing on the shore, but he could swim well himself. Before it was winter, before the ice came, we were all good swimmers. (VI: 173)

Six interviewees mentioned ice skating and 5 mentioned swimming as a recreational activity that they enjoyed on or in the water. These were mainly connected to childhood or adulthood with children. Other present-day activities that did not include children were walking and biking next to canals, rivers and the sea.

Structure

The stories within this narrative included many characters, such as partners, children, friends, pets and natural entities. These characters could not be fit in one of the categories of hero, villain or victim. Instead, these characters seemed to be side characters in the story that accompany the storyteller. They were rather

important, as the interviewees often mentioned them when they were asked what they do around water. Interviewees often talked about relatives in this narrative:

I also really enjoy going there with the kids. You also have kind of little beaches to just recreate there in the summer. Then we go find clay and pottery and things like that. (VIII: 35)

These were sometimes also recurrent events that are traditions within the family:

I'm not married, but I do have a lot of nieces and nephews, so I'm an aunt and they liked to come and stay. We would always go to Hoek van Holland, that was kind of part of it, to the beach. (V: 243)

Another interviewee talked fondly about his dogs regarding recreation near the water:

With the little dog, I love to swim together. That is fun too. She can swim like the best of them. (III: 63)

Form

The recreational narrative followed a low-mimesis form, where little happens in the plot and the events are on a local level. Emotions are more positive and happier and not overshadowed by conflict.

4.2.6 Relational value of water

This narrative shows how water has a relational value for the interviewees. This meant that specific water entities are valuable to them because they live or recreate nearby.

Content

The main object of the story in this narrative is regarding this relational value that the interviewee attributed to the water that is around them. Through knowledge on history and local water management, positive associations with the water and own reflections on its presence, interviewees showed how they valued water in relation to themselves. For example, after asking for associations with water in the landscape, 6 out of 8 interviewees started talking fondly about the water that was near to them.

Then I think first here about the Lek. It's 2 kilometers from here I think. I like to cycle along there, towards Schoonhoven for a while. (VIII: 35)

Another interviewee explicitly mentioned how the closeness to water is important to her: "If it's not there, I would miss it. I always like having water nearby or a small lake." (I: 213)

Another characteristic of this narrative is the knowledge that interviewees shared about the history or water management in the area. It showed interest and connection to the environment:

I'm one of the people who created a website for the so-called Rijndiep Veerders where there's a lot of history about the water management here and so forth. Those are just things that interest me, that actually interest everybody. The more you delve into it, the more interesting it becomes of course. (VII: 79)

Structure

The two characters that were at the front of this narrative are the interviewee and the water. They were both neither hero, villain or victim, but rather a main character, which was the interviewee, and a side character, the water, who relate to each other.

In contrast to the recreational narrative (Section 4.2.1), this one is focused on the individual relationship to water. Interviewees emphasized being alone as part of the experience:

When I came home from school and I was biking, I always made sure I was alone. Then, before I went home, I would sit by the creek. (II: 83)

Water bodies had their own character and brought a different atmosphere which resulted in different relations to it. For example, the sea was recognized to be "something else" (VIII: 131) or with a "different atmosphere" (V: 49) than the rivers. While the sea was unique in its infinity and vastness (I, VII), the rivers were flowing and enable trade by water (III, V).

In some cases, the interviewees gave the water agency by stating that it actively did something:

It's a very old river, so it found its own way. (V: 163)

Another example is when interviewee II talked about the pond near her house:

I am always happy when I see the Wilhelmina pond appear. When the [leaves of the] trees go away. I'm also very excited to see how long it takes for the pond to disappear again. (II, 162)

Of course, it was not water that disappeared, but the trees that grew in front of it. However, formulating the sentence in this way implied a more active role for water than the context would suggest.

Another way that water appeared to have a relational value is because it is part of the landscape. Seeing the water as part of the landscape was part of the experience through which the interviewee feels connected to it:

When I see the cows along the IJssel I think: that fits here. [...] The river and then the cows and the landscape around it, I do fit in there. (V: 23, 27)

Other examples of characters that were valued as part of the landscape with water are trees, the moon and the beach (II, III).

Form

The form of this narrative is comparable to the recreational narrative. A low-mimesis form dominates the stories with no conflict and little change in plot.

4.3 Reflexivity of the participants

During the interviews, it became clear that water in the landscape was not a topic that interviewees talked about a lot with others, especially when it comes to emotions and feelings towards water. As one interviewee said: “I often can’t describe everything very well, but then I think: that’s a feeling” (I: 213). This resulted in interviewees reflecting on their own thoughts and answers on the spot. Thus, the interviewee was not only aware of their own answer, but also of themselves as they could see their answer from a distance. In these moments, they changed from being a first-person storyteller to a reflective storyteller which brought up interesting layers of the story that might have stayed hidden otherwise. The following is a reflection of an interviewee on why he is reluctant to go into cold water:

I almost drowned once as a child. Got under the ice and then nobody saw me and then I ended up under the ice. I climbed out, but the ice kept breaking off because it was very thin there. So that was something, that I was suddenly in the middle of the forest in the freezing cold. I don’t know if that’s why I don’t like cold water. [...] It was pretty traumatizing. (VIII: 109, 113)

Other reflections that were related to the ‘recreational’ narrative were about the connection to the sea and why the interviewee thinks that he still felt it:

Maybe because of the feeling or because of the childhood, which makes you think about it [the sea]. (III: 123)

The same interviewee also mentioned what he used to do with water: “That is a beautiful water rich area, where we had so many great adventures on the water. With little surf boards and all those silly things. I could not surf at all, but that did not matter.” (III: 23) This quote pointed out how the interaction with water is more important than the actual activity and this then explains why all these 8 interviewees can talk fondly about water from such different backgrounds and point of views.

Another narrative where interviewees showed awareness of themselves and their relation to water was the ‘relational value of water’ narrative. The closeness to water was mentioned as reason of why they feel connected to it:

In Utrecht, I probably would have had a different association. [...] Then it probably would have been the Maarsseveenseplassen, what I would have answered. [...] Because then that’s reasonably close. Now you don’t get there because it’s fairly far away. (VIII: 39, 43, 47)

Two interviewees realized throughout the interview that they felt more connected to water than they realized:

I wasn’t even aware of that myself, but indeed I still seek out the water. (II: 138)

Interviewee VIII did not only realize that she felt connected to it, but also that she felt she, and perhaps more people, should know more about this:

I watch it all the time, so I guess I feel somewhat connected, right? [...] When we talk about it like this, I think: I really should know more about it. What is actually taught about it in education? Pretty crazy, actually. (VIII: 233, 655)

Reflexivity was mainly found when water had a positive connotation in the context. However, there were also cases that reflection happened in the context of the ‘water as a force of nature’ narrative. Interviewee VI who was close to the disaster area in 1953 answered the following when I asked if she was ever scared of this happening again:

No, we actually never realized. (VI: 153).

