WHERE HAS THE POWER GONE?

Examining Power Dynamics in Collaborative Water Governance

MSc Spatial Planning | Kay van Hulst

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MSc Thesis Spatial Planning
Wageningen University
March 2019

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A Dutch management summary is available as an addition to this research report.

Hulst, K. van. (2019). *Waar is de Macht gebleven? Onderzoek naar Machtsdynamiek in Collaborative Water Governance*. Wageningen University & Research.

ABSTRACT

Collaborative approaches are often based on the assumption that all actors are equally empowered to contribute to the final outcome (Innes, 2016). However, the best argument does not always win. Actors are able to empower their voices to increase their capacity to influence decisions (Hardy & Phillips, 1998). Considering the results of several literature reviews (e.g. Brisbois & de Loë, 2016a; Vink et al., 2013), the influence of these power dynamics on collaborative processes remains underexposed. This study aimed at creating a better understanding of the role of power dynamics in collaborative processes by examining how the voices of actors are empowered. The concepts of power and framing are combined to fulfill this aim, which resulted in three categories of frames: frames with formal authority, frames with resources, and frames with discursive legitimacy. A qualitative interpretive case study is conducted in which the Meandering Meuse Project ('MM Project') is used as a paradigmatic case. The three collaborative layers (SDM, project partners, and workshop participants) in the collaborative governance arrangement of the MM Project were used to analyze the influence of power dynamics on the (midterm) result. The following main research question was formulated to reveal the influence of power dynamics: *How do power dynamics influence the (midterm) result of a decision-making process in the context of collaborative water governance?*

The results of this study showed that the collaborating actors approach the MM Project from nine different frames. These frames were expressed to different extents by each collaborative layer. However, the water safety frame was centered by all collaborative layers to become part of the solution. In an attempt to make the expressed frames part of the (midterm) result of the MM Project, each collaborative layer empowered their frames in different ways. It turned out that all collaborative layers were able to empower frames sufficiently to influence the (midterm) result of the MM Project. Frames from all three categories – frames with formal authority, resources, and discursive legitimacy – ended up in the final plan. Frames that were insufficiently empowered did not become part of the solution. The findings showed that power is a dynamic concept which is exerted in interactions between collaborating actors, rather than a characteristic or capability that some actors have and others not. From the results is concluded that power dynamics have an influence on collaborative processes which means there is no reason anymore to neglect this influence in theory or practice.

Keywords
Collaborative Water Governance, Power Dynamics, Power Sources, Framing, Wicked Problems

SAMENVATTING

Besluitvormingsprocessen waarin private en publieke actoren samenwerken zijn vaak gebaseerd op de aanname dat actoren evenveel macht hebben om beslissingen te beïnvloeden (Innes, 2016). Echter, het beste argument wint niet altijd. Actoren zijn in staat om hun stemmen te laden met macht zodat hun capaciteit om een beslissing te beïnvloeden toeneemt (Hardy & Phillips, 1998). Gezien de resultaten van verschillende literatuuronderzoeken (bijv. Brisbois & de Loë, 2016a; Vink et al., 2013), is de invloed van deze machtsdynamiek in samenwerkingsprocessen onderbelicht. Het doel van deze studie was om het begrip van de invloed van machtsdynamiek in samenwerkingsprocessen te vergroten door te onderzoeken hoe actoren hun stemmen laden met macht. Om dit doel te vervullen zijn de concepten van 'Power' en 'Framing' gecombineerd in een theoretisch raamwerk. Dit resulteerde in drie categorieën van frames geladen met macht, namelijk: frames met formele autoriteit, frames met middelen en frames met discursieve legitimiteit. Een kwalitatieve interpretatieve casestudie is uitgevoerd waarin het Meanderende Maas Project ('MM Project') is gebruikt als voorbeeld/paradigmatische casus. De drie samenwerkingslagen (SDM, project partners en werkplaatsdeelnemers) in het samenwerkingsmodel van het MM Project zijn gebruikt om de invloed van machtsdynamiek op het (tussentijds) resultaat te analyseren. De volgende hoofdvraag was geformuleerd om de invloed van machtsdynamiek bloot te leggen: *Hoe beïnvloedt machtsdynamiek het (tussentijds) resultaat van een besluitvormingsproces in de context van Collaborative Water Governance?*

De resultaten van dit onderzoek toonden aan dat samenwerkende actoren het MM Project benaderen vanuit negen verschillende frames. Deze frames werden in verschillende mate geuit door elke samenwerkingslaag. Echter, het waterveiligheidsframe werd gecentreerd door elke samenwerkingslaag om onderdeel te worden van het (tussentijds) resultaat. In een poging om frames onderdeel te maken van het (tussentijds) resultaat probeert elke samenwerkingslaag hun frames te laden met macht. Het bleek dat elke samenwerkingslaag in staat was om frames voldoende met macht te laden om invloed uit te kunnen oefenen op het (tussentijds) resultaat. Frames van alle drie de categorieën – frames met formele autoriteit, middelen en discursieve legitimiteit – bereikte het uiteindelijke plan. Frames die onvoldoende geladen waren met macht haalden het (tussentijds) resultaat niet. De bevindingen lieten zien dat macht een dynamisch concept is, wat betekent dat macht uitgeoefend wordt gedurende interacties tussen samenwerkende actoren en dat macht niet enkel een karakteristiek of bezit is wat sommige actoren hebben en andere niet. Geconcludeerd kan worden dat machtsdynamiek invloed heeft op de uitkomsten van een samenwerkingsproces en dat er daarom geen reden meer is om de invloed van machtsdynamiek te negeren in theorie en praktijk.

Sleutelwoorden

Collaborative Water Governance, Machtsdynamiek, Machtsbronnen, Framing, Wicked Problems

PREFACE

The Dutch rivers have always fascinated me. Born in Het Land van Maas & Waal, I saw how beautiful the rivers are, but simultaneously heard stories about the dangers the rivers entail. Family, neighbors, and friends were namely evacuated in 1995 due to high water levels and the risk of a dike collapse. Stories, films, monuments, and documentaries about this evacuation have always interested me. This fascination, in combination with courses about integrated water management and collaborative governance arrangements, inspired me to conduct my MSc Thesis in the world of water governance. I was fortunate that at the moment my MSc Thesis was about to start, my parents were invited to participate in the dike reinforcement project of Meandering Meuse. I decided to join the decision-making process myself and experienced, while participating in workshops, how actors tried to empower their interests, ideas, and wishes in discussions. This resulted in the subject of this MSc Thesis: **Power Dynamics in Collaborative Water Governance**.

Six months later, the research is finished of which this report is the result. I would like to thank some people who contributed to this research. First of all my supervisor **Marleen Buizer** for her motivating enthusiasm. Our (group) discussions really contributed to the quality of the end result and your feedback and suggestions really inspired me while conducting this research. Thereby I would like to express my gratitude to the **project team of the Meandering Meuse**, who gave me permission to use the Meandering Meuse as a case in this MSc Thesis. The openness of the project team and the accessibility of data and resources were of great help while conducting this research. Last but not least, I would like to thank **all interviewees** for their time and contribution to this research. All interesting conversations, all cups of coffee, and above all your interest in my research really motivated me to successfully complete this study. I have learned so much during the past six months and you all contributed to that for which I would like to thank you.

I hope you enjoy reading this MSc Thesis,

Kay van Hulst

Wageningen, March 2019

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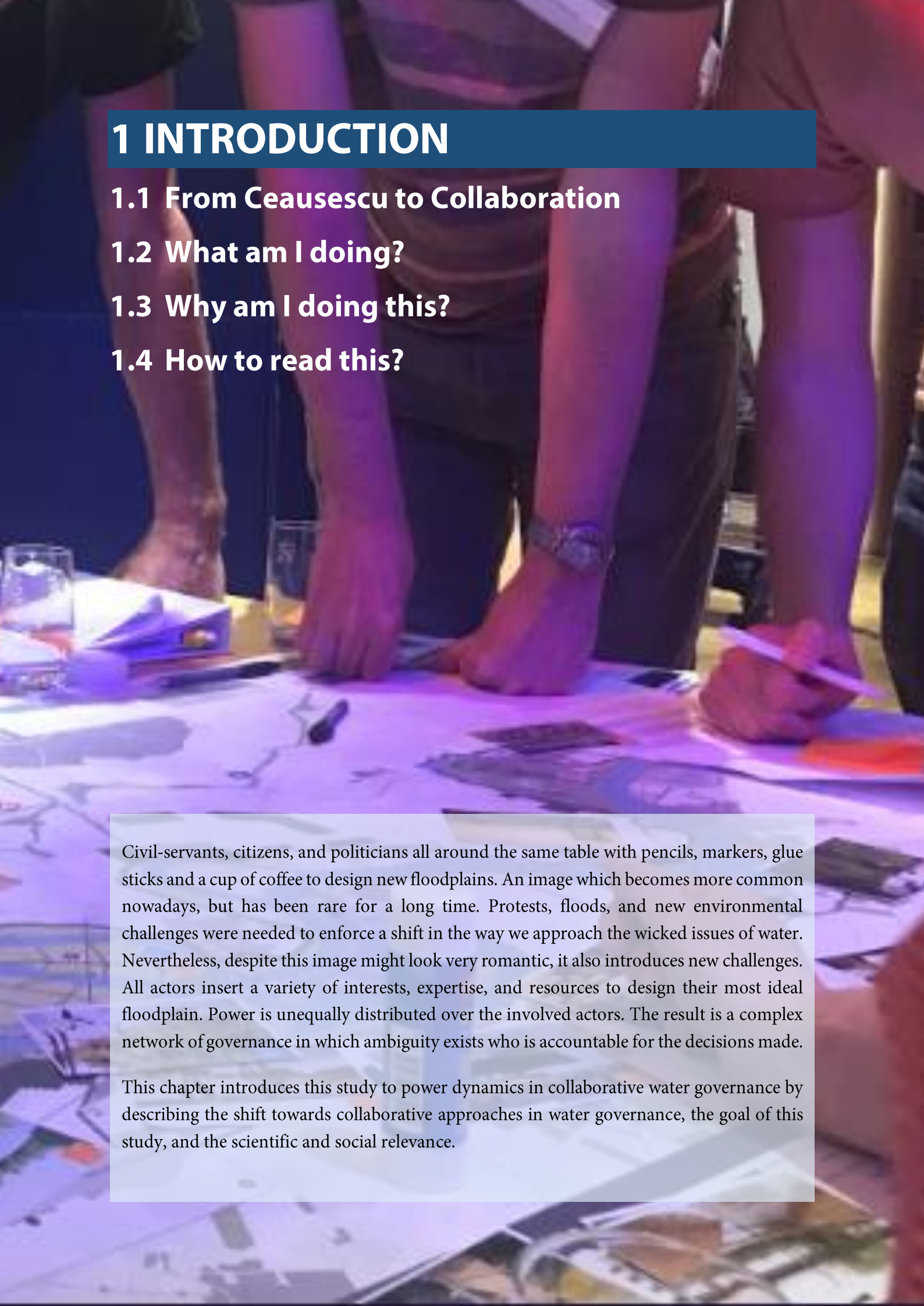
“De rivierdijken zijn geen openluchtmuseum.”
- Neelie Kroes



1 INTRODUCTION

1.1 From Ceausescu to Collaboration

1.2 What am I doing?

1.3 Why am I doing this?

1.4 How to read this?

Civil-servants, citizens, and politicians all around the same table with pencils, markers, glue sticks and a cup of coffee to design new floodplains. An image which becomes more common nowadays, but has been rare for a long time. Protests, floods, and new environmental challenges were needed to enforce a shift in the way we approach the wicked issues of water. Nevertheless, despite this image might look very romantic, it also introduces new challenges. All actors insert a variety of interests, expertise, and resources to design their most ideal floodplain. Power is unequally distributed over the involved actors. The result is a complex network of governance in which ambiguity exists who is accountable for the decisions made.

This chapter introduces this study to power dynamics in collaborative water governance by describing the shift towards collaborative approaches in water governance, the goal of this study, and the scientific and social relevance.

1.1 From Ceausescu to Collaboration

"The river dykes are not an open-air museum." A quote from Neelie Kroes, the Dutch minister of Verkeer en Waterstaat between 1982 and 1989 (van Heezik, 2008, p. 224). The quote symbolizes the common perception how to deal with flood security at that time. The main task for the responsible governmental authorities was to protect society from floods and all other interests as dyke dwellings, recreation, cultural heritage, and nature had to relinquish for that goal. The opinion of societal actors was not considered in these flood protection projects, because the rationally calculated safety norms were empowered with the decisive power. If there was any protest from below, it was neglected or refuted in the name of public safety (van Heezik, 2008).

From the 80s onwards, this hierarchical technocratic approach started to receive more and more criticism (van Heezik, 2008). Inhabitants and other societal actors did not accept anymore that top-down imposed projects affected their living environment without having a say. The societal movement against the technocratic approach started to draw media attention and columnists in Dutch newspapers such as Telegraaf, HP/De Tijd, De Volkskrant, and Elsevier criticized the planned dike reinforcements (van Heezik, 2008). One of those critics, professor Hans Righart (1990), even argued in a newspaper article that the Dutch approach to ensure flood safety would fit in the Romanian dictatorship of Ceausescu. Finally, the media attention paid off. The pressure from society, in combination with flood threats in 1993 and 1995 and new emerging challenges such as climate change and soil subsidence, created the momentum for institutional change in the world of water management (Woltjer & Al, 2007).

In a search for new strategies to ensure flood safety, the field of water management made a transition towards more integrative and collaborative forms of governance (van der Brugge, Rotmans, & Loorbach, 2005). Conventionally, the water sector mainly relied on its rational technocratic expertise to reduce the probability of flooding. By acknowledging that water issues are 'wicked' and thus are valued, interpreted, and defined differently per actor, the former technocratic hierarchical approach was considered as inappropriate to ensure flood protection (Lach, Rayner, & Ingram, 2005; van der Brugge et al., 2005). The isolated approach of a sectoral fight against floods changed into a more extrovert integrative approach of accommodating water on land (Woltjer & Al, 2007). A new regime emerged, in which collaborative arrangements became considered as the solution to deal with the wickedness of water.

1.2 What am I doing?

Where collaborative water governance might sound much more romantic than a dictatorship, it also introduces new challenges. In a dictatorship, it is clear who has the right to decide and who is accountable for the decisions made. Power, here understood as the capacity of an actor to influence a decision (derived from Arts & van Tatenhove, 2004, p. 351), is concentrated in the hands of a limited amount of actors. However, this concentration of power is less clear in a collaborative governance regime, in which power is spread over a wide variety of actors. Civil-servants, politicians, and inhabitants can join the decision-making table to have a voice in the collaborative process. Interactions and discussions at these tables could lead to win-win situations which actors could not achieve independently from each other (Roberts, 2000). However, sitting at the same table does not mean that each actor's voice has the same capacity to influence a decision. Actors differ in their possibilities to empower their voice and therefore also their capacity to influence a decision varies (Ansell & Gash, 2008; Ran & Qi, 2018). A lot of effort is needed in collaborative processes to create a win-win situation in which not only the

interests of the powerful are served (Ansell & Gash, 2008; Brugnach, Craps, & Dewulf, 2017). Since collaborative processes are often multi-scalar and highly complex, the power imbalances between actors become hard to understand (Huxham, 2000). This results in ambiguity among actors if their input is sufficiently empowered to reach the final plan. In other words: it becomes unclear where the power has gone, who is responsible for decisions made, and who is accountable for the consequences.

To find out where the power has gone, this study tries to unravel the complex world of power dynamics in collaborative processes. The term power dynamics concerns the process of power interactions between collaborating actors (Based on: van Lieshout, Dewulf, Aarts, & Termeer, 2017). The aim of this study is to better understand the influence of power dynamics on collaborative processes by examining how actors empower their voices while collaborating. To fulfill this aim, a qualitative interpretive case study is conducted in which the case study concerns the Meandering Meuse Project ('MM Project'). The MM Project is one of the first projects resulting from a change of law in 2017 by the Dutch government. This change of law increased the safety norms of river dikes. To meet these new safety norms, the MM Project combines the objective of water safety with other spatial objectives to improve the spatial qualities of the surrounding area. When this study was conducted, the MM Project was in the decision-making phase in which numerous actors were involved in different collaborative fora. Since the project is labeled as a frontrunner project by the Dutch government, the MM Project is used as a paradigmatic case. This means that the findings of this study aim at creating metaphors or lessons for other water safety projects at the governmental agenda (Flyvbjerg, 2006).

To analyze the influence of power dynamics in the MM Project, the two concepts of power and framing are combined. Where several other studies describe power as a static property, this study takes a different angle by perceiving power as a dynamic concept. When approaching power from a static perspective or as 'something out there', power becomes an apple hanging in a tree, waiting to be plucked by an actor to create an apple-pie. However, power is not only a property which some actors possess and others not. Power is exerted via interactions between collaborating actors, rather than a capability or characteristic of an individual (van Lieshout et al., 2017). When actors express their frames in a collaborative process, they interact, negotiate, learn, and reframe the problem to create common ground in which decisions are made (Dewulf et al., 2009). By examining how power is exerted via these frame interactions, power becomes an intrinsic part of the discussions and decision-making process. To examine this role of power dynamics in the decision-making process of the MM Project, the three sources of power - formal authority, resources, and discursive legitimacy - distinguished by Hardy & Phillips (1998) are combined with the concept of framing. Frames containing these sources of power might exclude or overrule other – less empowered – frames that represent other interests, values, or wishes. Finally, the differences in the empowerment of frames can have serious consequences since they influence which frames prevail in collaborative processes and which frames not.

1.3 Why am I doing this?

Although collaborative processes have received a lot of academic attention over the past decades, there is still a lot to learn how, and under what conditions, collaborative efforts contribute to decision-making procedures in the world of water governance. According to literature reviews of Brisbois & de Loë (2016a) and Vink et al. (2013) more studies should account for the role of power in these processes. Where some articles mention that power influences collaborative processes, the real impacts of power dynamics remain often underexposed. It is important to account for power dynamics, as applying a theoretical power lens helps to identify - obvious as well as hidden - causal factors and relationships that shape decisions (Lukes, 2005). According to Brisbois & de Loë (2016b), the world of water governance is highly suitable for this purpose, because a great variety of actors across scales is involved in complex decision-making procedures. By considering the role of power in the field of water governance, a more realistic view is obtained of what collaborative processes can accomplish in the existing institutional settings (Brisbois & de Loë, 2016a).

Especially nowadays an in-depth understanding of power dynamics in collaborative processes is of great importance. Collaborative water governance becomes embedded in legal frameworks such as the European Flood Directive 2007/60/EC and the new Dutch environmental law, which means that collaboration between governmental and societal actors becomes a legal requirement in solving environmental issues. Due to this legal embedment, bureaucrats, policymakers, scientists, and civil actors are all affected by the introduction of more collaborative forms of water governance. Therefore, according to Purdy (2012), more attention should be paid to the role of power dynamics to properly understand, facilitate, and design collaborative processes. For this reason, this study is not normative or prescriptive, but understanding-oriented to clarify the things as they are.

1.4 How to read this?

To unravel the complex world of power dynamics in collaborative processes, this report first builds a theoretical framework which combines the concepts of power and framing to operationalize power dynamics (Chapter 2). Secondly, in Chapter 3, the theoretically informed research questions are presented which aim to create a better understanding of the role of power dynamics in the collaborative process of the MM Project. Thirdly, in Chapter 4, the research design is discussed which consist of a description of the methods used to collect and analyze data. In the middle part, the sub research questions are answered to finally formulate and discuss the answer on the main research question in Chapter 8 and 9. The reading guide is visualized in Figure 1.1.

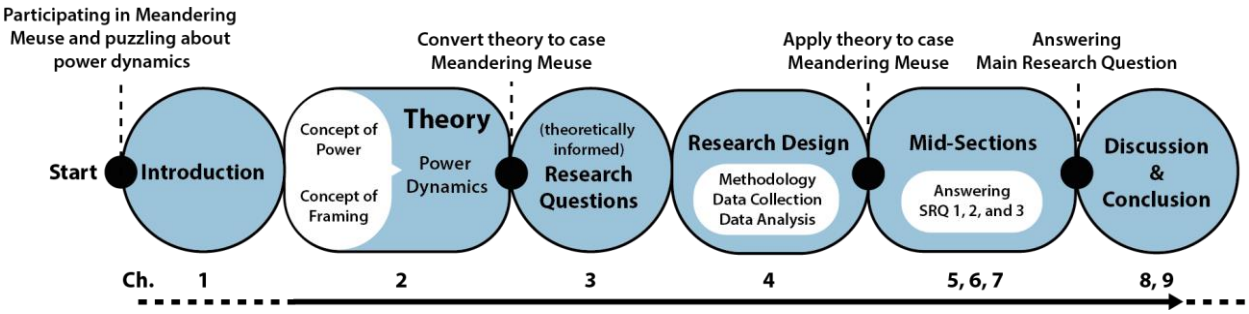
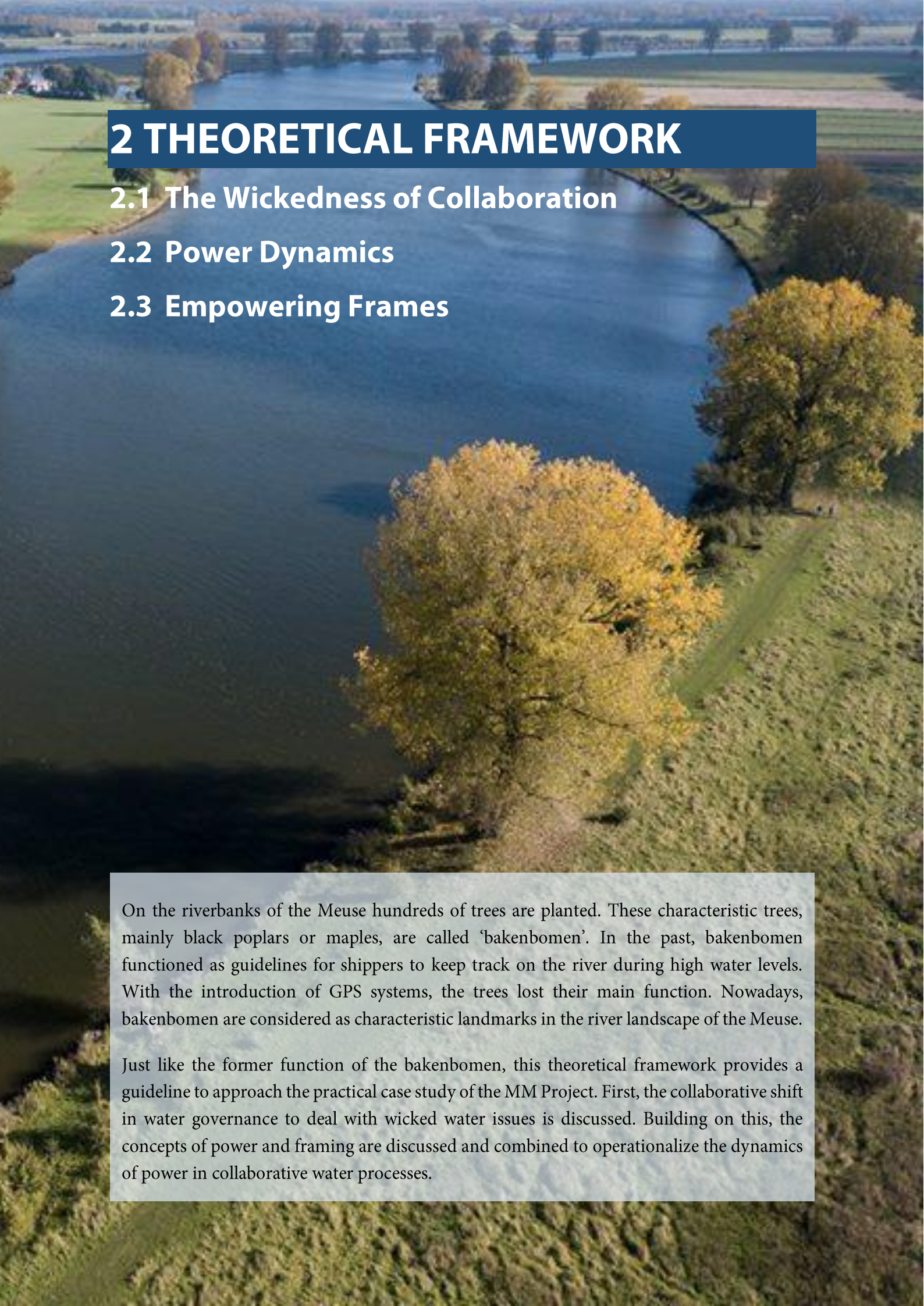


Figure 1.1 Reading Guide



2 THEORETICAL FRAMEWORK

2.1 The Wickedness of Collaboration

2.2 Power Dynamics

2.3 Empowering Frames

On the riverbanks of the Meuse hundreds of trees are planted. These characteristic trees, mainly black poplars or maples, are called 'bakenbomen'. In the past, bakenbomen functioned as guidelines for shippers to keep track on the river during high water levels. With the introduction of GPS systems, the trees lost their main function. Nowadays, bakenbomen are considered as characteristic landmarks in the river landscape of the Meuse.

Just like the former function of the bakenbomen, this theoretical framework provides a guideline to approach the practical case study of the MM Project. First, the collaborative shift in water governance to deal with wicked water issues is discussed. Building on this, the concepts of power and framing are discussed and combined to operationalize the dynamics of power in collaborative water processes.

2.1 The Wickedness of Collaboration

Compared to previous attempts to tame the water by means of a hierarchical approach, a collaborative approach asks for different practices. Where the conventional technocratic approach focused on solving the physical issues of water, the new integrative approach acknowledges that water issues are 'wicked' as they incorporate multiple functions (e.g. recreation, drinking water, agricultural), manifestations (e.g. rain, groundwater, sea water, surface water), and values (e.g. economic, ecological, social), leading to a variety of multi-scalar issues (e.g. demand, supply, scarcity, pollution, sea level rise) (Lach et al., 2005; van der Brugge et al., 2005). The wickedness of water issues means that no definitive problem formulation exists: "The formulation of a wicked problem is the problem!" (Rittel & Webber, 1973, p. 161). Where one actor defines the problem of water shortage as a matter of inadequate supply, other actors define it as a matter of extensive demand. Where a water engineer participates in a collaborative process to address the problem of flood protection, a dyke resident participates because he wants to address the problem of dyke elevation. Every actor reflects different interpretations, interests and values while solving the wicked issues of water.

For solving wicked water problems, the possible solutions are just as innumerable as the possible problem definitions. Where a puzzle usually has only one solution, the puzzle of a wicked problem has an endless amount of possible solutions. The definition of a wicked problem has serious consequences for how the puzzle is solved (Dewulf, Mancero, Cárdenas, & Sucozhañay, 2011). Certain problem definitions namely anticipate that some solutions are more desirable than others. If the final result of the wicked problem puzzle is 'the best solution possible' is a matter of judgement since the potential solutions cannot be expressed in terms of true-or-false, but only in terms of good-or-bad (Rittel & Webber, 1973). So are market based solutions favored when water is defined as an economic good, but are legal solutions advocated when water is considered as a human right (Brugnach & Ingram, 2012). The problem cannot be solved, but only be re-solved since no stopping rule exists (Rittel & Webber, 1973). As said by Pacanowsky (1995, p. 37) "…we do not really 'solve' wicked problems; rather, we 'design' more or less effective solutions based on how we define the problem." Therefore, solving wicked water problems is part of an iterative process, which depends on how the wicked problem is defined, valued, and interpreted by the collaborating actors that try to solve the puzzle.

How to deal with Wicked Water Problems?

In an attempt to solve the puzzle of wicked water problems, collaborative governance arrangements emerged. The aim of these arrangements is to deal with the multiple interpretations of wicked water problems by creating a shared understanding among actors about the wicked problem at stake (Ansell & Gash, 2008). Collaborative governance arrangements are characterized by a broad inclusion of public and private actors, equitable participation, shared resources, and a consensus-oriented deliberation (Brisbois & de Loë, 2016b; Emerson, Nabatchi, & Balogh, 2012). This collaborative way of governing finds its origin in collaborative planning theory developed by scholars such as Fischer & Forester (1993) and Healey (2003). Influenced by theories such as Habermas' communicative rationality, the development of more collaborative forms of governance led to more inclusive debates amongst state, private, and civil actors to inform decision-making. The fundamental idea is that collaborative efforts contribute to win-win outcomes, which actors could not accomplish by acting independently (Roberts, 2000). Collaboration can lead to creative and innovative solutions that reflect a broad range of knowledge, are acceptable to all stakeholders, and prevent conflict (Innes, 2016). Risk, costs, and benefits

are shared (Roberts, 2000). The outcomes of collaboration are considered of greater legitimacy and lead to improved implementation and compliance (Challies, Newig, Thaler, Kochskämper, & Levin-Keitel, 2016). These possible benefits of collaboration resulted in a wide range of collaborative labels, for example 'alliances', 'partnerships', 'roundtables', 'joint working' and 'multi-party working' (Huxham, 2000). To capture this whole spectrum of collective decision-making labels, this study uses the definition of collaborative governance from Ansell & Gash (2008, p. 544):

> "A governing arrangement where one or more public agencies directly engage non-state actors in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets."

Important to add to this definition is that these collaborative governance arrangements often consist of multiple collaborative coalitions or fora at different scale levels (local, regional, national). The decision-making process is not restricted to only one decision-making table surrounded by collaborating actors. In practice, multiple layers of collaboration are addressing the same problem simultaneously at different scale levels (Huxham, 2000). Per collaborative layer different topics are discussed, because the responsibilities of actors vary per scale level or actors might be not active at certain scale levels. Making use of several layers of collaboration can also be done for practical reasons, for example to facilitate the large amount of involved actors (Huxham, 2000). In different episodes of decision-making, the actions or results of a particular collaborative layer are linked to the actions in other collaborative layers to get to the final decision (van Lieshout et al., 2017). This is illustrated in Figure 2.1, in which also the active actors of the MM Project are added per collaborative layer: Steering Committee Delta program Meuse (SDM), the project partners, and workshop participants. The tasks and responsibilities of each collaborative layer are discussed in more detail in Section 4.4.

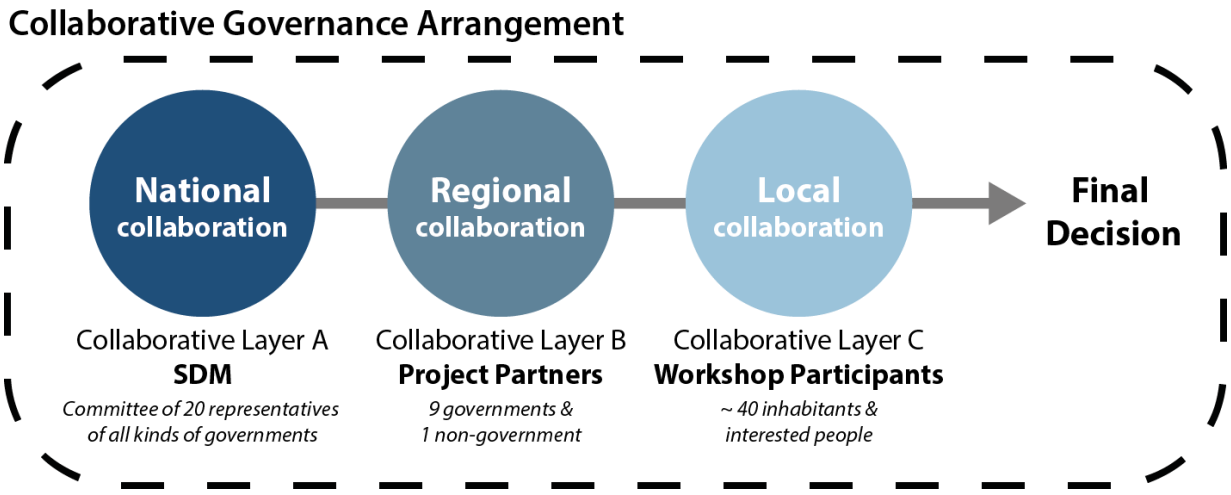


Figure 2.1 Collaborative Layers

The Power of the Argument

Despite collaboration between parties across scales might sound much more romantic than a top-down dictatorship, it also introduces new challenges (Huxham, 2000). Collaborative approaches are often based on the assumption that all actors are equally empowered to contribute to the final outcome (Innes, 2016). As a result, especially in those articles that advocate for collaborative governance, the role of power is often neglected (Arts & van Tatenhove, 2004). According to Healey (2003) this notion derives from Habermas' ideal speech situation, which was of great influence on the development of collaborative planning theory. In this ideal situation, power is equally spread between the collaborating actors to create a situation in which participants evaluate each other's assertions based on reason and evidence without influences from non-rational coercive factors such as capital and power. The possibilities of actors to influence a decision are considered as equal. However, in practice, the best argument does not always win. Actors empower their voices in discussions to increase their capacity to influence decisions (Krott et al., 2014). As every actor is different, also their degree of authority, resources, and discursive legitimacy differs (Hardy & Phillips, 1998). An example are governments or funders who increase their influence on outcomes by imposing minimal requirements to the end-result (Huxham, 2000). Ran & Qi (2018) describe this unequal distribution of power as 'power imbalance' or 'power asymmetry', which means that the power of actors to empower their voice is unequally distributed over a collaborative governance arrangement.

Power imbalances can have serious consequences for the effectiveness of collaborative processes (Ansell & Gash, 2008; Ran & Qi, 2018). To create win-win situations, power needs to be dispersed among collaborating actors in an uncontested way to avoid authoritative or competitive strategies (Roberts, 2000). However, as collaborative processes are highly complex, it is often unclear how and by whom power is exerted (Huxham, 2000). In the multiple layers of a collaborative governance arrangement (Figure 2.1), ambiguity arises who is accountable for the decisions made and if the input of certain actors is sufficiently empowered to contribute to the final decision (Huxham, 2000). Layers of collaboration addressing the same problem may even deal with non-issues, because decisions are possibly already made by other collaborative layers (Roth, Vink, Warner, & Winnubst, 2017). As stated by Hardy & Phillips (1998, p. 218), "collaboration may mask moves by powerful organizations to protect their privileged positions and to disadvantage less powerful stakeholders." Hidden agendas, power differences, and injustice lead to distrust among actors and possibly even to protest (Roth et al., 2017). This is illustrative for how a win-win situation may change into a zero-sum game, in which those with power create their own win at the expense of others. Neglecting the role of power dynamics and its consequences would result in an incomplete image of what collaborative efforts might achieve (Ansell & Gash, 2008). The next section elaborates on this pitfall and describes how this study tries to unravel the complex web of power dynamics.

2.2 Power Dynamics

The distribution of power is just as often contested as its definition (Lukes, 2005). As stated by Arts & van Tatenhove (2004, p. 346): "It seems as if there are as many definitions and approaches as there are power analysts." Often, these definitions and approaches are based on works of authors such as Foucault, Habermas, Giddens, and Lukes. Where the perspectives of these authors are often set against each other in theoretical debates, this study does not perceive them as contradictory. On the contrary, this interpretive study perceives the various perspectives on power as multiple ways to approach social phenomena of which the choice for a particular perspective depends on the context under study. Therefore, this section starts with explaining the position of this study within the power debate, after which the first step towards the operationalization of the concept is made.

An actor-oriented Perspective

The context of the power dynamics under study mainly consists of actors interacting at different scale levels of a collaborative governance arrangement. In these coalitions, power becomes a relational and dynamic concept which is exerted between actors. Similar to van Lieshout et al. (2017, p. 552), this study talks about 'power dynamics' to "…grasp the relational and dynamic aspects of power." Power is namely expressed in social relationships in which actors interact and are interdependent (Lukes, 2005). This interpretation of the power concept asks for an actor-oriented approach, which resembles an active and relational representation of the power concept. Based on Giddens' (1984) perspective on the concept of power, Arts & van Tatenhove (2004, p. 347) introduced a definition which is considered as best suitable for the dynamic power perspective of this study. This dynamic power perspective will become clearer in the next paragraph when dissecting this definition:

> "Power is the organizational and discursive capacity of agencies, either in competition with one another or jointly, to achieve outcomes in social practices, a capacity which is however co-determined by the structural power of those social institutions in which these agencies are embedded."

The first point of attention is that this definition centers 'agencies' (from now on described as 'actors') and emphasizes their interdependency to get to decisions. Collaborating actors or different layers of collaboration interact, either in competition or jointly, to get to final decisions. The collaborating actors are the central units of analysis in this study, because their capacity to influence decisions is examined. The second point of attention is that this definition focusses on the accessibility to resources as well as on their deployment in processes to influence outcomes. Power is understood as a capacity or ability, rather than a property or characteristic. This is similar to Lukes' (2005) perception of power as a dispositional concept, which means that power contains a potentiality that may never be actualized. Arts & van Tatenhove (2004, p. 347) explain it as follows: "To have (access to) resources is one thing, to use them and become effective another." The third point of attention is that resources to influence decisions are not only expressed in organizational terms (e.g. money, expertise, personnel), but also in discursive terms (e.g. argumentation, negotiation, persuasion). Studies often focus on the structural and instrumental power of actors (Brisbois & de Loë, 2016a). However, the 'power of argumentation' can be of great influence on the outcome of collaborations as well (Entman, 1993). By considering both, a complete image is obtained of the relational and interactive dimensions of power dynamics. The fourth and last point of attention is that the definition of Arts & van Tatenhove acknowledges that the capacity

of actors to influence decisions is subject to the structural power of social structures (e.g. discourses and institutions). Authors as Foucault and Lukes describe how actions of actors are - consciously or unconsciously - shaped, enabled, or constrained by these social structures. However, especially the 'ultra-radical view' of Foucault (Lukes, 2005, p. 88) – and to a lesser extent also the 'radical view' of Lukes (2005) – entail a risk to undermine the capacities of actors to act in these structures (Arts & van Tatenhove, 2004). Foucault described power as a characteristic of social practices, which is exerted through hegemonic discourses, rather than through actors, laws, or rules (Arts & Buizer, 2009). Actors are described as - somewhat passively - subject to the power of hegemonic discourses that discipline what actions are normal and legitimate. This study follows the worries expressed by Giddens (1984) and Arts & van Tatenhove (2004) that Foucault's perspective has a risk of denying the knowledgeability and capability of human agencies to intervene and act in social structures. Not only the content of a discourse or the structure of institutions disciplines what decisions are made in this study, but also the actors with the capacity to empower and shape the discourse. The power of actors is the central point of analysis, rather than the power of the established social structures. This means this study acknowledges that the capacities of actors are subject to the structural power of social structures (e.g. institutions and discourses), but does not undermine the capacity of actors to act within these structures.

The Sources of Power

Now the actor-oriented perspective of this study is clarified, a first step towards operationalization of the power concept can be made. To operationalize the actor-oriented approach, the theoretical framework introduced by Hardy & Phillips (1998) is used as basis. In this framework, Hardy & Phillips (1998, p. 219) distinguish three sources of power "…which are particularly useful in making sense of dynamics in interorganizational domains." These power sources are (1) formal authority, (2) resources, and (3) discursive legitimacy. Those actors or collaborative layers that have the capacity to exert these sources of power have a bigger chance to influence a decision than those who do not empower their voices with these power sources. Hardy & Phillips (1998) developed this framework because they experienced the power dimension was underexposed in literature examining interorganizational collaborations. Considering the more recent literature reviews of Brisbois & de Loë (2016a) and Vink et al. (2013), there is still a need to improve the understanding of the role of power in collaborative processes. Therefore, this study explores if the theoretical framework developed by Hardy & Phillips (1998) is still relevant in the context of contemporary collaborative processes. The three sources of power are described below.

Source of Power 1 | Formal Authority

With the power of formal authority, actor A has the capacity to influence a decision by the socially acknowledged right to judge and decide about defined areas (Hardy & Phillips, 1998). It is the relative status of an actor within the institutional context of a collaboration (Purdy, 2012). When the authoritative status of actor A is more prominent than the authoritative status of actor B, the claims of actor A will be of greater influence on the outcome of a collaborative process. Authority is often assisted by rules and laws that enforce the authority of an actor. Other ways that can reveal the authority of an actor in the collaborative process are imposed criteria, boundary conditions, developed policies and frameworks, or formal and informal consultation procedures. Next to the authority to judge and decide about certain aspects, an actor can also have the authority to design the collaborative process. This form of 'structural power' (Lukes, 2005) or 'power over the process' (van Lieshout et al., 2017) enables

empowered actors to open up and close down processes, to invite and exclude actors, and to control and structure the agenda setting. Despite authority might sound as a static source of power, it can be shared, renegotiated, and relocated over time, for example when an actor that expresses formal authority commits to the idea of another actor (Hardy & Phillips, 1998).

Source of Power 2 | Resources

With the power of resources, actor A has the capacity to influence a decision by empowering their voices with tangible resources (monetary resources, people, landownership, technology) or intangible resources (expertise, knowledge, capabilities) (Hardy & Phillips, 1998). The power of resources acknowledges the interdependency between actors. Instrumental power, as Lukes (2005) describes this source of power, is often exerted in active ways. Actor A wants something to be done and achieves that by mobilizing and expressing its resources. This source of power is because of the visible cause-effect relationships relatively easy to study (Brisbois & de Loë, 2016a). When actor B relies on actor A, because actor A owns a critical resource, actor B is at a power disadvantage (Hardy & Phillips, 1998). Especially when an actor entails resources that are critical or scarce, the capacity of that actor to influence a decision increases.

Source of Power 3 | Discursive Legitimacy

With the power of discursive legitimacy, actor A has the capacity to represent a discourse or to speak on behalf of a societal issue in a collaborative process. By means of speaking on behalf of societal values and norms, the capacity of an actor to influence decisions increases. Actors can refer to the principles of democracy, the importance of social support, or the rule of law. By empowering their voice with discursive legitimacy, an actor can affect the public understanding of issues among other actors to influence decisions. An example: when actor A represents a minority group, his statements can be linked to the societal values of equality and diversity. Consequently, the statements of actor A gain more power and the capacity of the actor to influence a decision increases. The influence of this source of power may exceed the influence of the other two since actors exerting this power source are often talking on behalf of the shared interests of a group, rather than actors with a strong self-interest (Hardy & Phillips, 1998). Discursive legitimacy can therefore empower the voice of those which you would not consider powerful on beforehand. Media attention and public protests are methods to increase the impact of this power source. However, the power of discursive legitimacy is often expressed in more subtle and covert ways. Brisbois & de Loë (2016a) argue that this source of power is underrepresented in literature, because it is relatively hard to grasp.

From 'static statue' to 'dynamic dancer'

The three described power sources are the basis to analyze the capacity of an actor or collaborative layer to influence a decision. However, these sources of power do not really capture the interactive nature of power dynamics in collaborative processes (Purdy, 2012). At the moment, the sources of power are described as static representations of power that certain actors possess and others not. Such a static representation of power "…is limited in its ability to describe ongoing power dynamics in a collaborative governance process (Purdy, 2012, p. 416). Therefore, these sources of power need to be converted from 'something-out-there' to an intrinsic part of the interactions in a collaborative governance arrangement.

To change this static representation of power into a more dynamic one, this study follows Hardy et al. (2005) and van Lieshout et al. (2017) in considering collaborations from a discursive perspective. In collaborative governance arrangements, actors do not behave as static statues that possess power or not. Collaborating actors interact, discuss, and argue to get to final decisions. By means of these interactions, power dances over the table from one actor to the others. As said by Arts & van Tatenhove (2004, p. 340) "power games are an intrinsic part of argumentation processes." Therefore, this study focusses on the interaction via which actors exert power, for example face-to-face meetings, reports, or other documents. These discursive practices not only reflect the language used, but also "…the ways in which language constructs organizational reality" (Hardy et al., 2005, p. 60). Examining the power dynamics that are part of these discursive practices gives a full picture of the capacity of actors to influence decisions. The next section describes how this study accounts for the discursive practices in collaborative processes.

2.3 Empowering Frames

To operationalize power dynamics from a discursive perspective, the concept of framing is used. The concept of framing "…consistently offers a way to describe the power of a communicating text" (Entman, 1993, p. 51). The concept is particularly useful when analyzing multi-actor settings dealing with wicked problems, because the concept captures the multiple interpretations, values, and meanings assigned to the wicked problem (Fletcher, 2009). After the concept was introduced by social and communication sciences, the concept expanded its use to other fields of study such as psychology and sociology (Dewulf et al., 2009). This resulted in multiple definitions, different usages, and a variety of conceptual interpretations which eventually led to conceptual confusion (Dewulf et al., 2009). Therefore, it is of great importance to define the boundaries of the framing concept thoroughly in this section.

Framing: a category in the world of discourses

The concept of framing derives from the world of discourse theory and analysis (Fletcher, 2009). Discourse analysis is an umbrella term for analytical approaches that aim at analyzing the language-in-use (Hajer & Versteeg, 2005). However, the concept of discourses can be interpreted and applied in many ways. To create an overview of the variety of interpretations and applications of the concept of discourses, Arts & Buizer (2009) distinguished four categories: (1) discourse as 'communication', (2) discourse as 'text', (3) discourse as 'frame', and (4) discourse as 'social practice'. Different from the first two categories, the category of discourses as 'frames' does not only focus on the meaning and exchange of language, but also on the underlying reasons for actors to use a certain language (Arts & Buizer, 2009). The use of language is mediated by a frame of meaning, of which the verb 'framing' is the process of meaning construction and the noun 'frames' are the "…communicative devices that individuals and groups use to negotiate their interactions" (Dewulf et al., 2009, p. 160). Thereby, different from the Foucauldian category of discourses as 'social practice', the concept of framing empowers actors and does not have the risk to undermine the capability and knowledgeability of actors to act in social structures as discourses and institutions (described in section 2.2 and by Arts & van Tatenhove, 2004, p. 349). It is not only the social practice of discourses that disciplines the behavior of actors, but also the actors acting within these social structures are capable to exert power by means of interactions (Arts & Buizer, 2009). Therefore, the concept of framing fits in the actor-oriented approach of this study.

Frames in Collaboration

The concept of framing is used in this study to analyze from what perspective collaborating actors approach the problem addressed in collaborative governance arrangements. As described in section 2.1, wicked problems do not have one definitive definition. In multi-actor settings dealing with wicked problems, actors have diverging ideas how to define the issues at stake or what the whole situation is about (Dewulf, Brugnach, Termeer, & Ingram, 2013). In other words: actors *frame* the wicked problem addressed in different ways by highlighting, selecting, and linking different issues that are part of the problem (Dewulf et al., 2013). This process of framing is illustrated by Figure 2.2. For the scope of this study, the definition of Entman (1993, p. 52) is used:

> "To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described."

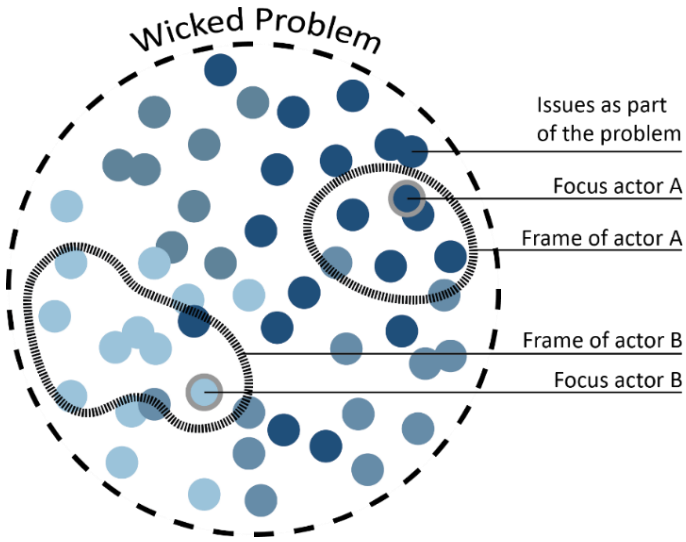


Figure 2.2 Framing a Wicked Problem

The process of framing can be divided in two parts, namely framing the *problem domain* and framing *the issues* in the problem domain (Dewulf et al., 2011). Framing the *problem domain* entails the process of drawing a boundary around the issues that are addressed in a collaborative process. As actors approach a problem from different perspectives, they arrange, stress, and link different issues to create their own problem domain (Dewulf et al., 2011). Defining the problem domain makes clear what topics is decided about in a collaborative process. Within these problem domains, actors might frame *the issues* at stake in different ways. This second step of framing focusses on the different interpretations of the issues addressed. As Dewulf et al. (2011, p. 53) argue: "Often it looks like everybody is talking about the same thing, while they frame that 'same thing' in very different ways and thus get stuck in endless discussions."

Both processes of framing are influenced by a cognitive memory structure shaped by personal histories, backgrounds, experiences and social contexts (Arts & Buizer, 2009). This cognitive paradigm considers frames to be cognitive representations stored in memory through which actors construct reality (Dewulf et al., 2009). This cognitive frame of reference implies what issues are important for an actor and which

are not. However, next to these cognitive memory structures also an interactive more dynamic component is of influence, described by Vink et al. (2013) as 'interactive framing'. Frames are not only located 'between the ears' of an individual, but also 'between the noses' of a group (Dewulf et al., 2009). In collaborative processes, actors express their diverging frames as communicative devices to negotiate and learn. By means of interactions in collaborative processes, new meaning and knowledge is added to the content of a problem frame to connect diverging frames (Dewulf et al., 2013). The connection of frames is the goal of these interactions, rather than frame integration. Full integration would namely neglect the important differences between actors that may lead to creative and innovative ideas (Dewulf et al., 2013).

Power Dynamics: a process of Puzzling and Powering

Where framing might sound like an innocent phenomenon, it can have serious consequences for the decisions made in collaborative processes. The concept of framing can namely not be seen independent from the concept of power (Arts & van Tatenhove, 2004; Vink et al., 2013). Authors such as van der Steen et al. (2016) and van Buuren et al. (2016) describe the interplay between framing and power as a process of 'puzzling and powering'. Power dynamics, which concerns the process of power interactions between collaborating actors, become visible via the interplay of these two concepts.

Puzzling refers to "… activities that generate definitions of a societal problem and possible solutions to solve a societal problem" (van der Steen et al., 2016, p. 8). Puzzling is the interactive process of connecting frames to create common ground in which actors get to legitimate decisions (Figure 2.3). Before actors can start with solving the puzzle of a wicked problem, they first need to agree on what puzzle pieces they want to use to solve the wicked problem puzzle. Interaction, bargaining, and discussions between actors is needed to create a shared understanding of the wicked problem at stake. Puzzling is therefore not about finding the exact facts, but about finding shared judgements about the reality outside (Vink, van der Steen, & Dewulf, 2016).