This interviewee never thought the possibility that something might happen and that they live in a vulnerable area. Another interviewee went into another layer of reflection when I asked him about potential water issues:

Let’s say it like this: I am worried about it, but I don’t lie awake from it. (VII: 345)

This answer implies that he has already thought about his own attitude towards the issues: he knows he worries about it, but not enough to keep him awake at night. These reflections showed that people do think about water but rarely speak about it.

4.4 Experiencing the social-ecological system

Until now, I have elaborated on the social part of the social-ecological system of Dutch people and the water in the landscape. I kept a journal during the hike in which I noted my experiences, thoughts, opinions and observations regarding my

environment and especially the water that I encountered. The following sections present my findings regarding the ecological part of the social-ecological system in which I immersed myself for the three weeks of my field work. In this research, reflexivity is not only part of the discussion, but also of the results when it is regarding my own reflections during the hike.

4.4.1 Relating environment to interview

Engaging with the environment that is close to that of the interviewees allowed me to immediately have an image in my head of what the person was talking about. For example, right before I entered the living area of interviewee V, I crossed the river IJssel. While I was standing on the bridge I saw the example of what many interviewees addressed as an instrumental value of water: the rivers being used for transportation. Two long, narrow transportation boats glided slowly behind each other. One of them halted and started to drift to the left to be able to make the turn. I realized in that moment how special it is that these transportation boats are floating in a meandering river like the IJssel, while there are countless rivers that have been turned into straight canals by the Dutch long before. Later that evening, this exact thought was expressed by my interviewee: “People have done something to it, but that IJssel flows that way and it is a very old river, the oldest in the Netherlands.” (V: 159).

About halfway of the hike in the middle of the country, I walked on a dike looking out over the floodplains towards my next accommodation. My experience with living near floodplains gave me an uneasy feeling: I knew that this area floods a lot when the water level in the river increases. When I told my host about my contemplations, she admitted that it had been critical a few times. The water would reach the back porch and she had to work together with the neighbors to prevent the house from flooding. However, she would not want to move. Considering her endangered safety and potential damage done by the water, this did not make sense. Experiencing the beautiful views with chirping birds and grazing deer myself and hearing her talk lovingly about the area made me understand her point.

4.4.2 Awareness of water

During the whole hike I wrote down the different water entities that I encountered on a daily basis. Doing this made me aware of how much water is always around, whether it is a small stream in a field or a wide river that I followed for miles. Just like some of my interviewees I was not aware of this amount of water in the landscape or I took it for granted. Being alone every day for a significant amount of time brought a lot of opportunities for reflection about my own experiences with water. One day, I interviewed myself and while I was listing my current and past interactions with water, I had the following thought:

I was still working on my list, just arrived at Terschelling and the Amsterdam water supply dunes, when I realized that I have a great deal with water. I had no idea. (Field Diary, 2025)

I started looking at the landscape from a different angle, seeing the many small streams that connect to bigger rivers flowing all the way to the sea. I also started to alter the way I thought about my hiking: I went from following roads to following water. The next quote is of the 16th day:

Mobile phone almost died so couldn't view the route, but had remembered to follow the Merwedekanaal and that would take me to Gorinchem. So for me the water was also a landmark that helped me find my way. (Field Diary, 2025)

This was a key reflection in my diary and the first time I noticed a fundamental change in thinking about water in the landscape. The last page of the journal is filled with reflective thoughts about my renewed awareness and appreciation of water in the Netherlands:

The map of the Netherlands in my mind is permeated with blue lines, winding, straight, deep blue and cheerfully shimmering, created by human hands or created after whirling water in storms and spring tides. (Field Diary, 2025)

5. Discussion

5.1 Narratives on the scale of agency and collectivity

The narratives that showed the least agency were the ‘coping with the threat of water’ and the ‘water as a force of nature’ narrative. Here, interviewees showed concern about what might happen to them or how they took a rather passive attitude towards the question of how to deal with the threat. Although the Dutch are known for designing constructions that help protect the country and the people from the water, these narratives showed how people still feel like the water has the upper hand. It is similar to the religious narrative explained by Jensen (2022/2024) where people assumed it was fate or God that punished them. From the interviews, it seemed that God did not play a role in how people made sense of their experiences with water disasters. God or punishment were not mentioned. However, the idea that it is fate was voiced by three interviewees. So, although the Dutch have been developing water works to actively protect themselves from the water, this sentiment of that it is meant to be this way still played a big role in how people process these water disasters. It is possible that religious beliefs that are reflected in several poems and songs still have an impact on the everyday dealing with the threat of water (Mostert, 2020).

Furthermore, there were the ‘relational value to water’ and ‘recreational’ narrative that were both focused on the more pleasant experiences that people had with water. Here, the agency level was high as they were in control of these experiences. Water could take many different forms and was enjoyable in different ways. It was remarkable that the narratives of ‘coping with the threat of water’ and ‘water as a force of nature’, which had the more negative characteristics of water connected to it, were the ones with the least agency. The Dutch have been mastering the management of water. When this appeared to be not sufficient, it could lead to fear and anxiety for the unpredictability of this natural force. An explanation of this could be that looking at this force as one individual, like during the interviews, might have felt overwhelming. The outcome of the agency, or what the agent can actually do, depends on the situation and the person (Pacherie, 2014). Most of the time, it is true that two agents can achieve more than one and a challenge seems more probable to overcome with more than one individual. This approach to individual and joint agency can also explain why the ‘Dutch identity’ and ‘responsibility’ narrative are located higher on the agency, where the participant felt the power of the collective.

The narratives of ‘responsibility’ and ‘Dutch identity’ were located on the right side of the individual to collective scale, leaning strongly towards the collective. Interviewees referred often to the long history of Dutch water management, which showed how “the history of ideas and stories sedates, metaphorically speaking, in

our present” (Jensen & Duiveman, 2020:57). There was a deeply engrained idea of a collective fight against water, which was voiced as a hollow echo by interviewees. This makes me wonder to what extent they say this because they are Dutch and the Dutch have this relationship to water, while they might have different views as individual beings. However, this was not apparent when looking at the individual scale of the narratives. These were mainly focused on individual experiences with water and not individual ideas on relationships with water.

Clayton et al. (2017) argue that limited experiences with nature can lead to a skewed image of it and “a belief that “true” nature is separate from daily human life may leave people feeling that care for nature is neither their responsibility nor within their power” (p. 649). In the growing field of citizen science are many examples of community-based programs that want to enhance experiences and through this the relationships with nature (Church et al., 2025; Vasiliades et al., 2021). When citizens and communities are more engaged in the care for nature or a landscape, they feel more powerful as an individual who contributes to change (Shandas & Messer, 2008). In a country such as The Netherlands where water is such an important and present natural entity, it would make sense to develop community-based water programs that focus on engaging with water beyond security.