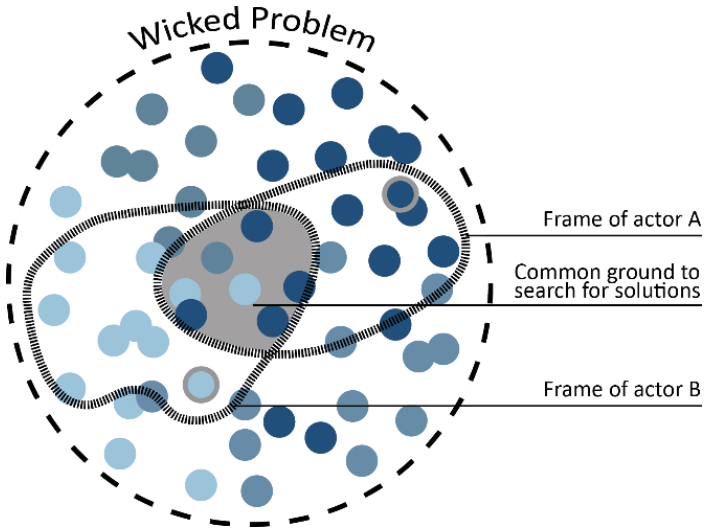


Figure 2.3 Creating Common Ground

The process of puzzling is strongly connected with the process of powering. Without the empowerment of the negotiated frames, the process of framing remains indecisive (Warner & van Buuren, 2016). In that case, the wicked problem and its solution will be reframed repeatedly in a process of puzzling without getting to a final decision. Van der Steen et al. (2016, p. 9) define powering as "…the ability to mobilize enough support for an interpretation of the problem and of the solution." The content of a puzzle piece - a negotiated frame - needs to be empowered sufficiently to make it part of the solution of the wicked problem puzzle and to neutralize the opposition against it (van Buuren et al., 2016; van der Steen et al., 2016). This can have serious consequences for the negotiated solution of a wicked problem, since frames empowered with a particular power source - formal authority, resources, or discursive legitimacy – can overrule less empowered frames and exclude them from the policy agenda (Figure 2.4). As a result, the empowered frame becomes more dominant in the solution of the puzzle. At that moment, when the debate is steered in a certain direction and the range of possible solutions reduces, the power dynamics between actors become visible most.

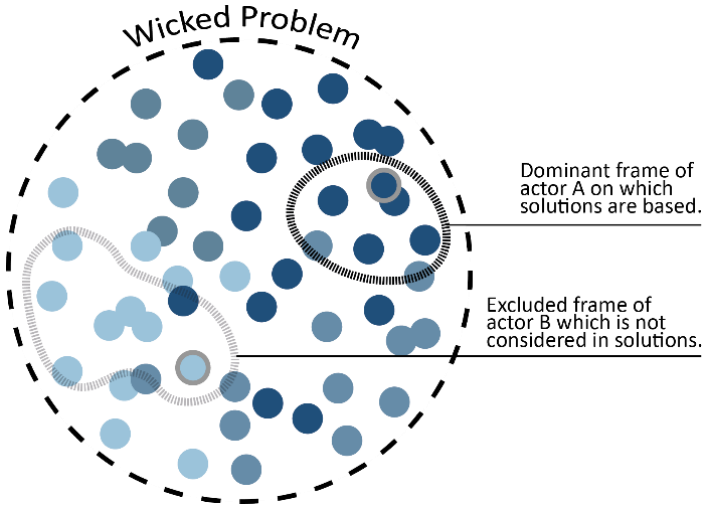


Figure 2.4 Empowering Frames

To analyze the interplay between the concepts of power and framing in the collaborative process of the MM Project, the three sources of power distinguished by Hardy & Phillips (1998) - formal authority, resources, and discursive legitimacy - are combined with the concept of framing according to Figure 2.5. This results in three categories of frames with power, namely (1) frames with formal authority, (2) frames with resources, and (3) frames with discursive legitimacy. It is important to mention that these categories can be intertwined or can have overlap. Actors might empower their frames with discursive legitimacy to challenge the formal authority of other frames or actors might empower their frames with more than only one power source simultaneously. By analyzing how and which actors empower their frames, this categorization gives insight in how some frames prevail, whereas other frames disappear in the decision-making process. Consequently, the capacity of each collaborative layer to influence decisions can be analyzed to contribute to the overall aim to better understand the influence of power dynamics in collaborative processes.

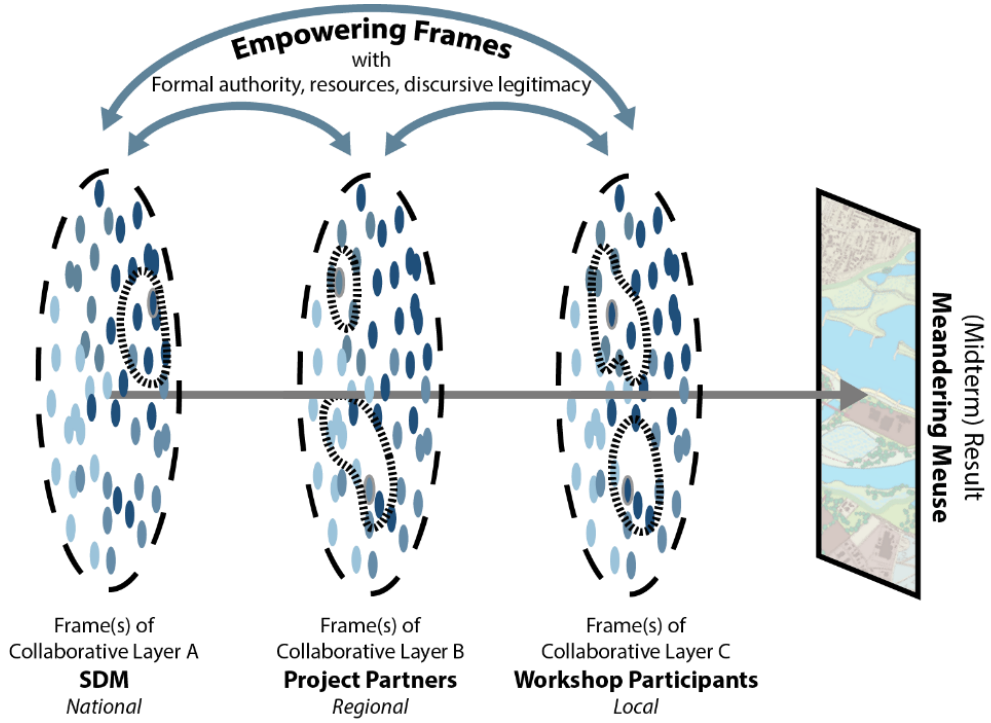


Figure 2.5 Power Dynamics Framework

3 RESEARCH QUESTIONS

The case study area of the MM Project contains four yellow ferries that sail up and down the Meuse. They ensure the connectivity between the province of Brabant and Gelderland. Where the inhabitants use the ferries to go to work, visitors use them to enjoy the recreational routes in the area.

Like the ferries connect both sides of the river and connect inhabitants with visitors, the research questions in this chapter connect theory and practice. By answering the theoretically informed research questions, the obtained findings can be used in practice to improve the understanding and design of collaborative processes.

As described in the previous chapters, the overall aim of this study is to improve the understanding of the influence of power dynamics on collaborative processes. To improve this understanding, the categorization of empowered frames - frames with formal authority, frames with resources, and frames with discursive legitimacy - is applied on the MM Project. The following Main Research Question and Sub Research Questions will be answered in this study:

Main Research Question (MRQ)

How do power dynamics influence the (midterm) result of a decision-making process in the context of collaborative water governance?

Sub Research Questions (SRQs)

SRQ 1: How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project?

SRQ 2: How do actors empower their frames in each collaborative layer of the Meandering Meuse Project?

SRQ 3: How do empowered frames end up in the (midterm) result of the Meandering Meuse Project?

In SRQ 1 the concept of framing is the central point of analysis. The aim of this question is to identify the frames present in each collaborative layer to examine the variety of interests, values, and issues present per layer. This gives insight in what puzzle pieces are preferred by each collaborative layer to become part of the wicked problem solution. Thereafter, SRQ 2 examines the ways how actors empower their frames in each collaborative layer in an attempt to ensure their frames prevail in the final decision. The last sub research question, SRQ 3, examines which frames are sufficiently empowered to reach the (midterm) result of the Meandering Meuse Project. This question uses the three frame categories to give insight in the influence of power dynamics on the result of the MM Project. The answers on the SRQs together help to formulate an answer to the MRQ to fulfill the goal of this study to better understand the role of power dynamics in collaborative processes. To answer these three questions, the next chapter discusses the methodology how to collect and analyze data.

4 RESEARCH DESIGN

4.1 Methodology

4.2 Data Collection

4.3 Data Analysis

4.4 Case Description

4.5 Trustworthiness and Ethics

The river area of the Meuse contains a lot of cultural heritage. Examples are ruins, castles, churches, and windmills. Some of the heritage in the area reflects how water was managed in the past. An example is shown on the picture: steam pumping station De Tuut in Appeltern. 75 similar pumping stations were built to keep feet dry in the polders between the Rhine and the Meuse. Over the years, the steam pumping stations were replaced and demolished as a result of new techniques. De Tuut is the only of 75 stations left in the Rhine-Meuse area and nowadays functions as a museum. This year De Tuut celebrates its 100st birthday.

Similar to the museum of De Tuut, this chapter explains how this study approaches the wicked issues of water. The research design is discussed first, after which the data collection and analysis methods are explained. Also the case study area is introduced more thoroughly and the trustworthiness and ethical considerations are discussed.

4.1 Methodology

To improve our understanding of the role of power dynamics in collaborative processes, this research adopted an interpretive approach. This methodology section discusses this approach to get to the procedures for data collection (Section 4.2) and data analysis (Section 4.3).

An interpretive Approach

Considering the origin and qualitative nature of the objectives and research questions, this study adopted an interpretive research approach. Interpretive research assumes that the world we live in can be understood and interpreted in multiple ways. The 'real' world is socially constructed by human actors, in which 'real' is subjective, rather than objective (Walsham, 2006). An interpretive approach was used in this study because of two reasons. First, the existence of multiple realities is the foundation of the applied framing concept which assumes the world we live in can be understood in multiple ways as a process of meaning construction. Second, as the dimension of power is underexposed in research (Section 1.3), this study explored just one of the numerous possibilities to improve the understanding of the role of power in collaborative processes. Schwartz-Shea & Yanow (2012, p. 31) use the metaphor of throwing a stone in the water, in which interpretive research tracks the 'ripples' in the water, when an event – the splashing stone – occurs. Specified on this study, the shift towards more collaborative forms of governance can be interpreted as the stone, where the ripples are the consequences for society and actors.

Typical for an interpretive approach is the abductive logic of inquiry (Schwartz-Shea & Yanow, 2012). Abductive reasoning starts with a puzzle of reality, which derives from a tension between the expectations of a researcher (often derived from theory) and the reality a researcher experiences (Schwartz-Shea & Yanow, 2012). In this study, this tension derived from the theoretical notion that power in collaboration is often considered as equally dispersed, where in practice this notion appeared to be questionable. The abductive approach in this study tried to solve a part of this real-life puzzle.

On the Case!

Fieldwork is a fundamental part of interpretive research to capture the different subjective realities that exist (Walsham, 2006). As every collaborative process is different and context-dependent, these processes needed to be analyzed in a particular situation. A paradigmatic single case study was conducted to capture this context-dependency.

A case-study is a research design in which a bounded system, for example an individual, a community, an event, or a town, is intensively examined (Kumar, 2011). The aim of a case-study is to collect contextual information to create a better understanding of causalities or events in the examined context. Considering the explorative nature of this study, a case-study design was helpful to improve the understanding of the distribution of power in practice. As said by Kumar (2011, p. 123), a case study design "…is of immense relevance when the focus of a study is on extensively exploring and understanding rather than confirming and quantifying." Several types of case studies exist, of which a paradigmatic case study is one. A paradigmatic case study aims at developing a metaphor or lessons for other cases in the researched domain (Flyvbjerg, 2006). By analyzing the distribution of power in a representative case, context-dependent knowledge was generated which is generalizable to similar cases (Flyvbjerg, 2006). This means lessons can be drawn from this case study for the numerous dike reinforcement projects that are at the agenda of the Dutch government.

In a search for an appropriate case to examine power dynamics in the field of water governance, the MM Project met the criteria to become a paradigmatic case. Since January 2018, I was attending workshops that are part of the decision-making procedure of this project. Meandering Meuse derived from the Delta program Meuse and aimed at redeveloping floodplains and reinforcing dikes to meet new flood safety standards (Figure 4.1 and section 4.4). The MM Project is labelled as a frontrunner project ('koploperproject') in Delta program Meuse and can therefore be used as an example for other projects that still have to start. The case involved a great variety of actors to find a solution for the wicked water problems addressed. Different layers of collaboration are present in the processes, which are described more thoroughly in section 4.4. Next to the criteria to become a paradigmatic case, other criteria the MM Project met are listed below:

- **Wickedness:** The MM Project dealt with wicked water problems which are framed in multiple ways.
- **Collaboration:** The MM Project aimed at solving wicked water issues via a collaborative process in which several layers of collaboration are present.
- **Accessibility:** The MM Project was accessible in multiple ways. First, there was a willingness to participate among the collaborating actors and project team. Second, documents and other types of information were available online. Third, the project area was easily accessible to conduct interviews.

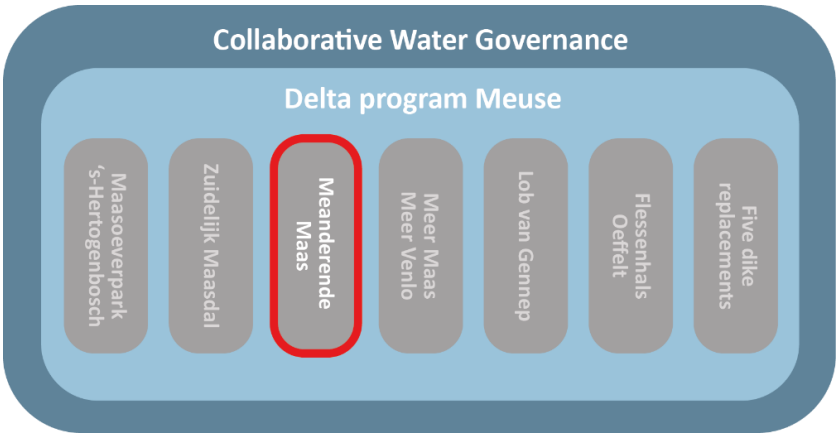


Figure 4.1 The Context of the MM Project

Getting Personal

It is important to discuss my personal involvement in this case as the position of a researcher influences the outcomes of a study. The involvement of a researcher in a case fluctuates during the research process over a spectrum from 'involved researcher' to 'outside researcher' (Schwartz-Shea & Yanow, 2012; Walsham, 2006). Where a researcher is closely involved while conducting participatory observations, the researcher can also take a step back while conducting formal interviews. Taking the position of a – more or less neutral – 'outside researcher' does not mean that the researcher is unbiased (Walsham, 2006). Experiences, background, and history may bias a researcher, which makes it important to consider my position as a researcher in the MM Project.

First, it is important to mention I lived for nineteen years in the project area. My parents still live in the area and therefore they received an invitation to join the workshops of the MM Project. This enabled me to approach one of the gatekeepers of the collaborative process. After approval from the project team to conduct the research, seven workshops were attended from January to October 2018. In these workshops forty inhabitants created and discussed different alternatives for dike reinforcement and

spatial development. The close involvement in these workshops enabled me to gain optimal accessibility to the case. It was relatively easy to approach civil servants, decision-makers, and civil actors as I met them on a monthly basis during the workshop. Thereby, the willingness to contribute to my research increased, because participants perceived me as 'one-of-them' and as a concerned insider. When a researcher is involved closely, other participants increasingly believe in the valid contribution of the study, rather than a research report which ends in a closed closet (Walsham, 2006). However, also downsides were present due to my close involvement. My 'unbiased view' was undoubtedly affected by participating in the MM Project. Just like the other participants, I also had ideas about desirable development directions for the area. It was important for me to funnel my feelings out of the research. Furthermore, as an easy to approach insider, participants expected sometimes from me to stress certain interests and claims in my research. I was sometimes perceived as a tool to stress certain worries or interests. It was important to question myself regularly if actors expressed their real thoughts and feelings, or if they were communicating in a strategic way. Several strategies and techniques are described in section 4.5 to make the sense-making process transparent and to improve the trustworthiness of this study.

4.2 Data Collection

To understand a case in its entirety it is important to gather information from a wide variety of available sources (Kumar, 2011). Therefore, this study examined the MM Project by means of a multi methods approach. Similar to the case study of Dewulf et al. (2011), this study examined frames by means of project documents, meeting transcripts, interviews, and participatory observations. How these methods were applied per SRQ is listed in Table 4.1. This section elaborates on the different techniques and procedures used.

Table 4.1 Data Collection & Analysis

SRQ		Method(s)		Data	Data source	Analysis
1	How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project?	1	Literature study	Transcripts	Policy documents & reports	Frame
		2	Participatory observation	Notes and summaries	Workshops	Frame
		3	Semi-structured interviews	Transcripts	Participating actors	Frame
2	How do actors empower their frames in each collaborative layer of the Meandering Meuse Project?	1	Literature study	Transcripts	Policy documents & reports	Discourse
		2	Participatory observation	Notes and summaries	Workshops	Discourse
		3	Semi-structured interviews	Transcripts	Participating actors	Discourse
3	How do empowered frames end up in the (midterm) result of the Meandering Meuse Project?	1	Literature study	Transcripts	Policy documents & reports	Discourse
		2	Participatory observation	Notes and summaries	Workshops	Discourse
		3	Semi-structured interviews	Transcripts	Participating actors	Discourse

Literature study

Actors not only exerted power by means of spoken language, but also by means of written texts. Policy documents and reports were used in the collaborative process of the MM Project to communicate frames between the different collaborating layers. Actors captured their frames in documents and were able to refer to these documents as a source of power (e.g. laws, studies, visions). Therefore, the purpose of this literature study was to create a better understanding of the power dynamics and frames by analyzing documents in the MM project. Next to the literature used to examine the three collaborative layers, also literature was used to identify the frames present in the midterm result of the MM Project.

The documents used in this literature study were based on three criteria. First, the document needed to be accessible for analytical purposes. Second, the document needed to relate to, or needed to be produced in the MM project. Third, the document needed to be considered as 'impactful' in the process by actors (e.g. steering actions or as communicative device). Table 4.2 lists the literature that matched these criteria and therefore was used to conduct the literature study.

Table 4.2 Documents for Literature Study

Documents		Collaborative Layer
1.	Ruimtelijk Perspectief Maas 2018	1. SDM
2.	Regionaal Voorstel Maas 2016	1. SDM
3.	Hoofdlijnen Voorkeursstrategieën Rivieren 2014	1. SDM
4.	Summary MIRT-Onderzoek Koploper Ravenstein-Lith 2016	2. Partners
5	Summary Workshop 1, 2, 3, 4, 5, 6	3. Workshops
6.	Summary Workshop 7	(Midterm) Result
7.	NRD Meanderende Maas	(Midterm) Result
8.	Factsheet Alternative X & Z	(Midterm) Result

Participatory observation

Participatory observation enables a researcher to follow a real-time process in detail and to do observations as an insider. In this study, participatory observation was used within the third collaborative layer of the MM project, namely the workshops (Figure 4.2). The aim of participatory observations was to improve the understanding of the existing frames and power dynamics among workshop participants. Transcripts made by me, as well as summaries made by the convener (Table 4.2), were used to analyze the group discussions, assignments, and design exercises in the workshops. Seven workshops were attended between January and October 2018.

The data collection method of participatory observation was considered useful because of three reasons. First, participatory observation helped to define the societal problems at play. Repeating discussions and questions in these workshops were indicators of underlying problems or knowledge gaps in the collaborative process of the MM Project. Second, participatory observation turned out to be a useful method to elicit different kinds of meaning construction from a process and was therefore very useful to examine frames (Schwartz-Shea & Yanow, 2012). Third, the collaborative layer of workshop included the greatest number and variety of actors in the MM Project. Participating in these workshops enabled me to get a better and complete image of the third collaborative layer.

In-depth semi-structured interviews

The last method used for data collection were in-depth semi-structured interviews. These interviews were conducted to get a thorough understanding of the frames and power dynamics in each collaborative layer. From each collaborative layer several actors were interviewed. The sampling-method to select interviewees was judgmental (or purposive) sampling (Kumar, 2011). This means the interviewees were approached, because I expected they could provide me with the best information to detect frames and reveal power dynamics. The reason to use this sampling method was to create a representative sample of interviewees in which a great variety of frames was present. Different types of (governmental) organizations and workshop participants with diverging interests were approached. The number of interviews conducted per collaborative layer is listed in Figure 4.2. I stopped approaching interviewees when actors started to repeat each other. This was for me a sign that most of the existing frames were identified.

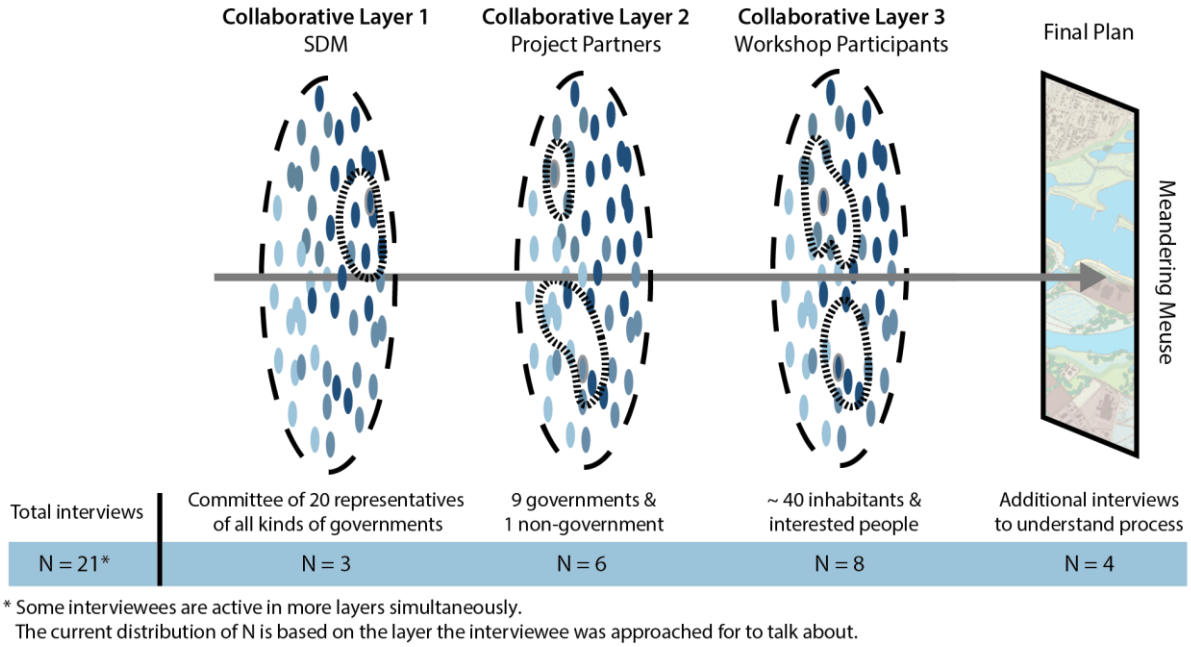


Figure 4.2 Interviews per Collaborative Layer

To create a list of interview questions, the concepts of power and framing were operationalized according to their attributes described in the theoretical framework (Chapter 2). The operationalization of these concepts is listed in Table 4.3. This resulted in an interview protocol, which is presented in Appendix A. The interviews were audio-recorded for analytical purposes, only with informed consent. Interviews were held in Dutch, but for the scope of this research quotes are translated to English. The original Dutch quotes are presented in Appendix B. The audio-recordings were transcribed literally to account for the context in which things were said. Additional handwritten notes were made of important statements in a log.

Table 4.3 Operationalization Framing and Power Concepts

Concept	Attributes	Basis Question (additional questions, if answer is insufficient or misinterpreted, are added in Appendix A)
Framing (SRQ 1 & 3)	Framing the problem domain	What is according to you the problem addressed in MM?
	Framing the issues in the problem domain	What are according to you the most important issues/topics addressed in the collaborative process of MM?
	Framing solutions	What is according to you the solution for the case of MM?
Sources of Power (SRQ 2 & 3)	Discursive Legitimacy	What group do you represent in the collaborative process of MM?
		Why would the collaborative process of MM consider your values, interests, or opinion?
		When you experience your interest is not sufficiently considered in the process of MM, how would you change this?
	Authority	What are the legal authorities or capabilities of your organization?
		Have you (or your organization) imposed any rules, laws, or requirements to the process of MM?
		What was your influence on the structure of the collaborative process of MM?
	Resources	What tangible resources (e.g. money, people, or technologies) did you or your organization insert into the process of MM?
		What intangible resources (e.g. expertise, knowledge, capabilities) did you or your organization insert into the process of MM?