5.2 Dutch storytelling reflects human-water relationships

Jensen (2022/2024) showed how all narratives of water that she found came down to the same idea of: the Dutch can overcome the water. However, in my analysis I also found stories that were not about ‘the Dutch’ or ‘overcoming the water’. They were about everyday people doing everyday activities along the water and enjoying their time. The chance that these people were actively reflecting on their identity as Dutch people while engaging with water in their everyday life was small. This was confirmed by analyzing the stories and reflections of interviewees about their relationship to water (Section 4.3). I found that the self-constructed stories from the interviews often did not follow a clear structure like those created by expert storytellers. Thus, I found that it was not always useful to compare these.

An aspect that I found in both stories from my participants and stories found in Jensen (2022/2024) and De Blécourt et al. (2010), was an echo of the general idea of Dutch conquering the water shown in Dutch storytelling about water. This refers the larger story or idea that surpasses generations and “through history ingrain themselves into the collective consciousness.” (Jensen & Duiveman, 2020:57). However, as the authors continue on a more positive note, it is possible

to tell different stories. The shift from mastery over nature to stewardship over nature that is happening now in the Netherlands illustrates how views can change. Nevertheless, in the case of human-water relationships, the interviews present a view of mastery over nature. The interviewees refer to dike building, enhanced water engineering projects and protection against water. Only when water is considered in the context of drinking water in the future, there seems to be a certain care for water that shows a stewardship of water.

When looking at global shift from mastery over water to stewardship of water, the interdisciplinary study in the coastal area of the St. Louis River in the US is an example of how to organize stewardship of water through local stories (Silbernagel et al., 2015). They found that conducting place-based research while engaging the local people paved the way for long-term stewardship. Another example from environmental stewardship in Ohio shows that it is also compatible with economic development and collective health for local communities (Levine, 2011). Stewardship of water is also studied in the context of water scarcity in order to consume less water, e.g. in agriculture or in the corporate sector (Jia et al., 2019; Jones et al., 2015). The stewardship of water concerning drinking water and water scarcity was also reflected in the interviews: participants repeatedly talked about how everyone needs water and how they consciously acted in interaction with drinking water. Nevertheless, current projects that engage people in local water entities show that with the proper organization and collaboration, people might feel more connected to the water in the landscape resulting in a shift towards stewardship.

5.3 Limitations and reflexivity

This section covers a discussion on the methodology of this research, as well as reflections on my role as a researcher. The position of the researcher in this research is an interesting one, because the researcher has become part of the study through engagement in the social-ecological system. The social part of the SES was experienced by talking to interviewees and other people that I met on the way. The ecological part of the SES is experienced through hiking in the study environment, including several water entities such as rivers, lakes, ditches and canals. These experiences have greatly increased my understanding of my study environment and study subjects, interviewees and their stories. Taking the point of view of a contextual social constructionist allowed me to continuously consider people's stories happening in their specific social and ecological context. The integrative approach allowed me to include the whole system, but being the only researcher also meant that personal assumptions or worldviews that were important for interpretation were maybe not fully taken into account in the

analysis and understanding of the results. The credibility of results would increase if more than one researcher was involved.

Being the only researcher in this study made the role of reflexivity even more important. Leavy (2017) describes the implementation of reflexivity as a question of power. The researcher has the power to approach the research from a certain point of view, thereby including voices and excluding others. Hiking the NAP line and choosing participants that lived on this line could have skewed the results to a more compliant attitude towards water, as they are still nearby the high part of the Netherlands. Hiking along the coast would probably have resulted in very different views on the threat of water. Another point of reflexivity concerns transparency of the research. Before every interview, I repeated that all voice records would be deleted after the thesis was graded. Also, two participants expressed interest in reading the full thesis when it was done, so I sent it to them when it was finished. Presenting data in a fair way like this enhances the credibility and validity of the study (Lung, 2017)

I did not find the participants randomly, as they are part of the VodF organization. It can be assumed that these are a certain kind of people, namely people that are willing to invite strangers into their home, sometimes even cook for them and have basic conversation. What can be said of these participants particularly, is that they contribute to a network of hikers and cyclists, thus assumingly people who like to be outdoors and in nature. All this has to be taken into account when drawing conclusions from this research. Generalization is more difficult when there is a bias in the participants. I have tried to overcome this as much as possible by selecting participants throughout the whole country, thus covering a broad range of landscapes and demographics. Furthermore, the study included only eight people, making it a small-scale study focused on stories from a limited range of people that does not lend itself to generalization to the whole population.

The methodological choices of using stories and narratives as the conceptual angle provided me with a diversity of research outcomes. It allowed me to look at the content of the stories, but also to keep an eye out for structural patterns. Although it appeared that the structure part of the CNA was not always as applicable to the stories, it did give me more insight into the presence of characters. It forced me to look purely at the roles that the participants assigned to different characters without looking at the exact content or emotions in that specific story. Seeing the stories of my participants in the bigger picture of Dutch storytelling about water also allowed me to discover almost hidden patterns in their stories, for example when talking about 'The Dutch' building dikes and water works. I knew that these were often subject in Dutch storytelling and I could then more easily identify when a participant was perhaps repeating the history of their people instead of telling their own story. In the end, the form aspect of the CNA was not as useful, as the forms described by Arnold were limited and did not uncover much more characteristics of the narratives. The

‘recreational’ and ‘relational value of water’ narratives were both categorized as low-mimesis. This implied that stories were mundane and contained little emotions, but looking from an individual perspective, these stories were perhaps more important for the participants than the stories about Dutch people building dikes in the romantic form. All four of the forms were also written from the perspective of humans, while this research is focused on the relationship between water and humans. Thus, I decided not to take this further into account in the discussion of the results.

5.4 Future research

In this research, I have seen how people experience water on an individual level while they also identify with the Dutch people as victims of water and heroes of water management. They see a responsibility for the collective, but when they have to be more specific, they talk about the dike builders or the water engineers. From the 1200 years that Dutch people have been controlling the water, almost 1000 years have been on a local level (Van de Ven, 1993). People living at the dike were also the ones in control of its maintenance. People felt responsible as a small collective. Water management only got centralized in 1798 with the creation of Rijkswaterstaat, the national water board. The amount of water boards went from 1300 to 21 in the past centuries. I have seen that people are experiencing the water on an individual level, identify with the Dutch as conquerors of the water, but expect a few groups or individuals to take care of the management. What if people start experiencing the water and the water works within small communities and as a unity again? Following the community-based study on storytelling and water stewardship in the US, it would be interesting to see what happens when applied to local communities in the Netherlands. Parts of national water management could be decentralized and given to local governmental entities or organizations that can connect water and people. Research can include the creation of a trial area, a living lab, which studies the multifaceted social and natural aspects of local water management and how these are interwoven.