4.3 Data Analysis

Following from the theoretical framework (Section 2.3), frame analysis and discourse analysis were used to analyze the collected data. Discourse analysis is an umbrella term for a gamut of analytical approaches (Hajer & Versteeg, 2005). It is the study of language-in-use (Hajer & Versteeg, 2005). However, this language-in-use can be analyzed in multiple ways (Graham, 2011). Frame analysis is one of the analytical methods that draws particular attention to how cognitive frames, present in the head of an actor, mediate the language used by actors (Arts & Buizer, 2009; van Hulst & Yanow, 2016). The theoretical differences between the concepts of discourses and frames also results in differences between both analytical approaches. These differences are discussed in this section.

Frame Analysis

Frame analysis was conducted to find the answer on SRQ 1 and SRQ 3. To find an answer on these two sub research questions, the existing frames needed to be identified in each collaborative layer and in the (midterm) result of the MM Project. Frame analysis focuses on how actors turn 'worries' into 'problems' to create a comprehensive problem frame (van Hulst & Yanow, 2016). Frame analysis is particularly useful in the context of multi-actor settings to analyze this process of sense-making (Dewulf et al., 2011). To conduct frame analysis, three steps in the framing process are distinguished: naming, selecting, and storytelling (van Hulst & Yanow, 2016). First, the features highlighted by actors were identified

(naming). Then, actors ignored or focused on certain features (selecting). As last step, actors linked these features into one coherent story to express their frame (storytelling). These three steps were used as a guideline to identify the frames of different collaborative layers in the MM Project.

However, as described in the theoretical framework (Section 2.3), the process of framing does not account for the concept of power automatically. The analytical approach of framing focusses on interactions, discussions, and negotiations, rather than on power dynamics. Therefore, to find the answers on SRQ 2 and the complement the answer on SRQ 3, a discourse analysis was conducted to account for the role of power.

Discourse Analysis

Where frame analysis was used in this study to identify what is said and with what reasons, discourse analysis was used to examine the impact of what was said: "One looks to statements not so much for what they say but what they do" (Graham, 2011, p. 5). As stated by Hajer & Versteeg (2005), discourse analysis is highly suitable to find out how actors empower their frames in discussions. This is confirmed by Buizer & van Herzele (2012, p. 94), who argued and showed in their study that "…discourse analysis provides an insight into what discourse 'ruled the game', even if it did so in implicit ways." Where the first SRQ mainly aims at identifying the existing frames, the other two sub research questions also focus on how these frames are embedded in the collaborative process of the MM Project. Discourse analysis was therefore used in this study to analyze how actors empowered and imposed their frames in discussions in their attempt to make them part of the (midterm) result of the MM Project. Finally, by comparing the empowered frames in each collaborative layer with the frames embedded in the (midterm) result, conclusions could be drawn about the capacity of each collaborative layer to influence the decisions of the MM Project.

Coding

To operationalize both analysis approaches, interview transcripts and documents were coded. Coding is the process of sorting data into categories to use it for further analysis (Silverman, 2015). The codes used for this study derived from the theoretical characteristics of the concepts of framing and power (See Chapter 2 Theoretical Framework). This resulted in the categorization and indicators of Table 4.4.

Table 4.4 Guideline for Coding

Concept		Method	Categories	Indicators
1	Framing	Frame analysis	Problem domain	Words referring to problems.
			Framing issues in problem domain	Words highlighting particular issues as important and the interpretations of the expressed problems.
			Framing solutions	Words referring to possible solutions, goals, desires, wishes, and objectives.
2	Power	Discourse analysis	Discursive Legitimacy	Words referring to minorities, unfairness, social justice, and resistance.
			Authority	Words referring to rules, laws, requirements, and process design.
			Resources	Words referring to money, expertise, knowledge, capabilities, and people.

The qualitative data software of ATLAS.ti was used to fulfill the process of coding. This process started with reading and comparing the literature and interview transcripts in a search for indicators of the categories listed in Table 4.4. The next step aimed at categorizing the coded phrases to identify the frames present in each collaborative layer. As a last step, the code categories were analyzed to examine how they were empowered by actors to make them part of the (midterm) result of the MM Project.

4.4 Case Description

Before reflecting on the trustworthiness of adopting the described approaches for data collection and analysis, first the examined case needs to be discussed: the Meandering Meuse Project ('Meanderende Maas', MM Project). The area of the MM Project stretches from the A50 highway to the sluice of Lith and forms the administrative border between the province of Gelderland (north) and Noord-Brabant (south) (Figure 4.3). The project results from new dike safety norms introduced by the Dutch government in 2017. The MM Project is labeled as a frontrunner project ('koploperproject') since it is one the first projects resulting from these new norms. Despite the project focusses on both riverbanks, the dike reinforcement only takes place at the Noord-Brabant side (dike 36-3). This dike has a higher safety norm (1/30.000) compared to the norm (1/3.000) at the Gelderland side (dike 41-3). To meet this new safety norm, the project combines dike reinforcement with other spatial developments to improve the spatial qualities of the area.

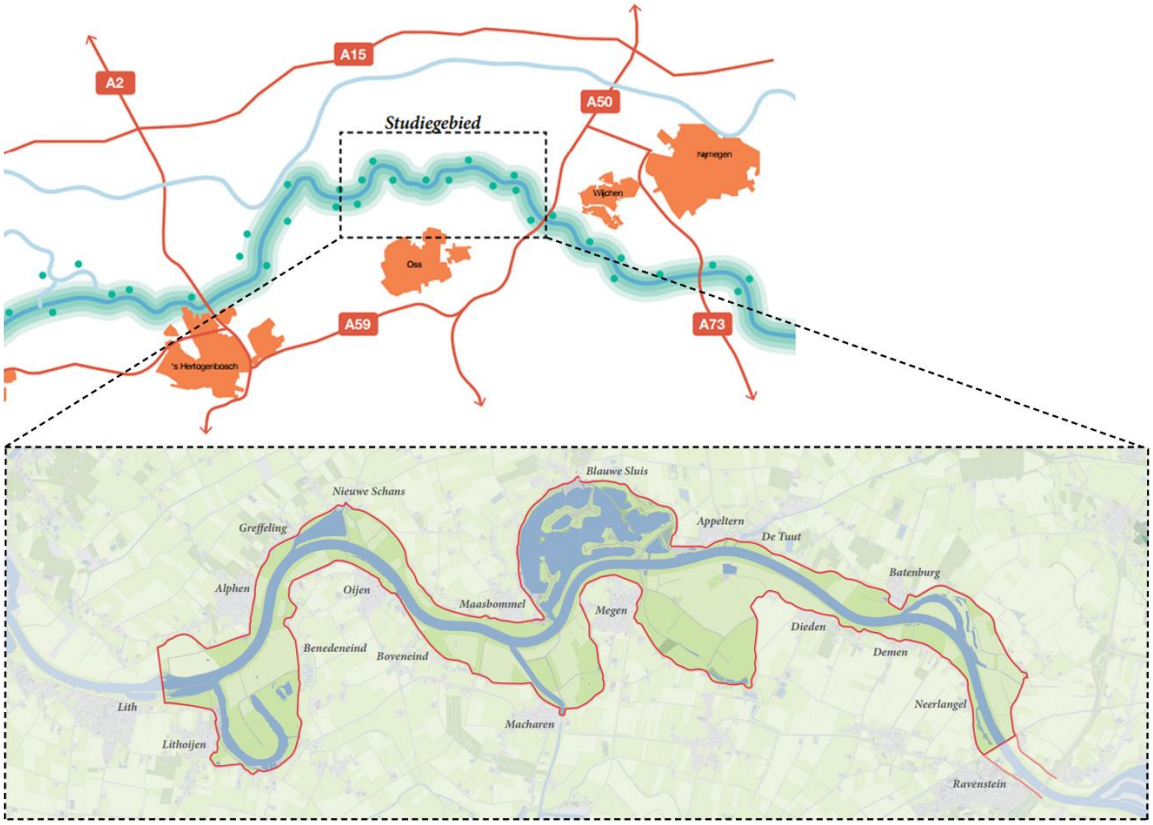


Figure 4.3 Case Area Meandering Meuse (Strootman Landschapsarchitecten, 2017)

At the moment of this research the decision-making process was in a phase of funneling from six *possible* alternatives to two *promising* alternatives (Figure 4.4). The two promising alternatives (Alternative X and Z) indicated the range in which the final alternative (Alternative Y) must fit. Both alternatives are added in Appendix C. The dike reinforcement is planned to be finished in 2025, where other measures have to be finished in 2028 (Projectteam Ravenstein-Lith, 2016).

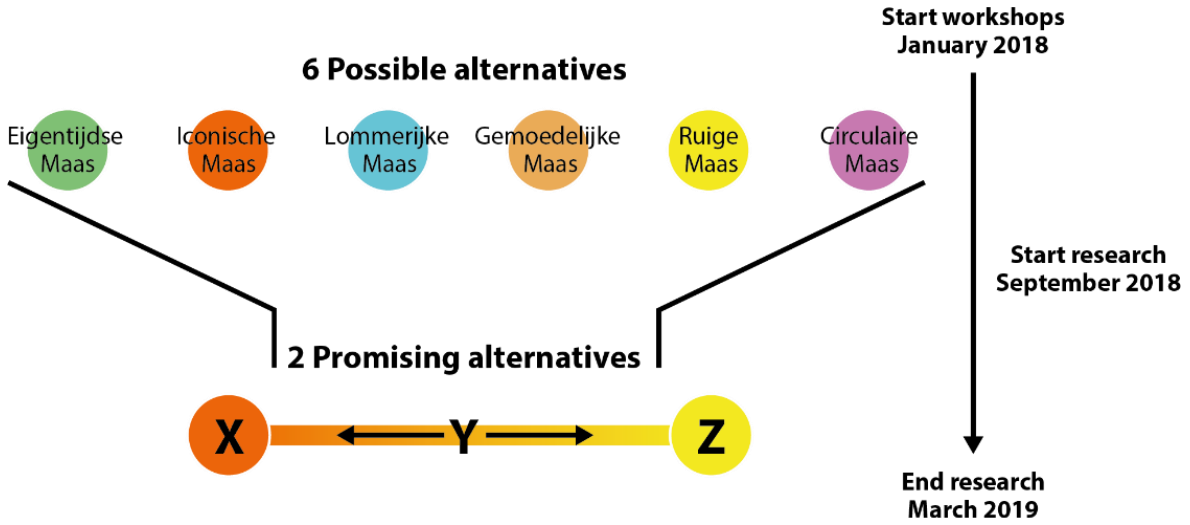


Figure 4.4 Timeline Research

To examine how this process of funneling to the (midterm) result was influenced by power dynamics, three collaborative layers were distinguished in the MM Project: SDM, project partners, and workshop participants. These three collaborative layers were chosen, because they were addressing the MM Project at different scales with diverging interests. Collectively these three collaborative layers formed the collaborative governance arrangement, illustrated previously in Figure 2.1. The collaboration between layers was facilitated by an external project team. This team prepared meetings and processes the results to make sure steps forward are made. All three collaborative layers are discussed below.

Collaborative Layer 1 | Steering Committee Delta Program Meuse (SDM)

Steering Committee Delta Program Meuse (SDM) is an advisory body which consisted of a program team of five persons and twenty representatives of different (governmental) organizations. The committee is financed by three provinces (Limburg, Noord-Brabant, Zuid-Holland), four water authorities, Rijkswaterstaat, and the Ministry of Infrastructure & Water Management. The aim of SDM is to develop coherent policies for the complete Meuse river from Maastricht to the Biesbosch. Next to the MM Project, they are also in close contact with the other projects of the Delta Program Meuse (Figure 4.1). Therefore, this collaborative layer is acting at a national scale.

Collaborative Layer 2 | Project Partners

The second layer consisted of the Ministry of Infrastructure & Water Management, Rijkswaterstaat, two provinces (Gelderland and Brabant), two water authorities (Aa & Maas and Rivierenland), three municipalities (Municipality of Oss, West Maas & and Waal, Wijchen) and a non-governmental organization, namely Natuurmonumenten. These ten organizations are together administrative responsible for the implementation of the MM Project. This layer focused only on the project area and is therefore acting at a regional scale.

Collaborative Layer 3 | Workshops

The third layer consisted of forty persons who attended seven workshops concerning the MM Project from January 2018 till October 2018. A large variety of actors was involved, among which residents, farmers, recreational entrepreneurs, and civil servants. Activities in the workshops consisted of discussions and design assignments to collectively get to decisions. The workshops were addressing the more local scale.

4.5 Trustworthiness and Ethics

Now the case study is explained, it is time to reflect on my involvement in the case and how that involvement affected the findings of this study. The researcher is namely the key instrument to analyze and collect data in interpretive studies like these (Schwartz-Shea & Yanow, 2012). This means the process of collecting and analyzing data was subjective to my position, involvement, and interpretation. This study does therefore not describe the immutable truth, but the interpretation of the researcher by applying the theoretical lens of power dynamics. To make this process of sense-making insightful, this section builds on the explanation of my personal involvement in section 4.1 and reflects on the strategies used to improve the trustworthiness of this study.

Reflexivity

Reflexivity concerns the reflection on how the characteristics, positionality, and presence of the researcher affected the outcomes of a study (Schwartz-Shea & Yanow, 2012). In interpretive research it is important to reflect on what it means to be the key instrument as a researcher. This process of sense-making of the results is namely affected by the characteristics of a researcher, the engagement of the researcher, and the circumstances in which the research was conducted.

I acknowledge my engagement in the process was, and still is, quite big as can be read in section 4.1. My involvement sometimes even touched upon the characteristics of an action researcher, because I affected – to a certain extent – the decision-making process of the MM Project (Huang, 2010). I reported my findings regularly to the project team and interviewees declared they gained new insights in their possibilities to empower frames after interviews. This possibly affected their behavior and the interactions in the collaborative process of the MM Project. However, despite I affected the decision-making process, the decision-making process also affected me and my research. Participating in workshops, exercises, and discussions stimulated my thoughts and wishes about what the (midterm) result of the MM Project should look like. Thereby, workshop participants sometimes saw me as another strategic tool to make their interests more salient in the collaborative process. Actors in the collaborative layers were aware of my dual role as researcher and workshop participant, which possibly enforced them to keep information secret to avoid it would reach collaborative layer 3.

To reflect on the consequences of my involvement, a research log was used to document ideas, meetings, interviews, research activities, and procedures for data collection and analysis. It was noted in the research log when the described downsides of my close involvement were experienced. The research log made me for example aware of the content of my own problem frame. The log enabled me to reflect on the downsides of being closely involved and to take action if needed.

Triangulation

The process of data-generation and analysis is in interpretive studies subjective to the possible biases of a researcher that influence the ways in which he or she collects and analyzes data (Schwartz-Shea & Yanow, 2012). The researcher may unconsciously select data in a search for confirmatory evidence to prove his/her own initial impressions. Several strategies and techniques are developed to improve this process of data-generation and analysis in which researchers "…are looking to articulate various experiences or viewpoints on the topic under investigation, in order to be able to understand its nuances more fully" (Schwartz-Shea & Yanow, 2012, p. 105). Triangulation is one of the techniques to minimize the risk of this bias.

Triangulation concerns the use of multiple methods or sources to collect and analyze data about the same subject or case (Creswell & Miller, 2000). Multiple forms of triangulation exist as for example triangulation across sources, methods, theories, or investigators. This research used two types of triangulation, namely triangulation across sources (documents, participants, and observations) and triangulation across methods (in-depth semi-structured interviews, participatory observations, and literature study). By using multiple sources and data collection methods, it was tried to obtain a complete and representative image of the frames and power dynamics present in the collaborative process of the MM Project. The process of collecting and analyzing data was reported in detail in the research log to make the process of data collection and analysis transparent and to improve the systematicity.

Thick, rich description

Thick, rich descriptions were made to account for the context of the examined decision-making procedure. The thick, rich descriptions are used to stimulate the empathy of the reader (Creswell & Miller, 2000). The aim is that the reader gets the feeling he/she could experience, or has experienced, the decision-making procedure at first hand. Thereby the thick, rich descriptions enable a reader to decide if the findings are applicable to other settings (Creswell & Miller, 2000). This is particularly useful since this study concerns a paradigmatic single case study of which other projects can draw lessons.

Member-checking

Member-checking deals with the possibility that a researcher interprets the answers of an interviewee in a different way than intended by the respondent. Therefore, the collected data and interpretations were taken back to the interviewee to check if their answers are interpreted in the correct way by the researcher (Creswell & Miller, 2000; Schwartz-Shea & Yanow, 2012). This study used member-checking to make sure the frames of interviewees and expressed power dynamics were interpreted well, as well as no important parts of the interview were neglected. After the interviews were literally transcribed, a summary was made of the interview findings. These summaries, with the most important frame issues and power claims, were brought back to the interviewees to make sure they could check if their answers were interpreted correctly. All interviewees respondent on the member-checking process; sometimes with approval, sometimes with some additional remarks.

Ethical Considerations

Before the start of an interview, interviewees were fully informed about the procedures during and after the interviews (Appendix A). Interviews were only audio-recorded with informed consent. The interviewees were coded to ensure their anonymity, for example MM-L01-P03 (MM Project – Collaborative layer 1 – Participant 3). Their answers were only used with approval and confidential information was handled strictly. During the interviews the participants had the right to refuse answering questions they did not feel comfortable with. At the end of an interview, contact details were exchanged to ensure interviewees could contact me if something came up in their mind. Concerning the participatory observations in the workshops, the project team approved that I would use the workshops as a source of information.

5 STARTING THE PUZZLE

5.1 Introducing the Puzzle Pieces

5.2 Ordering the Puzzle Pieces

Several parts of the floodplains in the project area are maintained by grazing cattle. Next to their practical and money-saving function, they also have an aesthetical function for many visitors or inhabitants who love to see animals wandering around in the floodplains. Additionally, the cattle are considered as an opportunity to preserve the current agricultural function of the floodplains.

This example of grazing cattle shows how one particular subject of discussion can be approached from three different frames: a maintenance frame, an aesthetical frame, and an agricultural frame. To study the existing frames in the MM Project, this chapter aims at answering SRQ 1. First, all frames in the process are identified, after which the presence of each frame per collaborative layer is discussed.

5.1 Introducing the Puzzle Pieces

The aim of this chapter is to formulate an answer to SRQ 1: How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project? To fulfill this aim, this section first discusses all frames present in the collaborative process of the MM Project without indicating how the frames are empowered. The existing frames namely first need to be identified by means of a frame analysis, before their empowerment will be discussed in Chapter 6. This resulted in a categorization of nine frames through which actors are approaching the MM Project. These nine frames are the puzzle pieces which have to be connected while collaborating to create the solution for the MM Project puzzle. A description of each frame is given below in random order, followed by an illustrative quote for each frame. All quote translations are presented in Appendix B. To close this section, an overview of all frames is given in Figure 5.1.

Frame 1 | Water Safety Frame

People approaching the collaborative process of the MM Project from the water safety frame center the issue of water safety as most important subject in the MM Project. Actors expressing this frame often link water safety to the new safety norms which are introduced in 2017 by the Dutch government. The interpretation of this puzzle piece is often complemented by measures that are needed to ensure water safety. Examples are decreasing water levels, dike measures (reinforcement or replacement), digging meanders, lowering floodplains, and deepen or widen the main channel. A quote that symbolizes this frame is:

"The only main task is the dike reinforcement imposed by the government. Dike reinforcement, water management, water safety. That are the issues. You can discuss all kinds of topics: esthetics, nature development, recreative possibilities, and so on, but only one subject is important and that is water safety." (Quote 5.1.1: MM-04-01)

Frame 2 | Water Quality Frame

People expressing this frame highlight the problem of a bad water quality in the Meuse. According to them, the current state of the (ecological & chemical) quality of the river water in the Meuse needs to be improved. Thereby, blue algae are considered as a big problem during the summer months. Functions of the Meuse that are considered important by actors expressing this frame are drinking water supply, swimming water, and nature development. People advocating this puzzle piece refer to measures as meanders, bypasses, ditches, and nature-friendly riverbanks to improve the water quality. A quote that symbolizes this frame is:

"Last summer, because of low river discharges, the Meuse was one of the first rivers that was completely filled with blue algae." (Quote 5.1.2: MM-03-06)

Frame 3 | Agricultural Frame

Approximately 100 hectares of the 300 hectares floodplains are used for intensive agricultural practices at the moment. Actors expressing the agricultural frame focus on the remaining opportunities for agricultural practices in these floodplains. The agricultural puzzle piece consists of topics such as the the agricultural transition, the possible maintenance role, crop production, and farms. Suggestions are made to aim for 'nature inclusive' agriculture which should be financially viable for the agricultural entrepreneurs in the region. However, most actors that express this frame focus on intensive agriculture. A symbolizing quote is:

"Let them use the higher floodplain soils for agriculture. I understand people do not want to see 50 hectares of maize. That is no longer possible. A variety of crops need to grow there, such as maize, grass, beets, potatoes or wheat. Diversity is what all people want to see in this area." (Quote 5.1.3: MM-03-08)

Frame 4 | Residential Frame

The residential frame focusses on the quality of life in villages surrounding the project area. The quality of life is expressed in terms of living enjoyment and in terms of economy impulses. Discussions about accessibility (by roads or ferries), traffic safety, the effects of increased visitor numbers, and the development of housing locations (e.g. at the old concrete factory SF Beton) determine the content of this puzzle piece. Thereby, improving the accessibility of the port of Oss is seen as an important measure to create an economic impulse for the businesses located there. An important value for actors expressing this frame is the peace in the region since this is an important reason for inhabitants to live in the area. However, the small villages in the region struggle to protect or to improve their quality of life. A quote that symbolizes this struggle is:

"The quality of life in the small villages is an important point of attention. What I see in Megen is when houses are build, or other developments take place, new possibilities arise. The school gets an impulse, because the number of pupils increases. It becomes more attractive for the youth to stay in the village. It is about the protection of the social structure of the village." (Quote 5.1.4: MM-03-03)

Frame 5 | Nature Frame

Actors expressing a nature frame center the objectives of nature development in the collaborative process of the MM Project. They highlight the opportunities to develop dynamic and robust nature which consists of a variety of open plains, swampy areas, and riverside woodland ('ooibos'). This type of nature is often referred to as a kind of 'heritage' or as 'the original' nature type which existed in the floodplains before human intervention. To realize this type of river- and swamp nature, actors that express this frame advocate for measures such as meanders, ditches, and nature-friendly riverbanks. The symbolizing quote for the content of this puzzle piece is:

"A huge area of floodplains is located outside the dike. This area has enormous potentials to create a natural river landscape. There is plenty of space for river processes. I even think that doing something different than nature development would devalue the area." (Quote 5.1.5: MM-02-06)

Frame 6 | Cultural Heritage Frame

The frame of cultural heritage is characterized by statements about identity, landscape characteristics, past activities, monuments, and buildings. Excavating the old meanders, protecting or improving village scenes, and preserving the trees on the riverbank ('bakenbomen') are important components of this frame. Other characteristics referred to are buildings such as the castle of Oijen or churches, the village scenes of Megen and Ravenstein, the tree dikes ('bomendijken'), and the type of dikes ('tuimeldijken'). This puzzle piece often derives from a desire to the former landscape, before canalization. The quote that symbolizes the content of the cultural heritage frame is:

"Bakenbomen are very characteristic for the Meuse. You can sail over every river, nowhere you will find trees on the shore like at the Meuse. They are characteristic for this area and should be preserved. It would also be a pity when characteristic buildings, located at nice places, disappear." (Quote 5.1.6: MM-03-06)

Frame 7 | Recreation Frame

Actors expressing the recreation frame center the possibilities for recreational development in the project area. These possibilities mainly consist of improving the route network (for boats, bikes, and walkers), new developments for recreative accommodations (e.g. campsites or floating houses), and improving facilities for water recreation (e.g. jetties or beaches). The Gouden Ham, which is a 330 hectares big recreation area in the project area, is considered as the center of intensive recreational activities. The surrounding floodplains offer opportunities to expand the recreational possibilities for this puzzle piece. Especially digging new meanders in floodplains is considered as an important way to improve the water recreation. People expressing this frame consider the recreation sector as the economic motor of the area. Illustrative for this frame is the following quote:

"I would be very excited when they make a small marina near Megen, just like near Ravenstein, to make it possible for boats to visit the small city. That is not possible at the moment. It would be a great option when the old meanders are excavated." (Quote 5.1.7: MM-03-05)

Frame 8 | Soil Frame

The soil frame mainly focusses on the construction phase of the project. However, the soil frame also has consequences for the plans made. Actors expressing this frame aim at cost reduction by reusing the soil in the area in a smart way. An example is to reinforce the dike with the soil that is excavated when reintroducing the meanders. Another option to reduce the costs is to sell the soil (sand or clay) to external parties. Thereby, reusing the soil in a smart way avoids unnecessary transport movements, emissions, and costs. This puzzle piece is illustrated by the following quote:

"A lot of soil is needed for the dike. When too much soil is excavated from the floodplains it also can have negative effects. Therefore, the topic of soil movement is for me the most central issue in this project, which also brings different aspects together. It links river widening and dike reinforcement and also indirect the nature development. Thereby, it is important to balance the costs." (Quote 5.1.8: MM-02-03)

Frame 9 | Sustainability Frame

The last puzzle piece that is used to solve the puzzle of the MM Project is the sustainability frame. The sustainability frame focusses on the implementation of new techniques to generate energy. Examples are solar panels, wind turbines, aquathermia, hydropower, and biomass. Innovative ideas that result from this frame are the introduction of electrical ferries (instead of the current diesel ferries) or replace the dead bakenbomen by solar trees. Investing in these new techniques is considerd as an opportunity to brand the region in a sustainable way. The quote that symbolizes this last puzzle piece is:

"Everything has to be more sustainable. So, when implementing a new project you can better utilize it. Future-oriented, it would be logical to consider sustainable energy. It does not have to be extreme, but a couple of solar panels for example." (Quote 5.1.9: MM-03-07)

These nine puzzle pieces are the frames collaborating actors referred to most while approaching the MM Project. An overview of all these frames is given on the next page in Figure 5.1. Considering the discursive perspective of this study, it is possible actors refer to multiple frames while interacting, connect frames, or only refer to parts of a particular frame. That is part of the process of frame connection in collaborative governance arrangements. To find out what frames actors referred to most per collaborative layer, the next section orders all puzzle pieces per collaborative layer. This means the

presence of each frame per collaborative layer is discussed to create an overview of how the different collaborative layers approach the project of the MM Project. This results in the answer on SRQ 1: How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project?

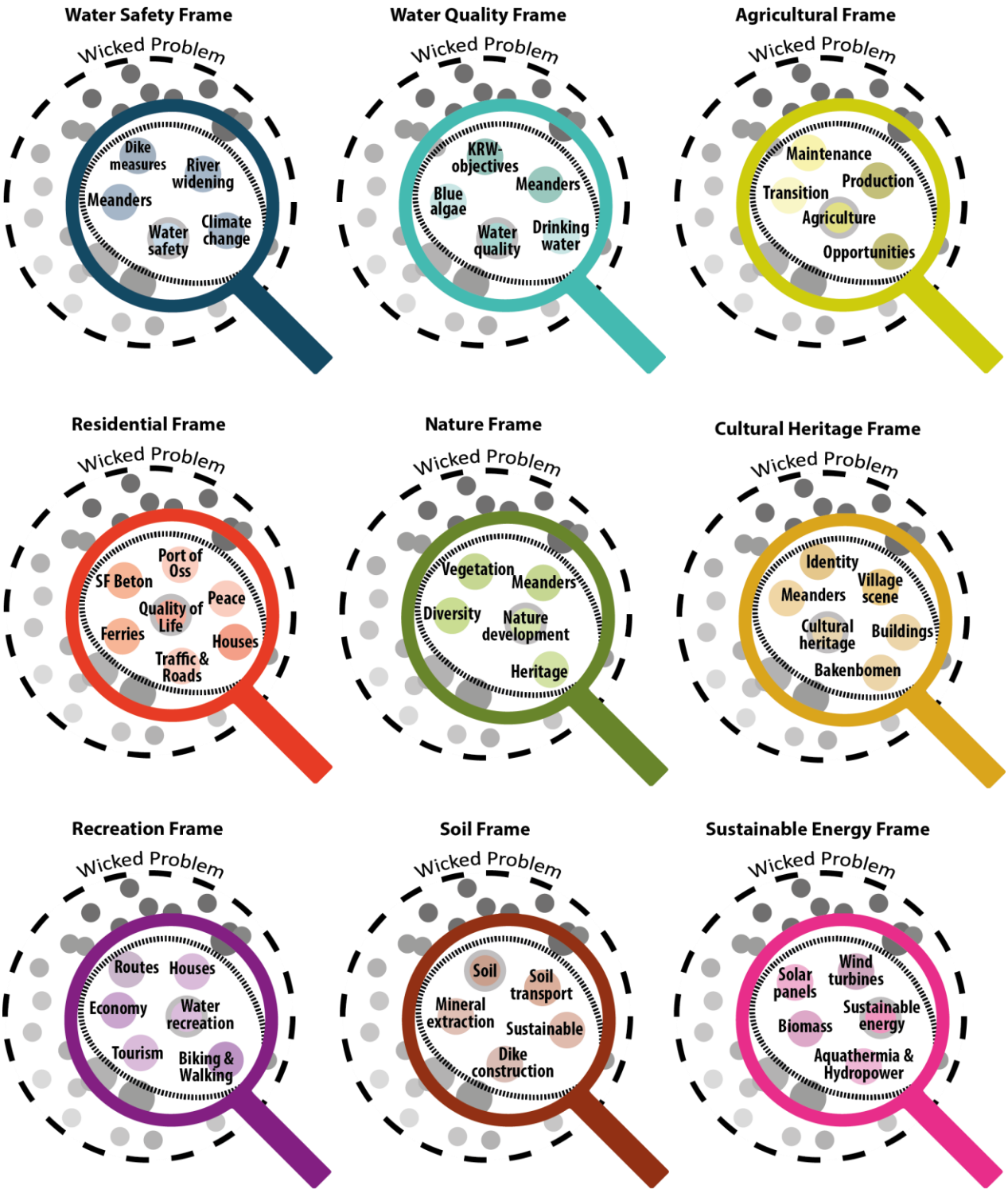


Figure 5.1 Overview of all Frames

5.2 Ordering the Puzzle Pieces

To answer SRQ 1 (How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project?), this section arranges the identified frames per collaborative layer. This gives insight in what puzzle pieces are advocated by each collaborative layer to solve the wicked problem puzzle of the MM Project, without indicating how each collaborative layer empowers them. First, the frames per collaborative layer are discussed, after which an overview is given in Figure 5.2.

Collaborative Layer 1 | National | SDM

The first collaborative layer of SDM mainly expresses issues derived from the water safety frame. According to this layer, water safety has priority over other frames and therefore water safety is considered as the most important puzzle piece to solve the puzzle of the MM Project. Especially the three issues of dike reinforcement, river widening, and decreasing water levels are considered as most important to ensure water safety in the Meuse delta. Combining the measures of dike reinforcement and river widening is according to this collaborative layer needed to ensure water safety:

"To create a robust river system a sophisticated combination of dike reinforcement and river widening is needed, to prevent increasing water levels and to realize risk reduction" (Quote 5.2.1: Deltaprogramma Rivieren, 2014, p. 6).

Despite the puzzle piece of water safety is most prominent in this layer, the collaborative layer of SDM searches for combinations with other puzzle pieces. These possible combinations mainly derive from the frames of recreation, nature, and cultural heritage. In one of the vision documents published by SDM, Ruimtelijke Perspectief Maas (2018, p. 86), the Meandering Meuse is even described to become a 'landscape park' in 2050, in which inhabitants and visitors can enjoy the landscape. The Meuse is considered by this layer as a natural and recreational axis, meandering along villages and cities. Especially water safety measures such as river widening and meanders offer opportunities for combinations with issues derived from the recreation, nature, and cultural heritage frame:

"The measure of river widening, for example by lowering floodplains or digging bypasses, offers opportunities to connect with other objectives or functions such as KRW-, nature-, or recreative objectives. That is also possible with the measure of dike reinforcement, because you can also add a foot- or bicycle path, but measures in the floodplains offer more opportunities." (Quote 5.2.2: MM-01-01)

Next to the possible combinations, SDM also expresses opportunities from the soil frame. SDM considers mineral extraction as a way to improve and develop spatial qualities, water safety, and nature (Stuurgroep Deltaprogramma Maas, 2016). Furthermore, the financial opportunities of selling excavated soils are described by this collaborative layer. However, the collaborative layer of SDM has not developed an unambiguous vision on this frame yet. Parts of this frame are considered as important, or possibly important in the future, but are not yet advocated in large numbers:

"While the current projects progress, it becomes clearer that the soil movements are an important pillar. It is important to make smart combinations to ensure soil demand and soil supply are balanced. I think the MM Project will succeed in this." (Quote 5.2.3: MM-01-02)

The water quality frame, residential frame, agricultural frame, and sustainable energy frame are barely to not expressed by SDM. These frames are not referred to or considered as an issue for other collaborative layers in the collaborative governance arrangement. Especially the energy transition frame

remains underexposed and deserves more attention in the future according to the collaborative layer of SDM:

"Dikes, river widening, nature, and recreation are good combinations. Agriculture is a hard topic, since friction exists there. Concerning the energy transition, it remains unclear if it becomes a new pillar, or driver, or if it will also cause friction." (Quote 5.2.4: MM-01-02)

Summarizing this collaborative layer, SDM approaches the MM Project mainly from a water safety frame. Other frames such as recreation, cultural heritage, and nature are subordinate to this frame, but when possible SDM searches for combinations between the water safety frame and secondary frames. The soil frame seems promising for the future but needs more elaboration. The four frames left are not expressed often, deserve more attention in the future, or are considered as an issue for other collaborative layers.

Collaborative Layer 2 | Regional | Project Partners

Where the water safety frame was by far the most salient frame in the first collaborative layer, the recreation and nature frame join the pole position of the water frame in the second collaborative layer. The project partners acknowledge that water safety is the most important component in the collaborative process of the MM Project. Therefore, the puzzle piece of water safety is placed in the center of the solution of the wicked problem puzzle. However, the puzzle piece of water safety is connected to the puzzle pieces of nature and recreation numerous times. Where the nature frame mainly derives from the regional partners, the recreational frame is mainly preached by the local governments. The frames of nature, recreation, and water safety reinforce each other according to this collaborative layer. An example is that measures in the floodplains to ensure water safety (e.g. digging meanders or lowering floodplains) are considered as opportunities for developing river- and swamp nature. Thereby, the recreational opportunities expand when making this type of nature accessible for visitors and tourists:

"This area will become the river nature park of the Netherlands. Nowhere in the Netherlands such a big area is located. It is three times bigger than the Gelderse Poort, two times bigger than the Oostvaardersplassen. This will become an enormous green lung. Areas like the Dutch coast, the Waddeneilanden, the Veluwe, Zuid-Limburg, or other areas with comparable green lungs flourish economically. They attract people and generate economic activities." (Quote 5.2.5: MM-02-06)

Next to the described puzzle pieces of water safety, recreation, and nature, the project partners also connect the puzzle piece of cultural heritage multiple times. Especially the bakenbomen, village scenes, and iconic buildings get attention in this layer. Where a dike reinforcement could be interpreted as a threat for cultural heritage (e.g. when buildings need to be removed), the project partners interpret the MM Project as an opportunity to reinforce cultural heritage. Two examples of how the frame of cultural heritage is connected to the frames of water safety and recreation are:

"The dikes in this area form the recreative link between cultural heritage (series of fortified cities and castles) and religious heritage (monasteries and churches)." (Quote 5.2.6: Stuurgroep Meanderende Maas, 2016, p. 4)

"The bakenbomen are important for us. In the past they were used to mark the river for shipping on foggy days. When the sonar and radar were introduced the trees lost their function. However, when cycling over the dike the line of trees is still visible. Nowadays the trees are marking the river for the recreants and tourists cycling over the dike, rather than for shipping." (Quote 5.2.7: MM-02-05)

Where the aforementioned frames are often connected with each other, the puzzle pieces of the residential frame and water quality frame are placed more separately from other frames on the decision-making table. Some parties have a strong interest or responsibility to improve the quality of life in surrounding villages or to improve the water quality in the Meuse. Actors approaching the MM Project from the residential frame stress topics such as the accessibility of the port of Oss, developing housing at the former concrete factory SF Beton, or preserving the ferries. The frame of water quality is expressed with a focus on blue algae and KRW objectives. The project partners utilize the momentum created by the MM Project to fulfill these objectives (Stuurgroep Meanderende Maas, 2016).

The last three puzzle pieces – the soil frame, the agricultural frame, and sustainable energy frame - are barely deployed by the project partners. A small group of actors has a strong interest in selling the excavated soil or efficient soil movements. However, this strong interest is in discussions refuted by other actors that have an interest to limit soil excavation, because they want to use the soils for the future dike reinforcement at the Gelderland side of the river:

"The soil needed for the dike reinforcement at the Gelderland side [around 2030] should be transported from somewhere else, when the floodplains at the Gelderland side are excavated to reinforce the dikes at the Brabant side. Thereby, when lowering the floodplains at the Gelderland side the water dynamics can change, leading to seepage, infiltration, or piping." (Quote 5.2.8: MM-02-04)

The agricultural frame is only expressed in a 'nature inclusive way'. None of the interviewed project partners in this collaborative layer stressed opportunities for intensive agriculture in the floodplains. This is comparable to the sustainable energy frame, in which the project partners barely see opportunities.

Summarizing this collaborative layer, project partners connect the water safety frame with other frames such as recreation, nature, and cultural heritage. The measures needed to ensure the water safety are considered as opportunities to fulfill objectives from other frames. Thereby, the momentum of the MM Project is used to utilize the opportunity to fulfill other objectives derived from the residential and water quality frame. The soil frame, agricultural frame, and sustainable energy frame are discussed to a lesser extent.

Collaborative Layer 3 | Local | Workshop Participants

Just like the other collaborative layers, also workshop participants stress the importance of issues derived from the water safety frame. Making sure the area is safe is seen as the most important puzzle piece that has to become part of the wicked problem puzzle. One of the reasons the workshop participants center the water safety frame is because a lot of participating inhabitants experienced the high water levels of 1995 or were even evacuated. Thereby, the awareness why a dike reinforcement is needed increased even more by participating in the collaborative process of the MM Project:

"During the workshops is explained how a dike is constructed and what the possible measures are. I really enjoyed to hear that. I have a somewhat technical background, but I do not know about these techniques. Because of this approach my understanding for a dike reinforcement increased. I understand better why a dike reinforcement is needed and what area is protected by the dike. I never expected that this dike also protects 's-Hertogenbosch." (Quote 5.2.9: MM-03-02)

Besides the focus on the water safety frame, the collaborative layer of workshop participants approaches the MM Project from a lot of different frames. The workshop participants have a wide scope and connect issues from all kinds of frames. This means, subordinate to the water safety frame, issues from four other frames are advocated: the recreation frame, the cultural heritage frame, the nature frame, and the residential frame.

Actors approaching the MM Project from a recreational frame highlight the possibilities for biking, walking, and water recreation. Improving recreative routes and facilities are considered as important measures to attract tourist, but also to improve the quality of life in surrounding villages. The recreative visitors namely generate extra revenue in the villages to maintain facilities:

"It is important that recreation creates added economical value to ensure restaurants and coffee houses have a good survival rate during the summer months and that during the winter months sufficient inhabitants are visiting the facilities to make them profitable." (Quote 5.2.10: MM-03-06)

Despite collaborating actors stress the benefits of recreation, they also highlight several threats. The recreation should namely not harm important values from the residential frame. Therefore, mass tourism should be avoided according to the workshop participants. Mass tourism is namely seen as a threat when it disturbs the peace in the area which is considered as an important value from the residential frame. Thereby, the current landscape characteristics, cultural heritage, and roads are not considered as suitable for mass tourism since these are mainly small-scale. Preserving the yellow ferries instead of introducing a bridge between Gelderland and Brabant is an example of this:

"Leave the ferries in service, because they have charm and ensure a certain degree of peace in the area." (Quote 5.2.11: MM-03-04)

To avoid mass tourism, people search for solutions in the nature frame. The notion in the workshops is that nature development enables for extensive recreative activities. Next to the link between the nature frame and recreation frame, collaborating actors advocate nature development to improve their own quality of life, derived from the residential frame. Two examples in which the recreation and residential frame are connected with the nature frame:

"I would love to see nature that is attractive for all forms of life. Good for the birds and good for the welfare to ensure people also enjoy their walk outside. […] I enjoy it when I am looking through my window in the morning and I see all kinds of things moving and flying. Variation in nature is important." (Quote 5.2.12: MM-03-06)

"We would love to see that the old Meuse meanders are reactivated, because they are attracting a lot of nature. However, it needs to be accessible to ensure people can enjoy the nature. It does not have to be a jungle. Some riverside woodland is acceptable, but it should not dominate the floodplains." (Quote 5.2.13: MM-03-07)

Different from the other collaborative layers, workshop participants also express the agricultural frame. This is mainly caused by the agricultural entrepreneurs present in the workshops. These farmers are the only actors in the entire collaborative governance arrangement that argue for intensive agriculture. The higher grounds in the floodplains are namely very fertile for growing crops. On these soils, 30% more yield can be harvested compared to other soils. Furthermore, the operation costs are lower on these fertile grounds. Despite the farmers would love to continue their current practices, they also see opportunities to connect their practices with other puzzle pieces such as the nature frame or recreation

frame. Next to the farmers, also other workshop participants would like to preserve agriculture in the floodplains. However, these participants have another motive to add the agricultural puzzle piece to the solution of the MM Project. They namely connect the agricultural frame with the cultural heritage frame and stress the possible maintenance role for farmers in the future:

"I do not like it when everything is full of maize. I am not in favor of that. A possibility for this project is to implement grazing as they did it in the past. That is implemented at more places in the surroundings. Deep red cattle are grazing there in the summer months. That looks beautiful and that is typically Dutch. It would be nice to implement that in this project too." (Quote 5.2.14: MM-03-05)

The puzzle pieces of water quality, soil, and sustainable energy are barely expressed during the workshops. Some innovative ideas from the sustainable energy frame are mentioned by participants such as electrical ferries, replacing bakenbomen by solar trees, or possibilities for aquathermia. However, these ideas did not create the momentum to encourage the sustainable energy frame in great numbers. The frames of water quality and soil are not considered as important in this collaborative layer or as an issue for other collaborative layers.

Summarizing, despite the water safety frame is expressed most, a wide range of other frames is argued for. Recreative development is desired, but it should not lead to mass tourism and a disturbance of peace. To avoid that, the workshop participants search for solutions by adding the nature puzzle piece, which offers opportunities for extensive forms of recreation. Thereby the nature frame also offers opportunities to improve the quality of life, which is derived from the residential frame. The agricultural frame is expressed in three ways by the workshop participants, namely production-oriented, maintenance-oriented, and identity-oriented. The other frames of water quality, sustainable energy and soil are barely expressed. A summary of all frames per collaborative layer is presented in Figure 5.2.

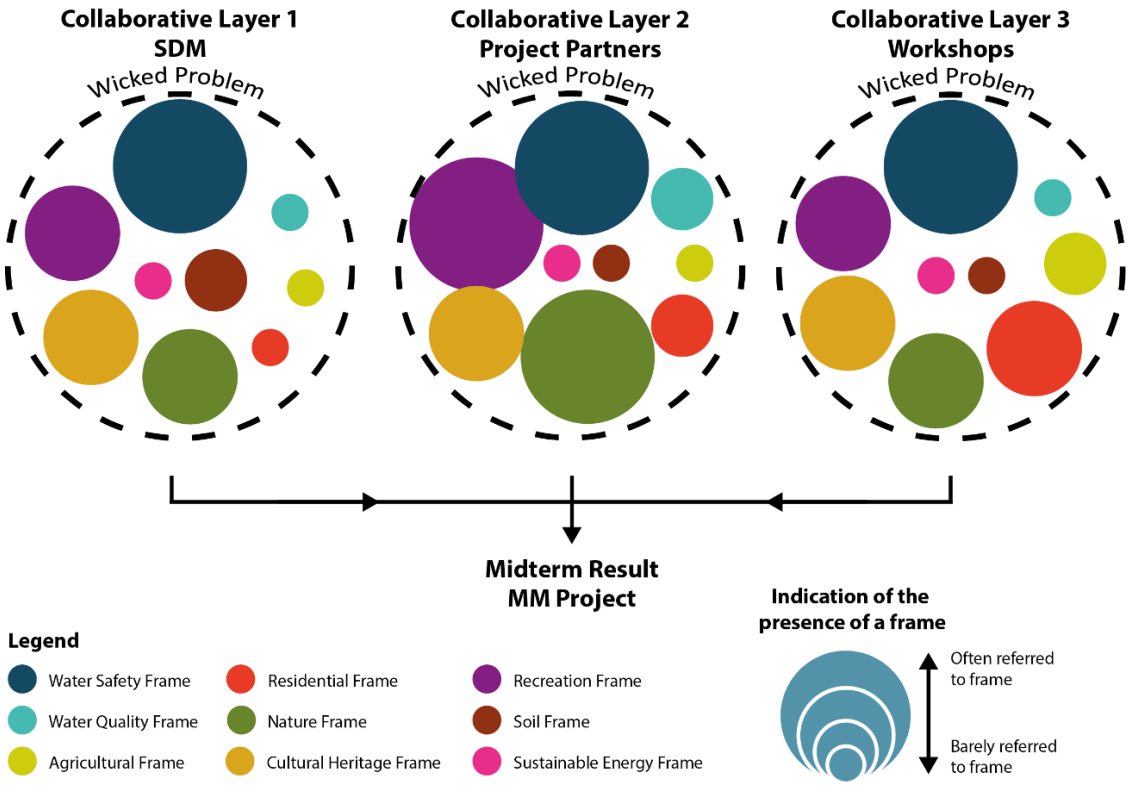


Figure 5.2 Frames per Collaborative Layer

6 EMPOWERING THE PUZZLE PIECES

6.1 SDM Frames

6.2 Project Partner Frames

6.3 Workshop Frames

The project area contains several monuments that remind of the fight against the water. In February 1995, 200.000 people were evacuated in the surroundings of the project area, because of high water levels and the risk of dike collapses. Fortunately, the dikes did not collapse, but the awareness that dike reinforcements were needed increased. The water safety frame was empowered by the Dutch government which resulted in numerous projects to improve the water safety of the Dutch river delta.

This chapter examines how contemporary frames are empowered in the MM Project. Therefore, this chapter aims at answering SRQ 2: How do actors empower their frames in each collaborative layer of the Meandering Meuse Project? The exerted power sources are discussed per collaborative layer.

To answer SRQ 2 (How do actors empower their frames in each collaborative layer of the Meandering Meuse Project?), this section discusses the ways collaborative layers empower their frames. The sources of power distinguished by Hardy & Phillips (1998) - formal authority, resources, and discursive legitimacy – are examined per collaborative layer to get insight in how each layer empowers its puzzle pieces in an attempt to make them part of the (midterm) result of the MM Project. Thereby, sometimes the overlap between power sources is discussed. A discourse analysis is conducted per collaborative layer of which the results will be discussed below.

6.1 SDM Frames

The first collaborative layer discussed is the Steering Committee Delta Program Meuse, which is active at a national scale. According to Chapter 5, this collaborative layer mainly expresses the water safety frame and searches for combinations with other subordinate frames such as the recreation, cultural heritage, or nature frame.

Formal Authority

In an attempt to make the advocated puzzle pieces part of the solution of the wicked problem puzzle, the collaborating actors in the SDM layer mainly empower their frames with formal authority. The goal of SDM is to create a comprehensive package of water safety measures for the entire Meuse river. To succeed in this goal, SDM is formally authorized to contribute to the national agenda setting in a search for promising projects to improve the water safety of the Meuse conform the new water safety norms (Stuurgroep Deltaprogramma Maas, 2016). This enables SDM to empower their frames with formal authority due to their socially acknowledged right to contribute to decisions about the locations and boundary conditions of water safety projects. An example are the three criteria, introduced by the minister, which are used by SDM to review possible water safety projects: (1) projects need to be effective for water safety, (2) synergy with other ambitions needs to be possible, and (3) projects are socially supported and entail the possibility to generate co-financing from regional parties (Stuurgroep Deltaprogramma Maas, 2016). This resulted in the choice for several dike replacements and six frontrunner projects, of which Meandering Meuse is one. Another example of the formal authority exerted by SDM are the imposed boundary conditions for individual projects which SDM embedded in their policies to ensure all projects are realized in a comprehensive way. These boundary conditions are monitored for each individual project by SDM and mainly concern financial and water safety aspects:

"We want that the individual projects are realized within the financial and water safety boundaries. That's also monitored by us. When it turns out that the Meandering Meuse Project is able to realize a water level decrease of 10 or 20 centimeters, we monitor the project to ensure they will achieve it." (Quote 6.1.1: MM-01-02)

Resources

Despite SDM monitors the financial aspects of each project, SDM does not financially support the individual projects. The layer exerts formal authority via their socially acknowledged right to strategically divide the financial resources between projects (for example in: Stuurgroep Deltaprogramma Maas, 2016), but SDM does not insert monetary resources into the process. Next to monetary resources, also other tangible resources (e.g. people, landownership, technology) are barely exerted by this collaborative layer.

To empower their frames with resources, SDM mainly supports their frames with intangible resources: expertise, knowledge, and capabilities. SDM is the only layer in the collaborative governance arrangement with a helicopter view over the whole Meuse river. Actors from alongside the entire Meuse are involved in this collaborative layer, which means a great variety of expertise is present. This enables SDM to monitor and link objectives of all individual Meuse projects to create a complete image of the water safety improvements. Thereby, SDM also considers the long-term consequences of projects since their scope is 2050. This scope is compared to other collaborative layers relatively long. Scenarios and trend analyses are used to ensure the long-term water safety. This means tangible resources are barely exerted by SDM, but a lot of intangible resources are expressed by this collaborative layer in interactions.