6. Conclusion

This study combined findings on narratives, stories and the social-ecological system to formulate and discuss the relationship of Dutch people to water in the landscape. I have seen, heard and experienced how the interviewees felt highly connected to water that was close to them. During the interviews, they talked fondly about personal experiences with water in their landscape during childhood as well as adulthood. I felt those emotions come to life while hiking through the same landscape. However, interviewees expressed fear and worry about water, looking back to water disasters in the past that they saw on the news or lived close to. These experiences with water disasters were more often connected to the Dutch identity of collective fighting against water, building dikes and water works. The narratives that I found connected to human-water relationships in the following way:

1. **Dutch identity:** idea of mastery over nature, people need to fight against water and build dikes and water works to protect themselves.
2. **Responsibility:** people need protection from water and the State has to provide that. Individual responsibility is seen in having to reduce drinking water waste.
3. **Water as a force of nature:** water is something to be afraid of. It is unpredictable and if not approached with care, possibly dangerous.
4. **Coping with the threat of water:** people feel the threat of water, but divert from the problem when dealing with it. They refer to alternative futures, the inevitability of it or decide to live in the moment and not think about the future.
5. **Recreational:** showing everyday interactions with water, also talking about memories from childhood.
6. **Relational value of water:** people have a profound relationship to water that is close to them.

Stewardship of water in the landscape is limited to the decreasing drinking water reserves and individual responsibility to decrease water waste. Echoing ideas of the past shape the current views of mastery over nature, while experiences of the present show the potential for stewardship of water. The high level of reflexivity of the participants concerning their own relationships to water offers perspectives for the future, where more awareness for water in the landscape through

storytelling and community-based research could enhance the willingness to care for water.

Conducting research in a social-ecological system made sure to experience the social and ecological factors and how they interacted with each other. This methodological approach could serve as an example for future water-related research and provide a framework for how to use stories as a way of uncovering human-water relationships.

References

- Aarts, N., & Drenthen, M. (2020). Socio-Ecological Interactions and Sustainable Development—Introduction to a Special Issue. *Sustainability*, 12(17).
<https://doi.org/10.3390/su12176967>
- Allan, J. A. (1998). Virtual Water: A Strategic Resource Global Solutions to Regional Deficits. *Groundwater*, 36(4), 545–546.
<https://doi.org/10.1111/j.1745-6584.1998.tb02825.x>
- Arnold, A. (2015). *Narratives of Climate Change. Outline of a systematic approach to narrative analysis in cultural sociology*. [Stuttgart].
<https://elib.uni-stuttgart.de/bitstreams/5564c47b-5cda-466a-a95b-00d177b3c63f/download>
- Arnold, A. (2018). Climate Change and Storytelling: Narratives and Cultural Meaning in Environmental Communication. In *Climate Change and Storytelling: Narratives and Cultural Meaning in Environmental Communication* (1st ed. 2018.). Springer International Publishing.
- Baake, K., & Kaempf, C. (2011). No Longer “Bullying the Rhine:” Giving Narrative a Place in Flood Management. 5(4), 428–446.
<https://doi.org/10.1080/17524032.2011.610807>
- Berendse, M., & Brood, P. (2022). *Historische Wateratlas NL: de drijvende kracht van Nederland*. WBOOKS.
- Brown, P. (2016). Narrative: An ontology, epistemology and methodology for proenvironmental psychology research. *Sustainable Housing & Urban Studies Unit (SHUSU)*, 31, 215–222.
<http://dx.doi.org/10.1016/j.erss.2017.06.006>
- Burningham, K., & Cooper, G. (1999). Being constructive: Social constructionism and the environment. *Sociology*, 33(2), 297–316.
<http://www.jstor.org/stable/42857932>

- Church, E. K., Wilson, K. A., Loder, J., & Dean, A. J. (2025). From citizen science experiences to stewardship action: The importance of both nature and social experiences. *Marine Policy*, 173. <https://doi.org/10.1016/j.marpol.2024.106537>
- Clara, P., Yves-François, L. L., Anne-Laure, A., Dad, R.-M., Fanny, A., Carole, B., Emmanuel, C., Georges, C., Anne, C., Marina, C., Emeline, C., Maxence, F., Jean-Michel, O., Hervé, P., Olivier, R., & Nicolas, L. (2024). Publications reveal how socio-ecological research is implemented: Lessons from the Rhône long term socio-ecological research platform. *Anthropocene*, 45, 100412. <https://doi.org/10.1016/j.ancene.2023.100412>
- Clayton, S., Colléony, A., Conversy, P., Maclouf, E., Martin, L., Torres, A., Truong, M., & Prévot, A. (2017). Transformation of Experience: Toward a New Relationship with Nature. *Conservation Letters*, 10(5), 645–651. <https://doi.org/10.1111/conl.12337>
- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Vol. 3rd). SAGE Publications, Inc. <https://doi.org/10.4135/9781452230153>
- De Blécourt, W., Koman, R. A., Van der Kooi, J., & Meder, T. (2010). *Verhalen van stad en streek: Sagen en legenden in Nederland*. Bert Bakker.
- De Graaf, R., Van de Giesen, N., & Van de Ven, F. (2009). Alternative water management options to reduce vulnerability for climate change in the Netherlands. *Natural Hazards*, 51, 407–422. <https://doi.org/10.1007/s11069-007-9184-4>
- De Groot, M., Drenthen, M., & De Groot, W. T. (2011). Public Visions of the Human/Nature Relationship and their Implications for Environmental Ethics. *Environmental Ethics*, 33(1), 25–44. <https://doi.org/10.5840/enviroethics20113314>

- De Groot, W. T., & Van den Born, R. J. G. (2003). Vision of nature and landscape type preferences: An exploration in The Netherlands. *Landscape and Urban Planning*, 63(3), 127–138. [https://doi.org/10.1016/S0169-2046\(02\)00184-6](https://doi.org/10.1016/S0169-2046(02)00184-6)
- Dicke, W. M. (2001). *Bridges and watersheds: A narrative analysis of water management in England, Wales and the Netherlands*. Katholieke Universiteit Nijmegen.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues*, 56(3), 524–442. <https://doi.org/10.1111/0022-4537.00176>
- Gaekwad, J. S., Moslehian, A. S., Roös, P. B., & Walker, A. (2022). A Meta-Analysis of Emotional Evidence for the Biophilia Hypothesis and Implications for Biophilic Design. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.750245>
- Gaventa, J. (2006). Finding the spaces for change: A power analysis. *IDS Bulletin*, 37(6), Article 6. <https://doi.org/10.1111/j.1759-5436.2006.tb00320.x>
- Gearey, M. (2018). Tales from the riverside: What community stories can tell us about sustainable water resources management practices. *Sustainable Development*, 26, 132–140. <https://doi.org/10.1002/sd.1724>
- Holmes, A., & McEwen, L. (2020). How to Exchange Stories of Local Flood Resilience From Flood Rich Areas to the Flooded Areas of the Future. *Environmental Communication*, 14(5), 597–613. <https://doi.org/10.1080/17524032.2019.1697325>
- Jensen, L. (2024). *Water: A Dutch Cultural History* (N. Forest-Flier, Trans.). Radboud University Press. (Original work published 2022)

- Jensen, L., & Duiveman, A. (2020). SPRAAKWATER: NIEUWE WATERVERHALEN MOETEN WORTELEN IN ONS VERLEDEN. *Water Governance*, 56–58.
- Jia, F., Hubbard, M., Zhang, T., & Chen, L. (2019). Water stewardship in agricultural supply chains. *Journal of Cleaner Production*, 235, 1170–1188. <https://doi.org/10.1016/j.jclepro.2019.07.006>
- Jones, P., Hillier, D., & Comfort, D. (2015). Corporate water stewardship. *Journal of Environmental Studies and Sciences*, 5, 272–276. <https://doi.org/10.1007/s13412-015-0255-7>
- Jones, S. (2002). Social constructionism and the environment: Through the quagmire. *Global Environmental Change*, 12(4), 247–251. [https://doi.org/10.1016/S0959-3780\(02\)00062-6](https://doi.org/10.1016/S0959-3780(02)00062-6)
- Kalof, L. (1997). Understanding the Social Construction of Environmental Concern. *Human Ecology Review*, 4(2), 101–105. <http://www.jstor.org/stable/24707033>
- Kaufmann, M., & Wiering, M. (2022). The role of discourses in understanding institutional stability and change – an analysis of Dutch flood risk governance. *Journal of Environmental Policy & Planning*, 24(1), 1–20. <https://doi.org/10.1080/1523908X.2021.1935222>
- Kenny, M. G. (1999). *A Place for Memory: The Interface between Individual and Collective History*. <https://doi.org/10.1017/S0010417599002248>
- King, A. (2005). Structure and Agency. In A. Harrington (Ed.), *Modern Social Theory: An Introduction* (pp. 215–232). Oxford University Press.
- Klaebe, H. (2013). Facilitating local stories in post disaster regional communities – evaluation in narrative driven oral history projects. *Oral History Journal of South Africa*, 1(1), 125–142. <https://eprints.qut.edu.au/220394/>

- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. The Guilford Press.
- Leech, B. L. (2002). Asking questions: Techniques for semistructured interviews. *PS - Political Science and Politics*, 35(4), Article 4.
<https://doi.org/10.1017/S1049096502001129>
- Levine, J. F. (2011). *Integration of Environmental Stewardship and Local Economic Development to Enhance Community Health*. 72(2), 141–144.
- Lintsen, H. (2002). *Two Centuries of Central Water Management in the Netherlands*. 43(3), 549–568. <https://doi.org/10.1353/tech.2002.0126>
- Lung, M. (2017). *Qualitative Research in Regional Geography: A Methodological Approach* (O. Ilovan & I. Doroftei, Eds.). PRESA UNIVERSITARĂ CLUJEANĂ.
- Margolin, U. (1990). *The What, the When, and the How of Being a Character in Literary Narrative*. 24(3), 453–468. <https://www.jstor.org/stable/42945873>
- Menary, R. (2007). *Writing as thinking*. 29(5), 621–632.
<https://doi.org/10.1016/j.langsci.2007.01.005>
- Middleton, W., Habibi, A., Shankar, S., & Ludwig, F. (2020). Characterizing Regenerative Aspects of Living Root Bridges. *Sustainability*, 12(8).
<https://doi.org/10.3390/su12083267>
- Moezzi, M., Janda, K. B., & Rotmann, S. (2017). Using stories, narratives, and storytelling in energy and climate change research. *Energy Research & Social Science*, 31, 1–10. <https://doi.org/10.1016/j.erss.2017.06.034>
- Mostert, E. (2020). Water and national identity in the Netherlands; the history of an idea. *Water History*, 12, 311–329. <https://doi.org/10.1007/s12685-020-00263-3>

- Pacherie, E. (2014). How does it feel to act together? *Phenomenology and the Cognitive Sciences*, 13, 25–46. <https://doi.org/10.1007/s11097-013-9329-8>
- Page, B. I., & Shapiro, R. Y. (1983). Effects of Public Opinion on Policy. *The American Political Science Review*, 77(1), 175–190.
<https://www.jstor.org/stable/1956018>
- Programma Integraal Riviermanagement. (n.d.). *Over Ruimte voor de Rivier 2.0*. Retrieved January 15, 2025, from <https://www.ruimtevoorderivier.nl/over-ruimte-voor-de-rivier>
- Redman, C. L., Grove, J. M., & Kuby, L. H. (2004). Integrating Social Science into the Long-Term Ecological Research (LTER) Network: Social Dimensions of Ecological Change and Ecological Dimensions of Social Change. *Ecosystems*, 7, 161–171. <https://doi.org/10.1007/s10021-003-0215-z>
- Rijkswaterstaat. (n.d.). *Normaal Amsterdams Peil (NAP)*.
<https://www.rijkswaterstaat.nl/zakelijk/open-data/normaal-amsterdams-peil>
- Robertson, K. (2005). Active listening: More than just paying attention. *Australian Family Physician*, 34(12), 1053–1055.
<https://search.informit.org/doi/10.3316/informit.366629010280498>
- Robson, C., & McCartan, K. (2015). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings* (4th ed.). John Wiley & Sons.
- Severin, M. I., Raes, F., Notebaert, E., Lambrecht, L., Everaert, G., & Buysse, A. (2022). A Qualitative Study on Emotions Experienced at the Coast and Their Influence on Well-Being. *Frontiers in Psychology*, 13.
<https://doi.org/10.3389/fpsyg.2022.902122>

- Shandas, V., & Messer, W. B. (2008). Fostering Green Communities Through Civic Engagement: Community-Based Environmental Stewardship in the Portland Area. *Journal of the American Planning Association*, 74(4), 408–418. <https://doi.org/10.1080/01944360802291265>
- Silbernagel, J., Host, G., & Hagley, C. (2015). Linking place-based science to people through spatial narratives of coastal stewardship. *Coast Conservation*, 19, 181–198. <https://doi.org/10.1007/s11852-015-0380-1>
- Sojamo, S., & Rudebeck, T. (2024). Corporate Engagement in Water Policy and Governance: A Literature Review on Water Stewardship and Water security. *Water Alternatives*, 17(2), 292–324.
- Sutton, J. (2008). Between Individual and Collective Memory: Coordination, Interaction, Distribution. *Social Research: An International Quarterly*, 75(1), 23–48. <https://doi.org/10.1353/sor.2008.0063>
- Teng, T., & Boekestein, J. (2018). *Orkaanhoeders en Dijkenfluisteraars: Een ziltpunkbundel*. Macc.
- Van de Ven, G. P. (1993). *Leefbaar laagland: Geschiedenis van de waterbeheersing en landaanwinning in Nederland* (2e ed.). Uitgeverij Matrijs.
- Van den Born, R. J. G. (2007). *Thinking Nature Everyday philosophy of nature in the Netherlands* [Radboud Universiteit Nijmegen]. <http://hdl.handle.net/2066/55991>
- Van Heezik, A. (2007). *Strijd om de rivieren: 200 jaar rivierenbeleid in Nederland* (2e ed.). HNT Historische producties Den Haag in samenwerking met Rijkswaterstaat.
- Van Hulst, M., Metze, T., Dewulf, A., De Vries, J., Van Bommel, S., & Van Ostaijen, M. (2024). Discourse, framing and narrative: Three ways of