Discursive Legitimacy

The last power source of discursive legitimacy is barely used to empower frames in this collaborative layer. SDM only refers to the societal value of 'social support' or to their role as representative of all kinds of (governmental) actors. The overlap between discursive legitimacy and formal authority becomes visible here, because social support in the project region is also introduced as an authorized prerequisite to start projects. Representatives of all kinds of (governmental) actors collaborate in the SDM layer to measure the social support for interventions within their administrative borders. Especially frames subordinate to the water safety frame (frames of recreation, nature, and cultural heritage) are empowered by SDM with discursive legitimacy to create social support among inhabitants for the implementation of measures from the dominant water safety frame:

"Our goal is to link the sectoral objective of water safety with broader social objectives. Participating parties have the opportunity to bring in their goals, interests, and resources which possibly results in social support for interventions in a region. That is a very important administrative ambition; to link the sectoral interest of water safety with other objectives to create social improvements in an area." (Quote 6.1.2: MM-01-02)

Summarizing this collaborative layer, SDM empowers their puzzle pieces mainly with formal authority. This is done by creating or referring to visions, frameworks, boundary conditions, and criteria. Furthermore, this layer is able to underpin their frames with formal authority by contributing to the national agenda setting of water safety projects and the distribution of monetary resources. The power source of resources is only used to empower puzzle pieces with intangible resources but is not used to empower frames in monetary terms. Especially the national helicopter view of SDM distinguishes the expertise in this layer from other layers. The last power source of discursive legitimacy is barely used to empower frames by this collaborative layer. Only social support is sometimes used as an argument to empower the frames that are subordinate to the water safety frame. An overview of the sources of power exerted by this collaborative layer is given in Figure 6.1.

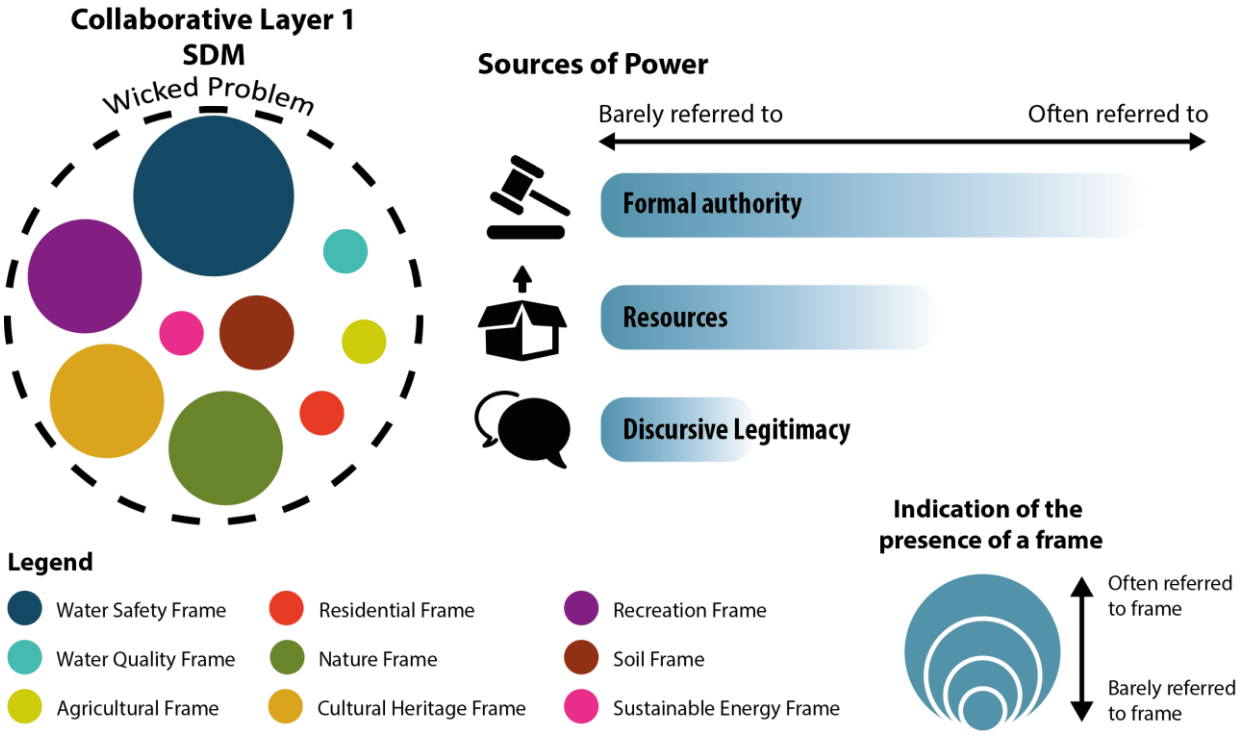


Figure 6.1 Power Collaborative Layer 1

6.2 Project Partner Frames

The second collaborative layer is the regionally active layer consisting of the project partners. According to Chapter 5, the project partners mainly connect the frames of water safety, recreation, nature, and cultural heritage to get to a solution of the wicked problem addressed in the MM Project. In an attempt to make these puzzle pieces part of the solution of the wicked problem puzzle of the MM Project, this collaborative layer mainly empowers their frames with formal authority and resources.

Formal Authority

The formal authority of the water safety frame is taken for granted by this collaborative layer. Actors are aware of the new safety norms introduced by the Dutch government and therefore center the puzzle piece of water safety in the middle of the solution. However, the preferences for measures to fulfill the water safety objectives differ among the project partners. Several project partners have a strong interest in measures from a particular frame, because that specific frame is strongly embedded in their policies, activities, or tasks. This is because several project partners are authorized to judge and decide about defined areas. Examples are the water authorities with the legislative task to reinforce the dike, Rijkswaterstaat with the legislative task to improve water quality, or the Province of Noord-Brabant and Natuurmonumenten, who want to utilize the MM Project to realize parts of the policy 'Nature Network Brabant'. Due to this embedment of frames in formal tasks, policies, and frameworks, the actors in this collaborative layer often claim the outlines of the puzzle solution of the MM Project are already sketched:

"You can pretend if everything is open for discussion, but that is not true. Policies and guideline exist and about some topics you cannot philosophize about wishes and desires. Sometimes that is clarified in a limited way. That creates a risk in terms of expectations." (Quote 6.2.1: MM-02-01)

Next to the formal tasks, several project partners are considered to have an authoritative status in the MM Project. Actors in this collaborative layer are considered as a client, a licensing authority, or a landowner. Thereby, some project partners are responsible for other projects in the area of the MM Project or will be responsible for maintenance when the project is finished. This authoritative status enables some actors to empower frames due their position or role in the collaborative process of the MM Project. The influence of this status becomes especially visible when focusing on the ability of decision-makers in this layer to decide about frames in 'go-or-no-go' decisions. The individual formal status of actors resulted in several boundary conditions and criteria imposed by this collaborative layer. Some examples:

"We are designated by the Netherlands to keep the dikes safe and that is our primary goal." (Quote 6.2.2: MM-02-04)

"We have communicated from the beginning that the project at Dieden-Demen continues. […] We have been very open about that from the beginning. That is a moving train for us and it keeps on driving. When they state that train has to stop than we quit the decision-making process." (Quote 6.2.3: MM-02-06)

"We have developed policies for the project area. We have for example an economic policy plan which states something about the accessibility of the port of Oss, but also a tourism and recreation plan in which the development of touristic functions at this side is stated. […] The policies will be adjusted, when arguments exist to do that. However, the existing policies form the starting point since the local council and inhabitants agreed on it." (Quote 6.2.4: MM-02-02)

"The complete area needs to become nature. That is not new, because that was already stated in the nature reserve plan. That is not a job for the Water Authority, but the province has the competent authority for nature policy. […] However, nature policies are implemented on the basis of voluntariness. Pressure exists, because the ambitions have to be realized in 2027. In contrast to water safety, no instruments exist to enforce nature development." (Quote 6.2.5: MM-02-06)

A last opportunity that project partners use to link formal authority to frames are the formal consultation procedures. Just like inhabitants, project partners are able to formally react on the (midterm) results of the MM Project. Actors in this layer use these formal procedures with two reasons. The first reason is to empower frames that project partners are missing in the (midterm) result. In that case, the consultation procedure is used as a final opportunity to make a frame part of the (midterm) result. The second reason to utilize the formal consultation procedures is to improve the argumentation behind the final plan to make sure the final plan does not fail when actors start to protest in later phases. In this case, the consultation procedure is used as an extra opportunity to protect and empower frames that have become part of (midterm) results to make sure the frames remain present in later phases.

Resources

Next to the power source of formal authority, also the power source of resources is used to empower puzzle pieces by the project partners. Where the power source of resources in the SDM layer was only derived from intangible resources (e.g. expertise, knowledge, and capabilities), the project partners also underpin frames with tangible resources. Issues from the water safety frame, nature frame, water quality frame, residential frame, cultural heritage frame and soil frame are all supported in monetary ways. The water authority Aa & Maas financially contributes to the dike reinforcements from the water safety frame via the financial mechanisms of the Hoogwaterbeschermingsprogramma (HWBP). The frame of

water quality is financially supported by the European guideline of Kaderrichtlijn Water (KRW) of which Rijkswaterstaat is the national executive party. The nature frame is reinforced by financial contributions of Natuurmonumenten and the Province of Noord-Brabant. This also resulted in the empowerment of the nature frame via the tangible resource of landownership, because Natuurmonumenten buys plots in the project area to develop nature. The collaborating municipalities finance the preservation of bakenbomen (cultural heritage frame) and the municipality of Oss pays to improve the accessibility for the port of Oss (residential frame). The last frame underpinned with financial motives is the soil frame since utilizing this frame can lead to cost reductions. This means only the recreation frame, sustainable energy frame, and agricultural frame are not paid for by project partners.

Besides the monetary resources, the collaborative layer of the project partners also links all kinds of expertise, knowledge, and manpower to their frames. Project partners often have employees specialized in specific domains. These specialists focus on all kinds of topics, such as the river system (e.g. water levels and seepage), river functions (e.g. shipping, recreation), spatial planning aspects (e.g. zoning plans, landownership), accessibility issues (e.g. ferries, road structure), social issues and worries (e.g. sludge deposit, traffic safety), and also have experience with similar processes and projects. This means a wide variety of frames is empowered with the expertise of project partners. A noteworthy difference with the national-oriented expertise of the SDM layer, is that the expertise of the project partners mainly focusses on the regional and local scale.

Discursive Legitimacy

The last power source exerted by the project partners is discursive legitimacy. However, compared to the power sources of formal authority and resources, discursive legitimacy is expressed to a lesser extent by this collaborative layer. Project partners support their statements with discursive legitimacy by speaking on behalf of the people they represent or by highlighting the importance of their legislative tasks. Project partners often claim they represent the interests of the inhabitants in their administrative area, because several decision-makers in this layer are democratically chosen by their constituency. Also here the overlap between formal authority and discursive legitimacy becomes visible when project partners stress the importance of their legislative tasks by linking them to values such as 'public safety' or 'social support'. An example is the water safety frame, which is considered by this layer as one of the most important legislative tasks since water safety is framed as a public good. This increases the capacity of project partners to influence decisions since their statements represent the general interests of their inhabitants:

"We participate in this project, because an important part of the measures takes place at our territory. […] They are our inhabitants and therefore it is in our interest to participate." (Quote 6.2.6: MM-02-02)

"We participate as a consultant, co-thinker, and as a representative of the Gelderland side." (Quote 6.2.7: MM-02-04)

The consequence of the representative status of project partners is that they argue that their imposed criteria derive from the values or topics which are considered as important by their constituency. Project partners claim that these criteria will improve the social support for the MM Project among inhabitants. An example are the ferries. The ferries are considered as important modes of transport among the inhabitants of the project area and therefore became a criteria imposed by the project partners:

"The disappearance of the ferries is not negotiable for us. Thereby, the project must not make it difficult to reach the ferries. The ferries must absolutely be preserved." (Quote 6.2.8: MM-02-05)

Summarizing, the project partners mainly try to impose their puzzle pieces by means of formal authority and resources. The power source of formal authority is derived from the status, roles, and positions of actors. This formal authority is operationalized via policy frameworks and criteria imposed by the project partners. The power source of resources is exerted by project partners in tangible and intangible ways both. Different from the SDM layer, the intangible resource of expertise mainly concerns regional and local subjects, rather than national issues. The last power source of discursive legitimacy is used to a lesser extent to empower frames. Project partners refer to their role as representative to speak on behalf of inhabitants and consider the frame of water safety as a public good. An overview of the power sources that are linked to frames by this collaborative layer is given in Figure 6.2.

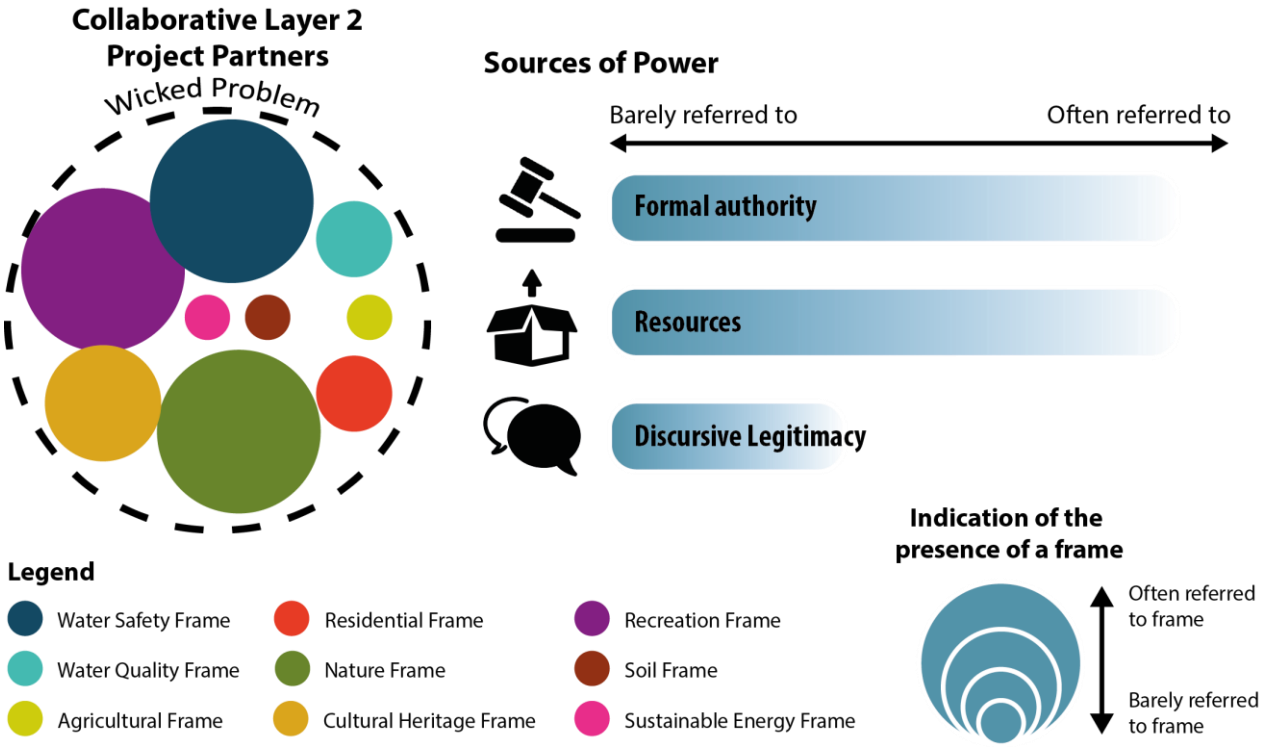


Figure 6.2 Power Collaborative Layer 2

6.3 Workshop Frames

The last collaborative layer consists of the workshop participants. According to Chapter 5, this collaborative layer centers the puzzle piece of water safety as most important frame to become part of the wicked problem solution. However, a wide range of other puzzle pieces are connected to the piece of water safety. Only the frames of water quality, sustainable energy, and soil are barely expressed. Where the other two collaborative layers mainly referred to formal authority and resources to empower their frames, the collaborative layer of workshop participants has another approach.

Formal Authority

Despite workshop participants consider formal authority as one of the most influential power sources, they barely see opportunities to support their frames with it. This becomes visible when workshop participants express boundary conditions or criteria, but consider themselves unable to judge or decide about these topics. Examples of imposed boundary conditions are that the accessibility of recreation park the Gouden Ham should not decrease or that the tree dike at Ravenstein should be preserved. These boundary conditions are not supported by formal status, laws, policies, or frameworks derived from this layer. The consequence is that workshop participants assign the right to decide about these topics to other layers and consider their capacity to influence a decision about these boundary conditions as nihil. The only option they see to empower their frames with formal authority are the formal consultation procedures:

"At the moment it is possible to formally react on the NRD [Notitie Reikwijdte en Detailniveau, onderdeel MER-rapportage]. You can formally react when we as inhabitants think the quality of life is an important topic and we have an idea how to examine that topic to ensure it becomes part of the decision-making or research procedure." (Quote 6.3.1: MM-03-03)

Sporadically, some actors claim the presence of workshops in the process design derives from the socially acknowledged right of inhabitants to have the opportunity to participate. In these statements, workshop participants underpin their frames with formal authority, because they claim other layers are formally obligated to consider their opinion. When inhabitants are not considered, the workshop participants state that the final decision will not be accepted by court when resistance or protest emerges. Two examples:

"I think it is impossible to avoid public participation nowadays. When taking decisions of which everybody is experiencing the consequences, without participation and involvement, a lot of mutiny may follow. Maybe even via the judge or Council of State. Municipalities and provinces stand stronger when they are able to show they listened carefully to the people, followed public consultation procedures, and created social support." (Quote 6.3.2: MM-03-01)

"If people are invited to participate, you take a lot of suspicion away. This excludes the idea that everything has already been decided about. If people get the feeling they have no opportunities for public participation, they start to resist, object, and litigate." (Quote 6.3.3: MM-03-06)

Resources

Just like the power source of formal authority, workshop participants barely see opportunities to empower their frames with resources. The workshop participants do not support their frames with the tangible resource of money. Also, the intangible resources of specialist expertise (project partners) or the national helicopter view (SDM) are barely present in this collaborative layer. However, two special and scarce forms of resources are inserted by this collaborative layer, namely the intangible resource of local knowledge and the tangible resource of landownership.

The tangible resource of landownership is mainly deployed by the farmers participating in the workshops. The farmers possess a third of the floodplain parcels which are part of the project area. This increases the capacity of farmers to influence the solution since they have the possibility to continue their agricultural practices if they do not sell their parcels.

Next to the tangible resource of landownership, actors in this layer express a scarce form of intangible resources, namely local knowledge. The power source of local knowledge enables the workshop participants to empower frames with pragmatic- and experience-based expertise. Some actors in this layer are living in and near the project area for decades. They use or pass the project area daily for diverging purposes. Thereby, some actors use the project area to make money, for example farmers or entrepreneurs in the recreation sector. The consequence is that the workshop participants consider themselves as a kind of local experts. This form of intangible resources has overlap with the power source of discursive legitimacy, because the knowledge claims of workshop participants affect the public understanding of issues among other actors:

"We are born and raised here. We know the Meuse since our childhood. We have swum in it, learned to water-ski, learned to sail, and so on." (Quote 6.3.4: MM-03-05)

"The workshops exist to consider the perspective of inhabitants, because people can create ideas behind their desks, but that does not always match with practice. This creates insight into the consequences of the project for people who work and live there and in the end have to deal with the end-result." (Quote 6.3.5: MM-03-07)

Next to the resources of land ownership and local knowledge, the workshop participants sporadically mentioned two other opportunities to support their frames with resources, namely the intangible resource of 'open-mindedness' and the tangible resource of 'people'. However, at the moment these two opportunities remain more or less unutilized by workshop participants. The first opportunity concerns the idea that the thoughts and wishes of workshop participants are less restricted by formal frameworks, laws, or policies compared to the other two collaborative layers. This resulted in some out-of-the-box ideas and led to the insertion of issues that would never be discussed in the process without the presence of workshop participants. However, I experienced workshop participants often adjust to the restricting formal frameworks, which also restricts their thinking and acting during workshops. The second opportunity for workshop participants to utilize the resources concerns the tangible resource of people. The number of inhabitants in the project area is much bigger than the number of actors in the other two collaborative layers. Some workshop participants see opportunities to mobilize people to encourage a particular frame. Also mobilizing people for protest is mentioned sporadically as an opportunity, which shows the overlap between resources and the next power source of discursive legitimacy. However, until now most of the workshop participants remain individual actors that advocate their own interests.

Discursive Legitimacy

Actors from this collaborative layer often consider themselves as powerless, because of a lack of formal authority and monetary resources. However, workshop participants – sometimes even unaware – empower their frames with discursive legitimacy a lot and in multiple ways. Workshop participants are considered as the people who have to deal and live with the final outcome of the MM Project and therefore the workshop participants consider their involvement in the decision-making process as normal and fair. Values as 'social support', 'equality', and 'social justice' are important for them. An example of how these values are used to empower a frame can be derived from the water safety frame. Workshop participants namely claim everybody has the right to live safe behind the dikes and frame water safety as a public good. Another example concerns the importance of the value of social support. Workshop participants are a sample of interested people and therefore actors from other collaborative layers consider them as a representation of the inhabitants. Discussions about wishes, issues, and problems between workshop participants are used by other collaborative layers to identify the social support for possible measures. Workshop participants are aware of their role as a sort of control group:

"I think decision-makers can only do a good job and have satisfied citizens if they really listen to what people have to say, what's going on and what issues exist." (Quote 6.3.6: MM-03-03)

"I do not think much of democratically elected representatives of a government or water authority, because in the end they do whatever they want. So for me it is really relevant that the workshops exist." (Quote 6.3.7: MM-03-04)

"The approach is to realize the project in consultation with residents in order to create the largest possible social support. If inhabitants are no longer involved in the next phases, you will get resistance." (Quote 6.3.8: MM-03-01)

When decisions made in other collaborative layers cannot count on enough social support from this layer, workshop participants describe several possibilities of protest to increase their influence. This protest is seen as a last tool when formal consultation procedures do not result in the desired outcome. Publicity, newspapers, mobilizing people, or even propaganda are described as possibilities to operationalize this protest:

"Publicity can be of great influence. When a population group manages to mobilize and publishes in the newspapers in particular, the course can be adjusted." (Quote 6.3.9: MM-03-05)

"The ZLTO made a lot of propaganda in the last month, because it is ridiculous that good soils for food production go away. The ZLTO is really committed to that." (Quote 6.3.10: MM-03-08)

"When the general public of the villages and cities will turn against the project, the chance increases that different considerations will be made." (Quote 6.3.11: MM-03-05)

However, despite the workshop participants can be interpreted as a representation of inhabitants, not all population groups participate in the workshops. An example is the lack of youth since most participants are at an age of 50+. Claims by the few participating youngsters are of extra influence, because of this minority position:

"I do not see any input of youth. Recently, I told the girl next door about the project and she did not even know it existed. That is actually a shame, because the youth is very important." (Quote 6.3.12: MM-03-07)

"It would be nice if more forms of sustainable energy were considered in the plans. Not too dominant, but in the end it is the younger generation who has to solve it, so it would not have been wrong." (Quote 6.3.13: MM-03-07)

The last form of discursive legitimacy in this layer is the respect for workshop participants from other collaborative layers. Workshop participants are participating in the collaborative governance arrangement on a voluntary basis. A lot of dedication and motivation is present among the workshop participants. This involvement results in respect for the workshop participants from the facilitator and other collaborative layers, which increases the urgency to consider the input of workshops:

"Striking was the motivation to participate [among workshop participants]. Some even arranged a babysitter or a free afternoon. That results in respect and motivates the project team to create meaningful meetings." (Quote 6.3.14: Projectteam Meanderende Maas, 2018a, p. 2)

Summarizing this collaborative layer, workshop participants mainly empower their puzzle pieces with discursive legitimacy. Despite actors from this layer consider themselves often as powerless, they empower their frames - sometimes unconsciously - in multiple ways. Especially discursive legitimacy is exerted a lot, which is based on values as 'social support', 'equality', 'social justice', and 'respect'. The power source of formal authority in this collaborative layer results from the formal consultation procedures and the obligated participation of inhabitants in the process design. These forms of participation and consultation are considered as legal prerequisites to create a grounded final plan. The power source of resources in this layer mainly derives from the intangible resource of local knowledge and the tangible resource of land ownership. Furthermore, other opportunities for resources are mentioned sporadically (e.g. open-mindedness and people), but these are not utilized to its maximum. An overview of the power sources exerted by this collaborative layer is given in Figure 6.3.