- doing critical, interpretive policy analysis. *Critical Policy Studies*, 19(1), 74–96. <https://doi.org/10.1080/19460171.2024.2326936>
- Vandersmissen, H., & Den Hengst, J. (1998). *Het woelige water. Watermanagement in Nederland*. TELEAC/NOT.
- Vasiliades, M. A., Hadjichambis, A. C., Paraskeva-Hadjichambi, D., Adamou, A., & Georgiou, Y. (2021). A Systematic Literature Review on the Participation Aspects of Environmental and Nature-Based Citizen Science Initiatives. *Sustainability*, 13(13). <https://doi.org/10.3390/su13137457>
- Veris, J. B., & Van der Laech, W. (1641). *Provisioneel concept ontwerp ende voorslach dienende tot de bedyckinge vande groote water meeren*. <http://hdl.handle.net/1887.1/item:2039898>
- Yanow, D., & Tsoukas, H. (2009). What is Reflection-In-Action? A Phenomenological Account. *Journal of Management Studies*, 46(8), 1339–1364. <https://doi.org/10.1111/j.1467-6486.2009.00859.x>

Where wet meets dry: stories of water and people – a popular science summary

Stories about water in the Netherlands are, just like the water itself, everywhere. The country consists of a fusion of countless rivers, canals, ditches and lakes. Just like stories, they are connected to each other and to the people that live nearby. So what do you do if you want to experience all of those, even the ones you cannot see? Indeed, you hike and listen.

This research addresses the relationship between people in the Netherlands and water in the landscape. While views on water policies in governmental institutions are changing towards working *with* the water instead of *against* it, people also develop their relationship to water in the landscape in their everyday life. People tell stories to make sense of their world, of events that happened in the past and of relationships with others, human and nonhuman. I walked next to the rivers and lakes that were characters in people's stories, showing strong personal connections to water in the landscape. I listened to stories about water that was scary, destructive and associated with the never-ending fight against water by the Dutch people. I found that the Dutch identity of fighting against water is still deeply engrained in the stories that people tell about water in the landscape. Nevertheless, they also showed a profound connection to the water that was present in their near environment. They talked about happy memories with water, such as swimming, ice skating, hiking and sailing. The water was also a place for solitude and peace. Walking the NAP line where the sea water would come if there were no dikes did not only help me to understand the stories better, but also strengthened my own relationship to water in the Netherlands.

The results show the complicated and intricate relationship that people have with the water and how it can develop by engaging with it. It also shows the possibilities of how this can be broadened and deepened. As many know, the Dutch are famous for their water management, building dikes, dams and pumps to keep the land dry. They have to - if you put Europe upside down and follow the water from source to sink, you would see that the Netherlands is the drain of the continent. Recent floodings show that the traditional water management might not be enough to keep the feet dry in the future. So is it time to let go of the typical attitude of working against water? Citizen science research shows that it is possible to engage communities in local natural resource management to make them care more about what happens to these resources. I see a lot of passion for water in the landscape from my interviews, but when it comes to its management, it is up to the State. By reorganizing the responsibility of water management back to local communities, people can tend to the water that they actually care about.

Appendix I: Interview guide

Can you tell something about yourself?

- How old are you?
- What do you do in daily life?
- Where are you from?
- How long have you lived here?

What is your strongest or first association when you think about water in the landscape?

- Can you describe this further: what situation were you in at the time and why do you think this comes up immediately?

Prompt 1: what did you think at the time? What do you think about this now?

Prompt 2: what did you think when you first heard this story? Why do you think this happened?

What was it like growing up in ...?

- Was there water near you?
- Did you ever go there?
- If so, can you describe it for me? What did you do and with whom?

Prompt 1: what emotions or feelings come to mind when you talk about this?

Prompt 2: what experiences did you have in or around these water bodies?

Are you currently, in this environment, in contact with water?

- In your current environment, is there water nearby?
- Do you ever go there?
- How do you think this is different from before?

Prompt 1: what emotions or feelings come to mind when you talk about this?

Prompt 2: has your relationship to water changed over the years? If so, how?

Prompt 3: are you attracted to water or do you prefer to stay away from it?

Do you feel connected to water that is not near you?

- Do you go there sometimes or maybe often and in what occasions?
- Can you think of a vivid memory?

Prompt 1: to what extent do you feel the presence of large water bodies, such as the ocean and big rivers?

How do you see the future of the Netherlands with water?

- What do you feel when you think about this topic?
- Do you ever think about how we deal with water in the Netherlands?
- Are you familiar with the NAP line?

I walk this route, the NAP route that follows the NAP line, that is, the line of land that is at the same height as the sea level, because I am intrigued by our low country that has kept the water out so intensively and successfully. Sea levels are rising and the western part of the country and around the major rivers are increasingly threatened by flooding and this affects our daily lives. For example, there are reports that the value of a home will change in the coming years in response to rising sea levels and risk of flooding. Furthermore, the water is given more space to reduce the impact of its flow.

Would you adapt your life to water?

For example (based on previously accumulated knowledge):

- By moving to a higher area?
- Taking preventive measures in your current home/environment?

Prompt 1: how does it make you feel to think about this?

Prompt 2: what is your opinion on water policy?

General prompts:

How did this feel to you?

Can you describe this for me?

Can you talk a little bit more about this?

Why is this valuable for you?

Appendix II: Email to potential participants (own translation)

Dear Mr/Mrs,

My name is Fenna Vesters and I will be walking through the Netherlands from February 12 to March 6. I am doing this as fieldwork for my master thesis for the study 'Environmental Communication and Management' from the Swedish University of Agriculture (SLU). Along the way, I will interview people with whom I am staying overnight, such as yourself maybe, about their relationship to water with a focus on the sea and rivers. It is intended to be an open conversation where every opinion and perspective is welcome. My questions to you are:

- Could I stay overnight at your place on [date] for 1 night?
- Would you be willing to participate in my research through an interview?

If you answer “yes” to both questions I will send a consent form for use of the interview results. If you prefer not to participate in the research but do have a place for me to stay overnight I also greatly appreciate it. This is not a study from the Friends on the Bicycle organization, but they have given written permission to ask you this question.

I look forward to your response!

Kind regards,

Fenna Vesters
Friend number: 21238869
Tel: +31630772313

Appendix III: Quotes in original Dutch

Interview (number: paragraph)	Original quote
I: 327	Maar nee, ik maak me daar... Ik ben ook op een leeftijd nu dat ik me niet meer zo druk maak.
I: 129	Maar dat heb ik helemaal niet. Vergaat het, dan denk ik: dan is het goed geweest. Ik ga niet daarom weg.
I: 85	In 98, maar toen was het heel kritiek, maar toen is het niet... Of jawel, er waren toch wel wat straten hier overstroomd. Omdat Beatrix er ook was, die kwam niet zomaar.
I: 213	Als het er niet is, zou ik het missen. Ik vind het altijd fijn om water in de buurt te hebben of een meertje. Ik kan vaak alles niet zo goed omschrijven, maar dan denk ik: dat is een gevoel.
I: 327	Ik hoop dat wij toch goede bruggenbouwers en goede delta bouwers hebben. Ik maak me niet angstig dat dat niet goed komt met Nederland.
II: 477	Ja, en ik vind het wel grappig, doordat ik naar Maarten van Rossum luister. Die neemt echt niet elke dag een douche, die doet dat met een washandje.
II: 547	Komt tijd, komt raad. Ik denk wel eens vooruit, maar dat is meer om leuke reizen te plannen. Maar ik ben geen doemdenker, beslist niet. Nee. Dan zeg ik gewoon: het is wat het is en leef op het moment.
II: 249	Want wij denken wel dat we de baas zijn. Maar forget it. De natuur is de baas.
II: 83	Als ik van school thuis kwam en ik fietste, dan zorgde ik altijd dat ik alleen was. Dan ging ik, voordat ik naar huis ging, langs de beek zitten.
II: 138	Daar was ik mezelf niet eens van bewust, maar ik zoek inderdaad nog steeds het water op.
II: 406	techniek en de wetenschap moeten doen. Die zal het in orde moeten maken.
III: 123	Door misschien het gevoel of door de jeugd, dat je er daardoor aan denkt.

III: 23	Dat is een mooi waterrijk gebied, daar hebben we heel veel mooie avonturen op het water beleefd. Met surfplankjes en allemaal onzinnige dingen. Ik kon helemaal niet surfen, maar dat maakte niet uit.
III: 147	Ja, daar ben ik wel benieuwd naar, want aan de ene kant denken ze, ze moeten hoger en hoger de dijken bouwen, steeds meer. Ze gaan bouwen op de laagste punten van Nederland, dat vind ik echt onzinnig
III: 175	De waterstand in Nederland wordt helemaal bepaald door de waterschappen met gemalen, want anders dan houden we het nog niet...
III: 31	Maarten van Rossem doucht maar één keer in de week. Die doucht helemaal niet, die wast zich altijd met een washandje en zeep.
III: 159	Dan moet het wel levensbedreigend zijn, maar anders niet.
IV: 97	Wij gingen altijd bij de sloten spelen natuurlijk, kikkervisjes en weet ik niet wat. We zaten altijd bij de sloten spelen. Dus ik ben wel echt bij water opgegroeid.
IV: 299	We hadden hier, dat is weer een ander verhaal, jaren terug 4/5 dames en die waren aan het wandelen. Die kwamen uit Wilnis. Wilnis ligt ergens in Noord-Holland volgens mij. Dat ligt in een polder. Toen was het heel droog en dan droogt het op. Toen is zo'n dijk doorgebroken. 's Morgens hoorden wij het nieuws. Ik zeg: ik wil jullie niet ongerust maken en ik geloof ook niet dat het heel ernstig is, er zijn geen ongelukken gebeurd. Ik zeg: jullie komen uit Wilnis, maar er zijn een paar van die dijkjes doorgebroken, dus er staat iets onder water bij jullie. Dat was natuurlijk paniek. Dus zij met het thuisfront bellen en ja, dat was zo. Bij één stond de auto onder water en bij de ander de huiskamer.
IV: 137	Je ziet ook wel dat het zeewater natuurlijk, of de waterstand van de zee, sowieso hoger wordt, alle water. Dus die dijken moeten gewoon verzwakt worden, want anders heb je echt overstromingen, dat komt echt niet goed.
IV: 161	Nee, dan was half Nederland er niet. Als we geen sluizen en geen dijken hadden was half Nederland onder water.
V: 243	Ik ben dus niet getrouwd, maar ik heb wel een hele boel neefjes en nichtjes, dus ik ben wel tante en ze kwamen graag logeren, want dan gingen we altijd naar Hoek van Holland, dat hoorde er een beetje bij, naar het strand.
V: 49	Andere sfeer.

V: 163	Hele oude rivier, dus die heeft zijn eigen weg gevonden.
V: 23, 27	Als ik de koeien zie langs de IJssel dan denk ik: dat past hier. De rivier en dan de koeien en het landschap eromheen, daar pas ik wel.
V: 187	Ja, wel zorgelijk hoor. Wij leven wel in een welvarend land. De boeren krijgen wel grote klappen, maar kijk maar hier in de wijk rond wat voor auto's hier rondrijden en is dat allemaal nodig? Pak de fiets zou ik zeggen. We mogen best wat minder. Dat is allemaal uitstoot. Het verkeer geeft een enorme uitstoot en daar mogen we echt wat aan doen.
V: 203	Water verrast je ook altijd.
V: 19	Nederland is een beetje bekend geworden wereldwijd om het water. Mooie projecten. Rotterdam, de Maas, maar ook de deltawerken, het waterkeringssysteem bij Maassluis. Knap werk. En Rotterdam ja, de havens en zonder water zou Rotterdam niet Rotterdam zijn.
V: 207, 215	Toen ik in Rotterdam woonde, was er op een gegeven moment in de jaren 90, welke rivier was dat? Daar richting de Betuwe, daar was het ook allemaal overstroomd. Dat was best wel heftig. Dat hoort wel bij Nederland met alle rivieren en dijken.
V: 159	De mens heeft er wel wat aan gedaan, maar die IJssel loopt zo en dat is een hele oude rivier, de oudste van Nederland.
VI: 173	Toen wij 9 waren, gingen we naar de boerderij van mijn opa en toen moesten wij van mijn vader leren zwemmen. 18 september kwamen we 's avonds uit school en deden ze ons een touw aan de buik en dan was er een hele grote vijver voor als er brand uitbrak op de boerderij dat ze water hadden om te blussen. Dus die was best diep, dus wij konden er niet meer staan. Doe maar zo, zegt ie. Ik zie hem nog zo op de kant staan, maar zelf kon ie goed zwemmen. Voordat het winter was, voordat het ijs kwam konden we allemaal goed zwemmen.
VI: 97, 101	We hoorden de koeien brullen boven het water. Verschrikkelijk. En koud. En waaien. Het was toch slecht weer.
VI: 461	Ik hoop niet dat ze de boel onder water zetten als het oorlog wordt, want dan zijn wij mooi de pineut.
VI: 299	Matten maken voor de dijken, om de dijken te verstevigen met griend.
VI: 518	Je kan je er ook zo druk over maken, maar daar schiet je niks mee op
VI: 389	Ik denk dat je eerder oorlog krijgt dan wat anders.