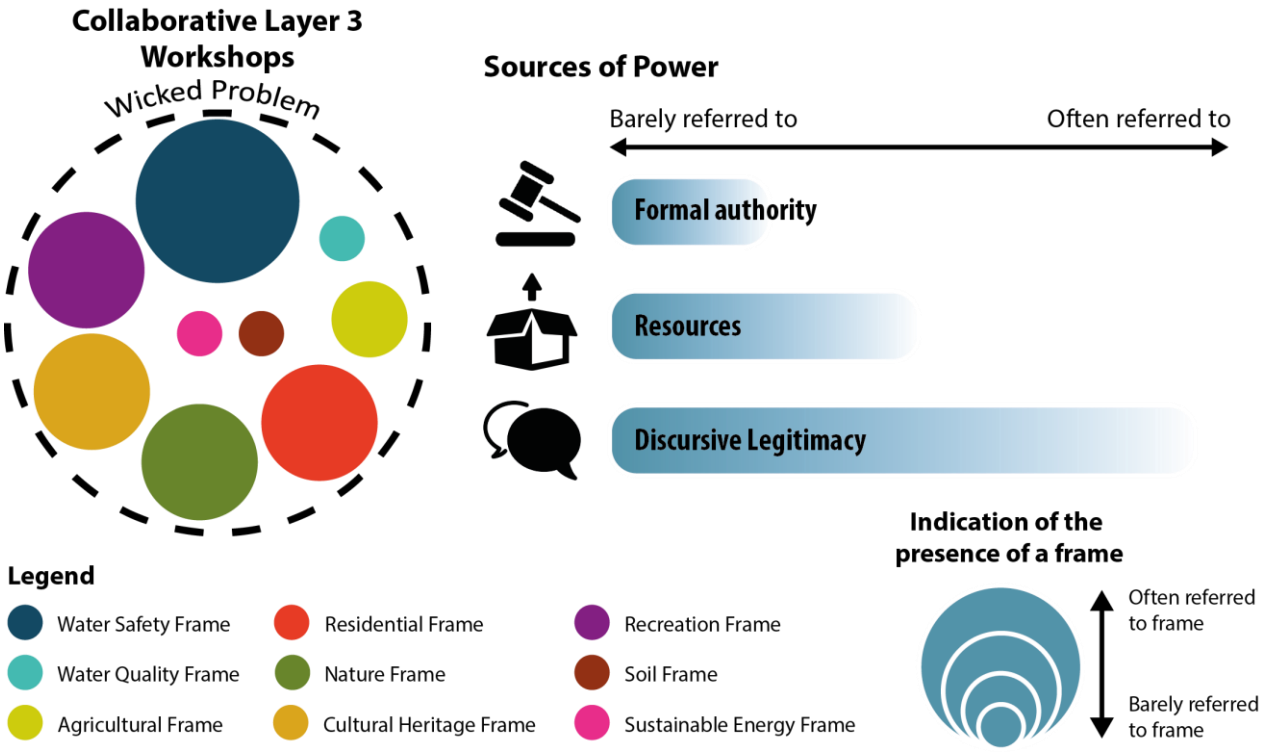
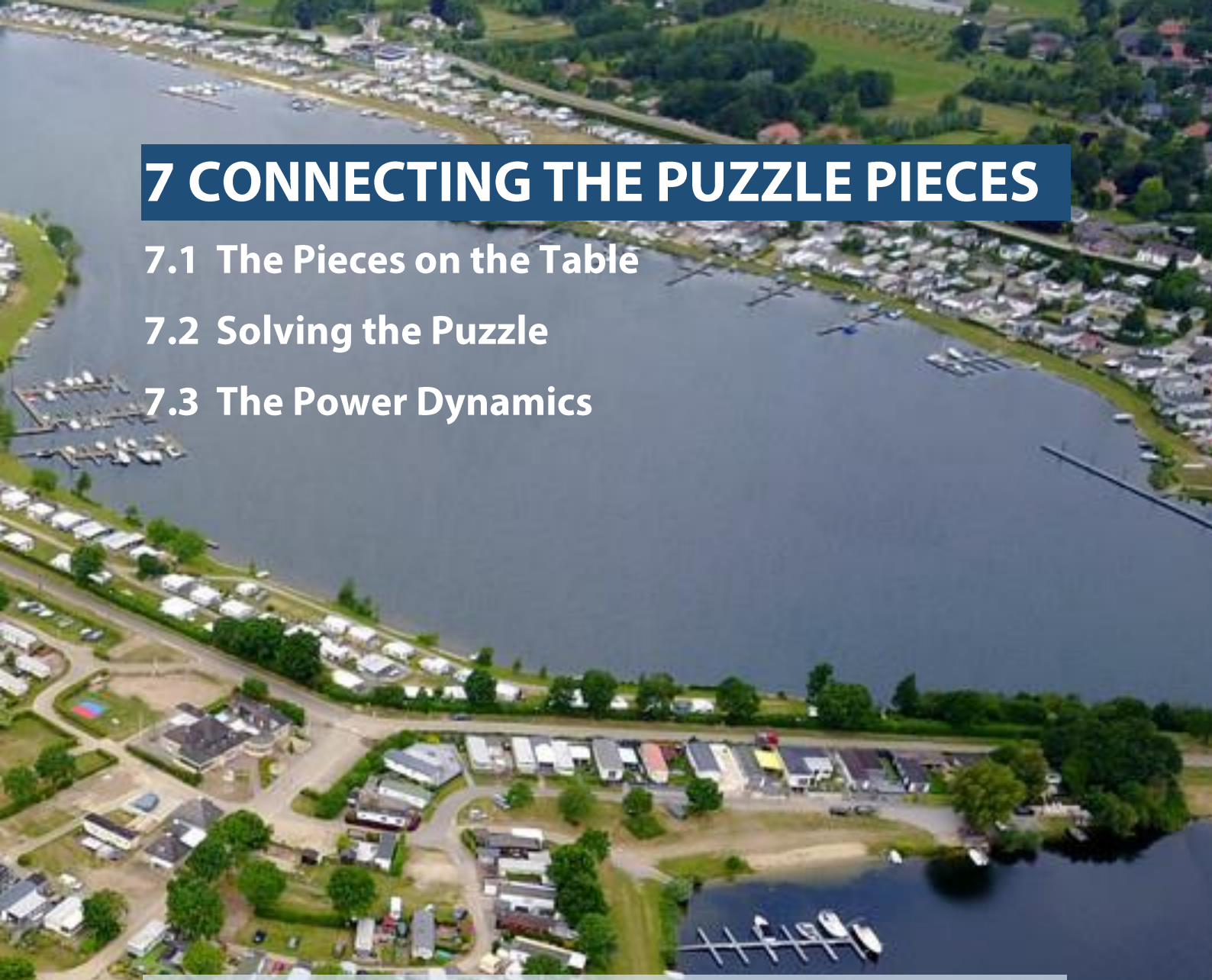


Figure 6.3 Power Collaborative Layer 3

This chapter showed how collaborating actors empower their frames in the MM Project. An answer per collaborative layer is formulated for SRQ 2: How do actors empower their frames in each collaborative layer of the Meandering Meuse Project? However, the influence of these power dynamics on the (midterm) result of the MM Project is still not clear. Actors empower their puzzle pieces, but due to the interactions between empowered puzzle pieces, some might not reach the solution of the wicked problem puzzle. Therefore, the next chapter will answer the last SRQ which aims at identifying how the empowered frames per collaborative layer end up in the (midterm) result of the Meandering Meuse Project.



7 CONNECTING THE PUZZLE PIECES

7.1 The Pieces on the Table

7.2 Solving the Puzzle

7.3 The Power Dynamics

The Gouden Ham is a recreational area (330 hectares) located in the project area of the Meandering Meuse. The camping is known for its marinas, facilities for water recreation, beaches, and campsites. Next to the campsites, also 45 colorful floating houses are located in the Gouden Ham. The entrepreneurs in the area are mainly present in the workshop layer of the MM Project. They have a financial interest, since it is important for them to continue their recreational activities. Therefore, they try to empower the recreational frame in various ways to ensure the recreational frame is considered in the final plans of the MM Project.

This chapter examines how empowered frames, including the recreational frame, interact with other empowered frames and eventually are excluded from or end up in the (midterm) result of the MM Project. This is done by answering SRQ 3, in which the concepts of framing and power are combined to examine how power dynamics influence the (midterm) result of the MM Project. First, in section 7.1, the puzzle pieces part of the solution are introduced. Thereafter, in the sections 7.2 and 7.3, the interactions between empowered frames and the influence of power dynamics are discussed.

7.1 The Pieces on the Table

This chapter aims at answering SRQ 3: How do empowered frames end up in the (midterm) result of the Meandering Meuse Project? When this study was conducted, the (midterm) result of the MM Project consisted of two promising alternatives, called alternative X and alternative Z (described in Section 4.4 and shown in Appendix C). These two alternatives are the two extreme alternatives between which the preferred alternative, called alternative Y, will be located in a later stage. The two alternatives of X and Z therefore show the range of frames which are until the end of this research sufficiently empowered to become part of the final solution. These alternatives are the result of the interactions of empowered frames between the three collaborative layers. To answer SRQ 3, the descriptions and maps of these alternatives are converted to frames by means of a frame analysis. This resulted in the overview of frames in Figure 7.1. The frames shown in the (midterm) result of the MM Project are the puzzle pieces that until now ended up in the (midterm) solution of the wicked problem puzzle.

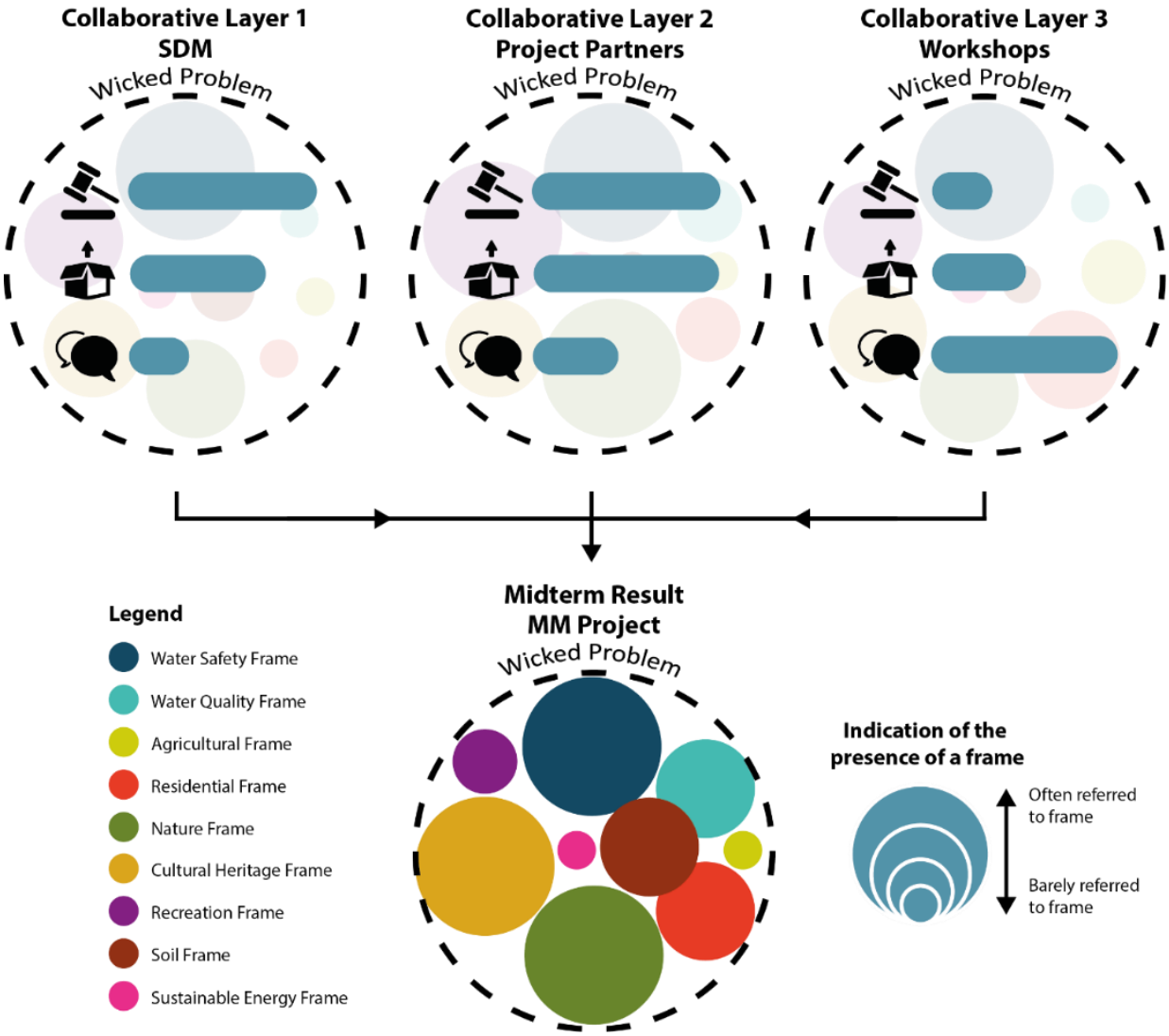


Figure 7.1 The Solution of the Puzzle

Now it is clear what puzzle pieces became part of the solution of the wicked problem puzzle, it is time to examine the influence of power dynamics on the solution of the puzzle. How the power dynamics influenced the outcome becomes visible when comparing the frames in the collaborative layers with the frames in the (midterm) result the MM Project. This namely shows how frames that were barely expressed by the collaborative layers are still sufficiently empowered to obtain a position in the (midterm) result of the MM Project. The opposite direction becomes also visible when comparing the frames in each collaborative layer with the (midterm) result: frames that were often expressed by collaborative layers, but remain insufficiently empowered to end up in the solution of the wicked problem puzzle. The next section, section 7.2, examines how these empowered frames interacted and influenced the solution of the puzzle. To account for the role of the concept of power, a discourse analysis is conducted to formulate an answer to SRQ 3.

7.2 Solving the Puzzle

To formulate an answer to SRQ 3 (How do empowered frames end up in the (midterm) result of the Meandering Meuse Project?), this section combines the concepts of framing and power by applying the categorization of frames from the theoretical framework: (1) frames with formal authority, (2) frames with resources, and (3) frames with discursive legitimacy. The aim of this categorization is to make the influence of power dynamics on the (midterm) result more transparent. Figure 7.2 and Figure 7.3 together visualize this process of frame empowerment and indicate the influence of power dynamics. Figure 7.2 is used to compare the frames in each collaborative layer with the frames in the (midterm) result. This offers an indication of what collaborative layers succeeded in empowering their frames sufficiently to end up in the (midterm) result of the MM Project. Figure 7.3 shows to what degree each frame is empowered, based on the interpretation of the researcher. The figure shows the relative empowerment per power source for each puzzle piece. Thereby, the figure shows that most frames are supported by multiple power sources and therefore belong to more than just one category of empowered frames. The influence of power dynamics will be discussed per frame category by connecting Figure 7.2 and Figure 7.3,.

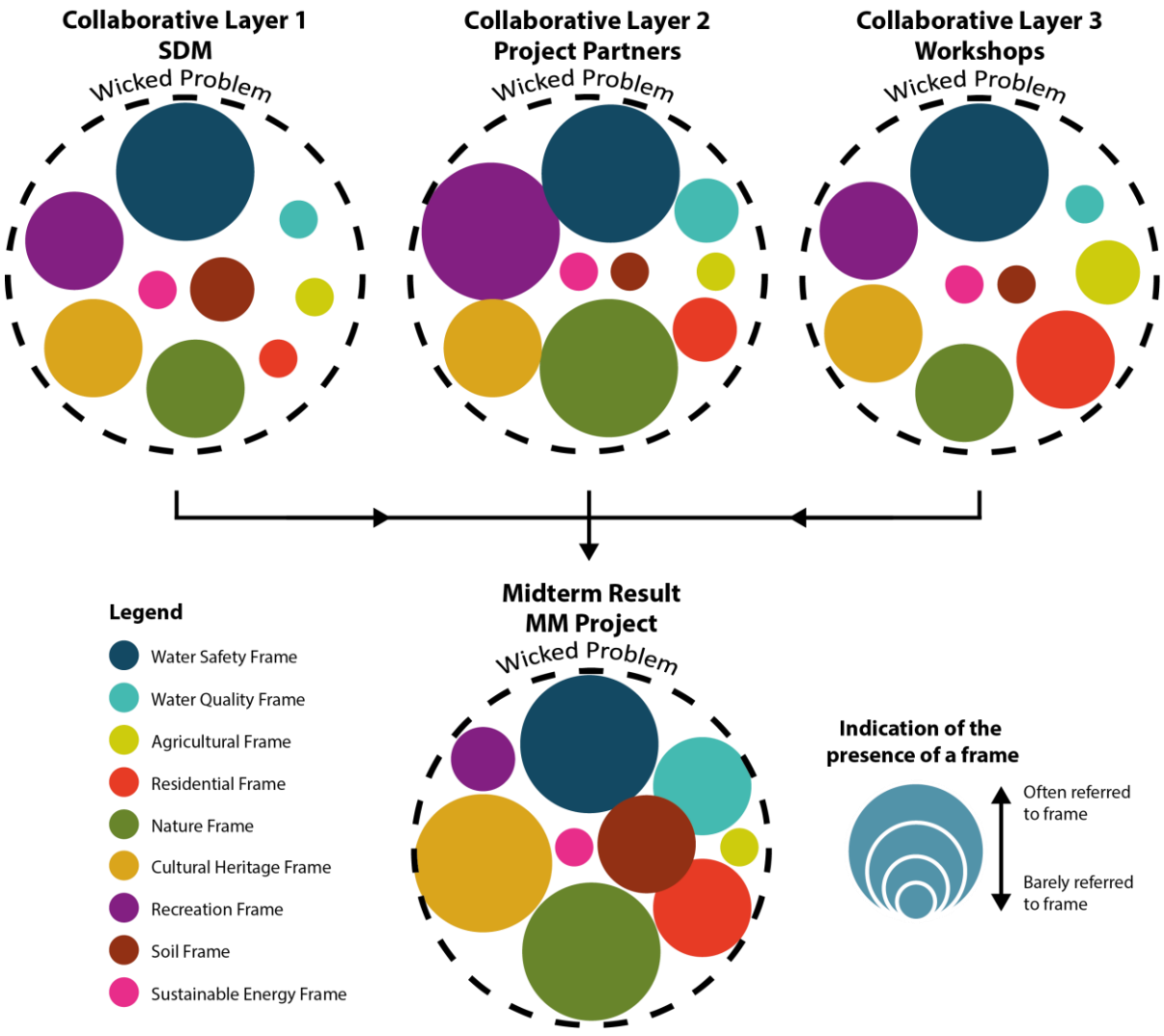


Figure 7.2 The Result of Power Dynamics

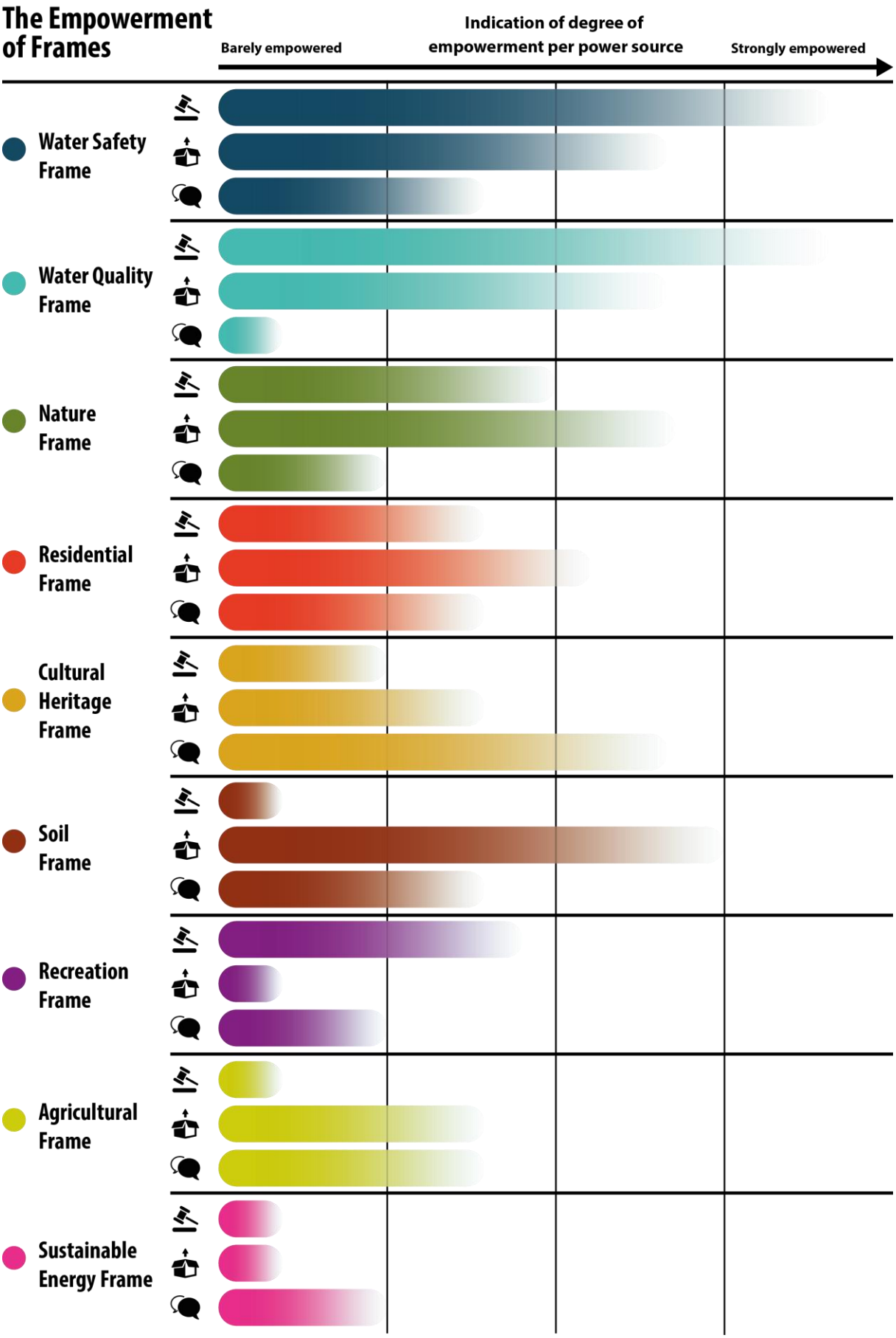


Figure 7.3 The Empowerment of Frames

Frames with Formal Authority

The frames in the (midterm) result which are empowered most with formal authority are the water safety frame, water quality frame, and nature frame (Figure 7.3). The influence of the other power sources on these frames will be discussed later since formal authority is not the only power source that supports these frames.

All collaborative layers considered improving the water safety as an absolute prerequisite in the solution of the MM Project. Thereby, the project would not even be started if the new water safety norms were not introduced. SDM supported this frame with formal authority with their contribution to the national agenda setting and by introducing criteria and boundary conditions for each individual project along the Meuse. Thereby, the water authorities have the legislative task to reinforce the dike when they do not meet the norm. The result is that both alternatives meet the new water safety norm, despite both alternatives contain different measures to reach this norm.

Next to the water safety frame, also the water quality frame is reinforced with formal authority. This is especially done by the collaborative layer of project partners since Rijkswaterstaat is the national executive party of the European guideline of Kaderrichtlijn Water (KRW). Despite the frame of water quality was barely expressed by the collaborative layers, it obtained quite a prominent position in the solution due to this empowerment (Figure 7.2). An example are the KRW-objectives which are realized in both alternatives and resulted in several measures in both alternatives: bypasses and meanders are reintroduced, river banks are made stone free, and the stream-ends ('beekmondingen') are redeveloped to improve the water quality of the Meuse.

The last frame in the category of formal authority is the nature frame. Both alternatives X and Z include nature development on a large scale. Especially the project partners empower this frame with formal authority since nature development is part of several policies and frameworks on local, regional, and national scales. However, the type of nature that will be developed is still open for discussion. Both alternatives focus on completely different types of nature, but both alternatives still fulfill the objectives of the frameworks. Where in alternative X swamp- and river nature is developed, alternative Z focusses on a more cultural and traditional hedge landscape:

"Alternative Z is way more open, more grass and focusses on the characteristics of a cultural landscape with an old parcel structure. While in alternative X a self-managing nature system is created. That will be densely overgrown and create a new landscape. […] People are always longing for grandfather's landscape. People go on holiday to the landscapes they recognize from their youth." (Quote 7.1.1: MM-04-04)

Next to the three frames discussed, also some issues from other frames derive their power from formal authority. The redevelopment of SF Beton and the improvement of the accessibility of the port of Oss are both examples from the residential frame that ended up in the (midterm) result, because they are part of municipal policies. This shows how individual actors even can influence a decision by empowering their frames sufficiently with formal authority. However, considering the indications in Figure 7.3, formal authority is not the only power source that let frames prevail in the solution of the wicked problem puzzle. Examples are the water safety frame which is also supported by resources and discursive legitimacy or the water quality frame and nature frame which are also dependent on the power source of resources. This shows how the three categories of empowered frames overlap. The next part will discuss the implications of frames with resources.

Frames with Resources

Numerous frames in the (midterm) result derive their power from tangible and intangible resources across all collaborative layers (Figure 7.3). However, only the collaborative layer of the project partners deployed the tangible resource of money to support their frames. Six of the nine frames are financially underpinned by the project partners (described in section 6.2). Considering Figure 7.3, this source of power assists the other power sources to let a frame prevail in the (midterm) result of the MM Project. The three frames that lack monetary resources - the recreation frame, sustainable energy frame, and agricultural frame - are barely present in the (midterm) result of the MM Project. Of course, someone needs to pay for all measures presented in the (midterm) result.

Next to the monetary resources, also the resources of expertise, knowledge, and capabilities empower a great variety of frames. Interesting is that all collaborative layers link this source of power to their frames but differ in the types of expertise expressed. SDM uses his national helicopter view to support frames, the project partners deployed regional and local expertise, and the frames of the workshop participants derive their power from experience- and practice-based local knowledge.