VI: 405	Ja, er was gewoon niks. Die paar winkels die er waren, die waren gewoon leeg. Dan kwam er weer eens een voorraad en hadden mensen bonnen en dan ging ik met mijn moeder naar Breda, want daar zou iets te koop zijn wat haar aanstond, maar wij komen daar en alles was al weg dus konden we weer terug naar huis. Dat weet je eigenlijk nog best goed.
VI: 153	Nee, daar hebben we eigenlijk nooit bij stilgestaan.
VII: 161	Maar bij Vlieland kan het echt behoorlijk spoken. Dan moet je echt oppassen. Dan zit je elke ochtend even te kijken van of je andere schepen ziet varen en dan denk je, dan moet ik het ook wel kunnen. Je moet weten wat voor weer het is. Je kunt niet weg als het binnen een paar uur slecht weer is. Dan moet je niet vertrekken. Dat zijn dingen waar je echt op moet letten.
VII: 173	Te veel wind en te veel stroming.
VII: 79	Ik ben een van de mensen die een website gemaakt heeft voor het zogenaamde Rijndiep veerders waar er veel geschiedenis over die waterhuishouding hier en zo uit de doeken gedaan wordt. Dat zijn gewoon dingen die me interesseren, die iedereen eigenlijk wel interesseert. Hoe meer je je erin verdiept, hoe interessanter het wordt natuurlijk.
VII: 335, 339	Je maak toch wel een atoomoorlog mee. Waarschijnlijk, maar er kan je natuurlijk van alles overkomen.
VII: 307	Dat is al een heel verschil, want ik vraag me af of het hier zoveel anders dan worden. Ik houd op de vijfde verdieping wel droge voeten.
VII: 345	Laten we het zo zeggen: ik ben daar wel enigszins bezorgd over, maar daar lig ik niet vak wakker.
VII: 291	De situatie is gewoon ernstig en niet compleet op te lossen. Je kunt het waterbeheer nog zo goed maken, maar op moment dat ze in Frankrijk de boel niet voor mekaar hebben dan komt het met een rotvaart door de Maas heen. Of als ze het in Duitsland niet goed voor mekaar hebben komt het met een rotvaart door de Geul heen en dan zit je met de gebakken peren.
VIII: 35	Ik vind het ook heel leuk om daar met kinderen naartoe te gaan. Je hebt ook een soort strandjes om daar gewoon te recreëren in de zomer. Dan gaan we klei zoeken en pottenbakken en van dat soort dingen.
VIII: 293	Het is ook wel een soort onbetrouwbaar. Je bent opgegroeid met: we zijn heel goed in dijken bouwen en het wordt geregeld door het Rijk en we zijn veilig. Ik denk dat het zo bijgebracht is,

	terwijl ik het water ook heel onberekenbaar vind. Onderstromen, dit soort camping toestanden. Dat kan je zo overvallen.
VIII: 35	Ik denk dan als eerste hier aan de Lek. Het is 2 kilometer hier vandaan denk ik. Daar fiets best wel graag langs, richting Schoonhoven even.
VIII: 131	Wat anders
VIII: 39, 43, 47	In Utrecht had ik waarschijnlijk een andere associatie gehad. Dan was het waarschijnlijk de Maarsseveenseplassen geweest, wat ik als antwoord had gegeven. Omdat dat dan redelijk dichtbij is. Nu kom je daar niet meer omdat het redelijk ver weg is.
VIII: 233, 655	Ik kijk er altijd naar, dus ik voel me denk ik toch wel enigszins verbonden? Als we het er zo over hebben denk ik wel van: ik zou er eigenlijk meer over moeten weten. Wat wordt er nou eigenlijk in het onderwijs over meegegeven? Best wel gek eigenlijk.
VIII: 319	In mijn leven vraag ik me af het al zover gaat komen. Nog 50 jaar of zo, ik weet niet. Maar dan denk je ook aan je kinderen en eventueel de kinderen van je kinderen. Ook met de overtuiging in je opvoeding dat je denkt: het zal wel goed komen of dan gaan ze die dijken hoger maken. Maar voordat dat helemaal gerealiseerd is, ben je ook een paar jaartjes verder. Ik weet het niet. Aan de ene kant ben ik er niet echt mee bezig, maar ik denk er wel meer over na. Van: is het nou echt wel zo gevaarlijk in onze situatie? Het voelt ook naïef om te zeggen: zal wel meevallen.
VIII: 379	Ik maak me veel meer zorgen over Trump. Dat met die Nederlanders, dat geloof ik allemaal wel. Maar dat die man daar aan de macht is en in een klimaatverdrag gewoon zegt: hij is wel getekend in Parijs, maar ik doe niet mee en de kolencentrales moeten weer energie gaan opwekken. Ze zijn al het meest vervuilende land van de wereld. Dat is veel erger, dat probleem is veel groter.
VIII: 323	Omdat ik wel denk dat de zeespiegel gaat stijgen en dat het risico natuurlijk groter wordt dat wij hier een probleem krijgen.
VIII: 329	Die zeespiegel duurt nog wel eventjes, maar als die golfstroom verandert.
VIII: 449	Ik denk dat je wel zal moeten. Liever eerder, want anders dan ga je met z'n allen hetzelfde bedenken. Eigenlijk kan je het beter nu doen. Toch?

- VIII: 475 Ik hoorde daar best wel vaak: bad luck, what to do? Dus die hele mentaliteit is heel... Het is voorbestemd. Als Allah dat met jou bedacht heeft, dan is dat jouw lot. Terwijl wij hier in Nederland een andere insteek hebben om dat probleem van water aan te pakken. Daar zijn we eindeloos goed in geworden dat we in de hele wereld palmstranden moeten onderhouden en onderzeeboten moeten bergen en weet ik het allemaal niet. Dijken bouwen. Stormvloedkeringen.
- VIII: 109, 113 Ik ben keer bijna verdronken als kind. Onder het ijs gekomen en toen zag niemand me en toen ben ik onder het ijs terecht gekomen. Wel eruit geklauterd, maar dat ijs brak steeds af omdat het daar heel dun was. Dus dat was wel een dingetje, dat ik midden in het bos ineens in de vrieskou stond. Ik weet niet of het daarvandaan komt dat ik niet van koud water houd. Het was wel redelijk traumatisch.
- VIII: 563 Die weet toen nog wel dat ze inzameling hadden voor die kinderen en daar had ie kaartjes gespaard. Dat was zijn allerdierbaarste bezit en dat gaf hij weg.
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