The frame in the (midterm) result that is influenced most by the power source of resources is the soil frame. The soil frame was barely expressed by the collaborative layers but obtained quite a prominent position in the solution (Figure 7.2). However, the monetary motives to reduce costs and the expertise to facilitate smart soil movements supported the soil frame enough to end up in the (midterm) result. The transport of soil and the applications of excavated soils is discussed multiple times in the descriptions of the alternatives. In alternative X even several symbols are included to indicate these soil movements:

"It is a general principle [referring to the smart soil movements]. We try to estimate how it could be solved. How can we limit the nuisance and how can the costs be reduced? For BV Nederland it is also nice if we do not spend 4 euros per cubic meter but limit it to 3.5 euros. I think it's worth thinking about when we need 2 to 3 million cubic meters." (Quote 7.1.2: MM-04-04)

Notable is that the tangible resource of landownership barely affected the (midterm) result. The support of the agricultural frame in terms of landownership by farmers did not result in an inclusion of the agricultural frame in the (midterm) result. This was especially the result of interactions with other (more) empowered frames. The objectives derived from the nature and water safety frame namely not matched with the practices of the agricultural frame.

Frames with Discursive Legitimacy

The power source of discursive legitimacy was mainly used by the collaborative layer of the workshop participants to empower frames. This collaborative layer had a very wide scope of frames and stressed the importance of all kinds of issues. The consequence is that, just like the power source of resources, also the power source of discursive legitimacy supported a wide variety of frames (Figure 7.3). The wishes of workshop participants, that fit within the formally authorized boundaries, often derived their power from discursive legitimacy. This is for example visible in the water safety frame. Where SDM imposed all kind of formally authorized boundary conditions and criteria for the water safety frame, both alternatives differ in their dike constructions and include different interventions in the floodplains to reach the new safety norm (Projectteam Meanderende Maas, 2018b). These differences are the result

of the wish of workshop participants to not create one uniform dike, but to include a variety of dike constructions along the complete dike trajectory.

A very dominant frame in the (midterm) result is the cultural heritage frame (Figure 7.2). Where this frame is also empowered with monetary resources (e.g. payment for the preservation of bakenbomen), especially the discursive legitimacy is used to empower this frame (Figure 7.3). The idea is that preserving or improving cultural heritage will create more social support for the interventions resulting from other frames. Thereby, respect for the current landscape characteristics is a very important value in the collaborative process. The consequence is that both alternatives preserve, expand, or improve the village scenes, the tree dikes, or the bakenbomen.

Frames with insufficient Power

Three frames that are empowered insufficiently to reach the (midterm) result of the MM Project are the recreation frame, the agricultural frame, and the sustainability frame. The puzzle piece of the recreation frame is placed at the border of the solution. In both alternatives, no (mass) tourism comparable to the Gouden Ham will be stimulated on other places in the project area (Projectteam Meanderende Maas, 2018b). Despite the exclusion of (mass) tourism, both alternatives include some small components of the recreation frame. Examples in both alternatives are recreative points or recreative bike routes. Also in descriptions of both alternatives, statements are made about the type of recreationists each alternative is attracting (Stuurgroep Meanderende Maas, 2018). These components mainly derive from formal authority since the recreation frame is part of municipal policies (Figure 7.3). However, the current descriptions in the (midterm) result remain very general and a concrete elaboration of the recreation frame is absent. Important to mention is that this is also possible due to the current scale level of the plans. In later stages, when smaller scale levels are discussed, this frame may be elaborated and empowered more:

"A lot of information is gathered during the workshops, for example about beaches. That will come back in a later stage. It collected well and it will be back later, but that does not make the difference between alternative X or Z. In the end, that beach will be made somewhere." (Quote 7.1.3: MM-04-04)

The other two frames, the agricultural frame and sustainable energy frame, are barely to not present in the (midterm) result of the MM Project. According to the report of the last workshop (Projectteam Meanderende Maas, 2018b), no intensive agriculture will be included in the floodplains in the desirable alternative Y. This is mainly the result of interactions between the agricultural frame and other frames such as the nature frame and water safety frame. The objectives in these frames do not match with the practices of intensive agriculture. This means that the agricultural frame lost its position in the (midterm) result, despite the support of resources and discursive legitimacy for the agricultural frame. It is also stated in this workshop report that no sustainable energy objectives will be fulfilled via the MM Project. This means both frames are excluded from the current range of frames from which desirable alternative Y will result. For both frames the opportunities to reach the final plan shrunk tremendously.

7.3 The Power Dynamics

Concluding the answer on SRQ 3 (How do empowered frames end up in the (midterm) result of the Meandering Meuse Project?), it became clear that empowered frames reach the (midterm) result of the MM Project easier than less empowered frames. Thereby, it does not seem that one particular frame category – frames with formal authority, frames with resources, and frames with discursive legitimacy - was of more influence than the other categories, because frames of all three categories ended up in the (midterm) result. Categories of frames showed overlap several times which means frames are supported by multiple power sources. These frames, which are empowered more and with multiple sources of power, obtained a prominent position in the (midterm) result. Even frames that were barely expressed by collaborative layers were able to obtain a prominent position in the (midterm) result of the MM Project when they were sufficiently empowered in interactions. An example is the water quality frame, which was only expressed by some project partners but obtained a prominent position in the (midterm) result. Vice versa, frames that were barely empowered (e.g. the sustainable energy frame, agricultural frame, and recreational frame) did not reach the (midterm) result.

The influence of power dynamics and interactions becomes especially visible when focusing on these frames that not reached the (midterm) result. An example is the agricultural frame, which was empowered with discursive legitimacy and the resources of landownership. Despite this empowerment, the frame disappeared in the (midterm) result due to interaction with other frames (e.g. the nature frame and water safety frame). Also the other two excluded frames of sustainable energy and recreation were partly overruled by the more empowered frames in interactions.

By answering SRQ 3 it can be concluded that power dynamics were of influence on the (midterm) result of the MM Project. Most of the time it is a combination of multiple power sources and interactions that determined if a frame ended up in the final decision or not. With that, it became clear power is not equally distributed over the collaborating actors, and it is important to be aware of that power imbalance when designing or participating in collaborative processes.

8 DISCUSSION

8.1 Reflection on Theory

8.2 Reflection on Methodology

8.3 Future Research

The downstream end of the project area is marked by the Prinses Máxima Sluizen between Lith (NB) and Alphen (GLD). The water in the Meuse is controlled by weirs to make shipping possible. Next to the weir and sluice, also a hydroelectric station and a fish ladder are located at the sluice complex of Lith. The sluices are an intermediate stop for shippers to go from one water level to another. As the sluice of Lith is the last sluice in the Meuse, it marks the end of the Meuse controlled by sluices. However, the sluice is simultaneously a new start for shippers to continue the journey.

Just like the sluices, this research is also an intermediate stop for the development of knowledge in the world of collaborative water governance and other collaborative processes. This discussion reflects on this study and positions the findings in the context of the current academic debate. Thereby, this study also offers a start for new studies to improve the understanding and design of collaborative processes.

8.1 Reflection on Theory

To place the findings of this research in the context of the current academic debate, this section reflects on how the theoretical starting points influenced the findings of this study. The power debate is a very complex and long-standing debate which started decades ago with the works of scholars such as Foucault, Habermas, Giddens, and Lukes. The discussion about how to think about power theoretically and how to study the concept empirically keeps a lot of theorists busy until today. Theorists contributing to the power debate criticized each other, came to new insights, and changed their opinions over time. Therefore, it is important to make clear what the consequences are of the adopted power perspective for the findings of this study. To embed the results of this study in the theoretical debate, first the consequences of applying an actor-oriented approach are discussed. This actor-oriented approach led to a partial exclusion of the influence of structural power, which needs to be considered when interpreting the findings of this study. Next to the influence of structural power, also some factors that influence power dynamics remained out of the scope of this research. Therefore, the consequences of using the current operationalization of power dynamics need to be discussed too.

The Influence of Structural Power

In their efforts to structure the power debate, Arts & van Tatenhove (2004, p. 347) distinguish a couple of dichotomies in the power debate. One of these dichotomies is that some authors "…situate power at the level of the acting agent (the swimming fish), while others situate it at the level of structures (the water putting pressure on the fish)." Drawing on the description of the actor-oriented approach in section 2.2, this study focused on the actions of the swimming fishes. The main critique on adopting an actor-oriented approach is therefore that it denies the influence of the water putting pressure on the fish (Krott et al., 2014). This water pressure is the result of structural forms of power such as rules, discourses, and social settings. The decisions taken by the collaborating actors are influenced by these social structures. An example is how hegemonic discourses normalize certain behavior and discipline thinking, speaking, and acting in collaborative processes (Arts & Buizer, 2009; Cook, Kesby, Fazey, & Spray, 2013). Actors have a bias to decide what is decided about already due to the structural power of social structures. Also Lukes (2005) explains how non-decision-making is just as influential as decision-making, since non-decision-making can keep certain issues outside the scope of a collaborative governance arrangement. This empowers the frames of certain actors and privileges their interests. This was also experienced during the participatory observations of workshop, where only a few out-of-the-box ideas emerged because I felt actors started to adapt to the existing social structures. This means power asymmetry and power dynamics may be the result of - or may be influenced by - the social and institutional settings.

Considering the applied definition of the power concept in this study (section 2.2,), it is acknowledged that structural power of social institutions (e.g. discourses and institutions) has an influence on power dynamics. Due to the actor-oriented approach, these social structures are examined from the point of view of collaborating actors. The consequence of this viewpoint is that social structures do not exert power itself in this study but are included in this study as a power source for actors. As described by Krott et al. (2014, p. 36), who also adopted an actor-oriented approach: "The actor can make use of rules, arguments in discourse, ideologies or other structures in order to strengthen his power. The actor can also find allies within a power network. Such support is defined as a source of power but not directly as the power of the actor." This is also experienced and perceived in this study. An example is the

collaborative layer of SDM who contributed to the national agenda setting of water safety project and used that as a power source to support the water safety frame. However, the power as part of - and exerted by - the social structures is outside the scope of the used definition, perspective, and approach in this study. This partly exclusion of the influence of structural power from social institutions limits this study in revealing the real impacts of power dynamics. The presence of a frame in the (midterm) result of the MM Project may namely not be the result of power dynamics between collaborating actors only, but also because of a hegemonic discourse on the background.

The Operationalization of Power Dynamics

To operationalize power dynamics, this study combined the power sources of Hardy & Phillips (1998) with the concept of framing. This resulted in a categorization of frames with formal authority, frames with resources, and frames with discursive legitimacy. However, many other ways exist to examine and operationalize power dynamics. Van Lieshout et al. (2017) examined power dynamics from a categorization of 'power-in', 'power-of', and 'power-over' interactive governance. Another possibility to examine power dynamics are the three forms of power used in the 'power cube' developed by Gaventa (2006): visible power, hidden power, and invisible power. Next to the concept of power, also the concept of framing can be applied in many ways. This study applied frames as communicative devices, which result from the cognitive frames existing in the heads of collaborating actors. However, this linguistic interpretation of the framing concept can be made more specific. An example is the study of van Lieshout et al. (2017), who specified frames to 'scale frames' to examine the influence of framing a particular issue on a certain scale. Another example is the study of Dewulf et al. (2013), who examined 'knowledge frames' to stress that frames embody a particular kind of knowledge. The numerous amount of approaches and categorizations all have their own pros and cons and are suitable for different research purposes and contexts. Operationalizing power dynamics by means of a categorization can be useful to make the complex concept of power graspable, understandable, and operationalizable. However, during this research I also experienced the downsides of applying a categorization.

The first limitation of applying a categorization of frames concerns the overlap between categories. Sometimes in this research the overlap between categories is pointed out. However, since the diverging categories are the tools to analyze the collaborative process, this overlap is sometimes not detected. The categorization limits therefore the opportunities to discuss and analyze this overlap thoroughly.

The second limitation of the categorization concerns the exclusion of other factors that influence power dynamics. Many aspects influence power dynamics next to the described power sources. The role of leadership (e.g. Ansell & Gash, 2008), boundary spanning (e.g. Edelenbos & van Meerkerk, 2015), and contingency factors (e.g. Ran & Qi, 2018) are only a few of the elements in collaborative processes that possibly affect power dynamics. Thereby, I experienced that mutual trust can be of great influence on power dynamics. When actors trusted each other, mainly as a result of shared interests, they started to form coalitions to utilize more power sources for a frame. These coalitions were mainly formed after meetings or in informal talks. Certain influential factors were not included in the applied frame categorization and were therefore excluded from the scope of this research. This means that using a categorization to examine power dynamics is limited in its possibilities to create a complete image of how power dynamics influence collaborative processes. This is important to consider while interpreting the results, because the prevalence of certain frames in the (midterm) result may not be the result of power dynamics only, but also of other influential factors.

8.2 Reflection on Methodology

This section reflects on the effects of the applied methodology on the findings of this study. Three aspects are discussed: the case study of the MM Project, the simplification of the collaborative governance arrangement, the interviews, and the participatory observations during the workshops.

The Meandering Meuse as a Paradigmatic Case

The MM Project was chosen as paradigmatic case by applying several criteria (section 4.1). Despite the MM Project met the criteria to become a paradigmatic case, also constraints exist that need to be considered when generalizing the results of the case study. The most important factors to consider when generalizing the findings of the MM Project are the time and scale constraints, the simplification of the collaborative governance arrangement, and the context-dependency of power dynamics.

While conducting this research, the MM Project was in a beginning phase. First six alternatives were created, after which a filter process started from six to two alternatives. The final preferable alternative, alternative Y, is not reached yet and the decision-making process of the MM Project continuous after finalizing this study. Later stages of the decision-making process could offer opportunities for other actors to empower their frames. This is also possible due to the changing scale level of the plans over time. The current alternatives concern quite a big scale in which is focussed on the whole project area. As van Lieshout et al. (2017) show, the scale level of discussions is of great influence on power dynamics. This means when other scale levels are discussed in later stages of the decision-making procedure (e.g. more detail), new opportunities may arise for actors to empower their frames and to make them part of the (midterm) solution. These time and scale constraints therefore limit the understanding of power dynamics in the complete collaborative process of the MM Project and need to be considered when generalizing the results to other projects.

Another limitation is the simplification of the collaborative governance arrangement. The collaborative governance arrangement of the MM Project was simplified with three collaborative layers. However, in practice the collaborative governance arrangement of the MM Project is more complex. Other collaborative coalitions are influencing the process and its power dynamics, for example the advisory group ('klankbordgroep') or the so called 'regioprocessen'. Thereby, also the important role of the convenor/facilitator/project team was excluded from the collaborative governance arrangement. However, it is important to acknowledge that the project team influences the activities and structure of a collaborative governance arrangement (Ansell & Gash, 2008). Despite the influence of the other collaborative layers and the project team, their frames were not included in the collaborative governance arrangement due to time constraints. Only some participants from these collaborative layers and members of the project team were spoken to understand the influence of power dynamics better.

The last limitation to consider when generalizing the findings of this paradigmatic case study, is the context-dependency of power dynamics. The context of a decision-making procedure is an inherent part of the processes of puzzling and powering (van der Steen et al., 2016). Therefore, it is important to consider the described planning phase, simplifications, and context of the MM Project. Since the goal of this study was more understanding-oriented than prescriptive, the findings of this study do not offer a blueprint how to deal with power dynamics for other cases. The findings aimed to indicate the challenge of dealing with power imbalances for planners, policy-makers, and collaborating actors and they can therefore use the findings of this study to reflect on their own collaborative processes.

The Interviews

In-depth semi-structured interviews were conducted to collect data. This resulted in an amount of 21 interviews. Two aspects of the interviews are important to consider when interpreting the results: the sampling method used to approach interviewees and the usability of the interview results.

The interviewees were chosen by means of judgmental (or purposive) sampling (Kumar, 2011). Interviewees were approached, because of their availability and because I expected they could provide me with the best information possible to create a representative picture of the frames present in each collaborative layer. Judgement sampling is based on the interpretation of the researcher and therefore biased. My judgement if an interviewee contributes to the representativity of frames can be wrong. Thereby, I stopped approaching interviewees when actors started to repeat each other. This means a risk exists that I excluded actors that approach the MM Project from a particular frame due to the bias inherent to the sampling method.

Next to the sampling method, also the usability of the interview results are important to discuss. This study focusses on the interactive components of power dynamics. However, these interactions are not observable while interviewing. People could express other frames and power dynamics in interactions than during interviews. Therefore, more or different power dynamics could be going on, which were not expressed to me in interviews. Next to the usability of interviews to examine interactions, also a strong difference was observable between the usability of interviews from different collaborative layers. Illustrative is that interviews with (governmental) organizations (mainly derived from collaborative layer 1 and 2) resulted in 60-80 useful quotes, where workshop participants (collaborative layer 3) did not pass the amount of 40 useful quotes. The interviewees in the first two collaborative layers were well-spoken compared to inhabitants. The usability of interviews from the first two collaborative layers were therefore bigger. However, in an attempt to tackle this difference in usability, more people from the third layer were interviewed and participatory observations were conducted in this layer.

Participatory Observations

Participatory observations were used to get an idea of power dynamics in interactions. These participatory observations only took place in the third collaborative layer, because of two reasons: time constraints and a lack of accessibility. These constraints made it impossible to attend meetings from the other two layers. The internal interactions within a collaborative layer are therefore only examined in the third layer of workshop participants. Despite this study mainly focussed on the external power interactions *between* collaborative layers and not on the internal power interactions *within* a collaborative layer, insight in the internal power dynamics can help to understand the external power dynamics better.

The differences in the methods of data collection between the collaborative layers may have affected the results. Less interpretation was needed while analysing the interviews of the first two collaborative layers, because interviewees from these two layers were able to express their frames better. However, in the third collaborative layer also the internal power dynamics are examined to improve the understanding of the external power dynamics. The consequence of these differences may be that the results in one collaborative layer come closer to reality than the findings in the other.

8.3 Future Research

To expand the knowledge of power dynamics in collaborative processes, this section lists some recommendations for future research. Three subjects are considered as interesting for future research, namely the time dimension, the discursive legitimacy, and other policy domains.

The Time Dimension

The findings of this study are a cross-sectional representation of the power dynamics in the MM Project. However, it would be interesting for future research to include the time dimension of power dynamics. Power dynamics are namely part of a continuum that varies between the two extremes of power sharing and power asymmetry (Ran & Qi, 2018). At the moment, not a lot of longitudinal studies exist that examine the fluctuations of power dynamics over time. The article of Warner & van Buuren (2016) is one of the few articles that examined the evolution of power dynamics in a process of long-term policy development. However, there is a lack of theoretical approaches to consider this time dimension systematically. Also Purdy (2012) explains she experienced problems with adding the time-dimension in her power framework. To consider the time-dimension in her current framework multiple assessments are needed over the course of a collaborative process to evaluate how power dynamics are evolving over time. Developing this power framework could therefore be an interesting starting point for future research to systematically include the time dimension while evaluating power dynamics.

Discursive Legitimacy

The power source of discursive legitimacy is currently underexposed in research to power dynamics (Brisbois & de Loë, 2016a). However, the findings of this study showed that frames with discursive legitimacy can be of great influence on the result of a collaborative process. Frames with discursive legitimacy were able to reach the (midterm) result of the MM Project and the power source of discursive legitimacy was used to challenge frames with formal authority or resources, for example when these frames were not empowered sufficiently with social support. Despite most of the actors were not aware of this source of power, it can be used by those aware of this power source to manipulate the choices of other actors in collaborative processes. As stated by Lukes (2005, p. 27):

> "A may exercise power over B by getting him to do what he does not want to do, but he also exercises power over him by influencing, shaping or determining his very wants. Indeed, is it not the supreme exercise of power to get another or others to have the desires you want them to have - that is, to secure their compliance by controlling their thoughts and desires?"

Public education, lobbying, mass media, and control over technology are all methods that can be used to consciously empower frames with discursive legitimacy (Brisbois & de Loë, 2016a; Gaventa, 2006). When more people are becoming aware of these opportunities to empower their frames, the influence of discursive legitimacy on collaborative processes may increase. Therefore, future research could focus more on this power source to create theoretical approaches to improve the understanding of the influence of this power source.

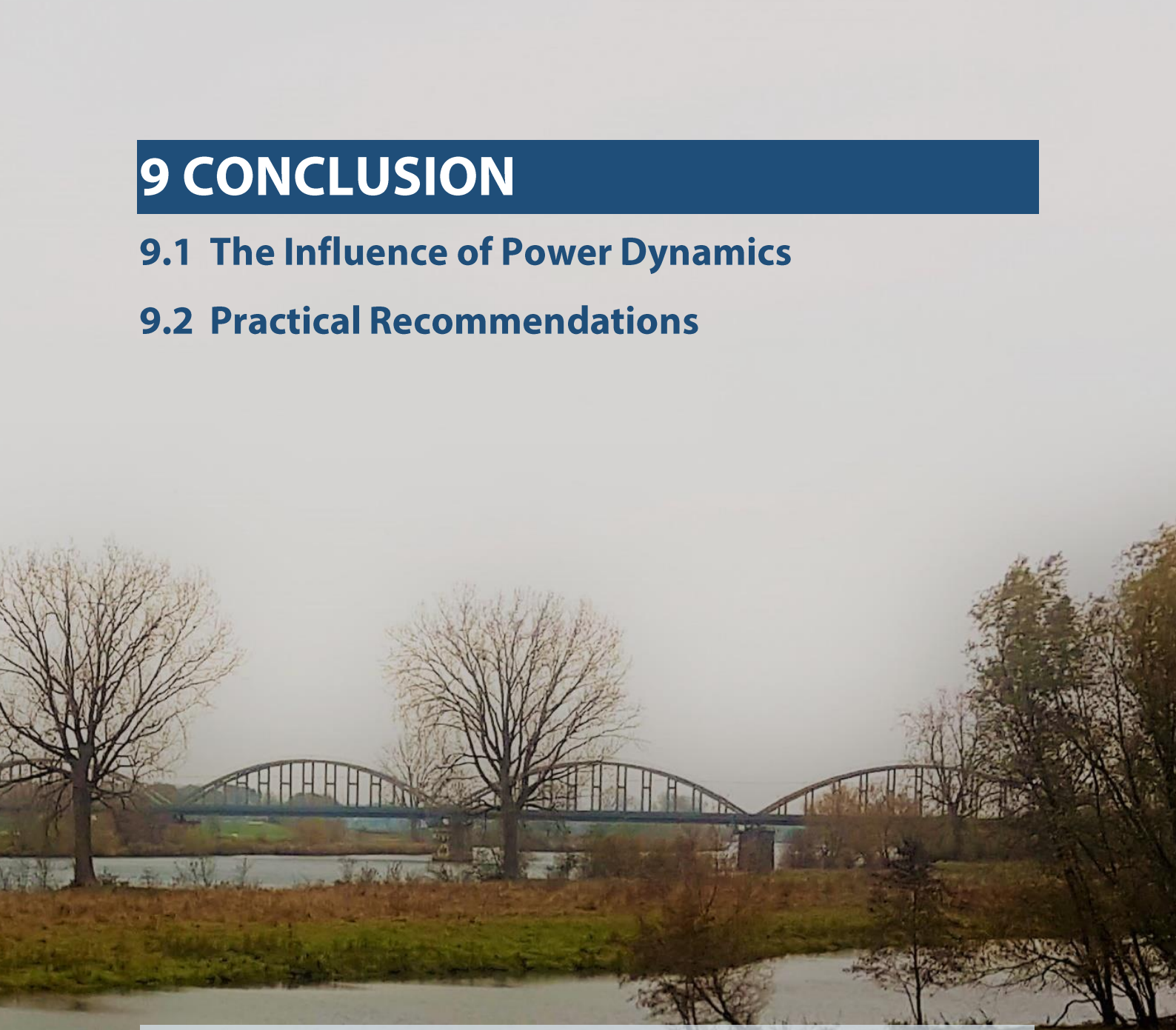
Other Policy Domains

The last recommendation for future research concerns power dynamics in other policy domains. Where this study focussed on collaborative water governance, also other policy domains start to examine power dynamics in their decision-making procedures. Examples are the domains of health technology (e.g. Nedlund & Garpenby, 2014), forest policy (e.g. Krott et al., 2014), and some other policy fields which increasingly implement collaborative processes (e.g. Gaventa, 2006). However, the current availability of research to power dynamics in other domains remains scarce. Most of the current research focusses on the policy domains of water management and climate change adaptation in a western context (e.g. van Buuren et al., 2016; van der Steen et al., 2016; Warner & van Buuren, 2016). Since decision-making procedures in the policy domains of climate change and water management are often highly complex, also other policy domains should be able to examine power dynamics to improve their collaborative processes. This could result in new inspiration how to deal with power dynamics in collaborative processes in different contexts.

9 CONCLUSION

9.1 The Influence of Power Dynamics

9.2 Practical Recommendations



Where the Prinses Máxima Sluizen marked the downstream end of the Meuse trajectory, the railway bridge at Ravenstein marks the eastern border. Another project will start at the other side of the bridge after the MM Project is finished, called 'Waterfront Ravenstein'. This project tries to solve the bottleneck in the Meuse caused by the railway bridge and the animal feed factory in Ravenstein. This shows how the projects and activities to ensure the water safety never stop.

Just like the railway bridge, this chapter marks the end of the research process. The journey of collecting and analyzing data has finished and all SRQs are answered. However, the answers on the SRQs are still not combined to create one comprehensive answer on the MRQ. Therefore, this chapter concludes with an answer on the MRQ and adds some practical relevance and recommendations for planners, (process) designers, and collaborating participants to deal with the influence of power dynamics.

9.1 The Influence of Power Dynamics

The aim of this study was to improve the understanding of the influence of power dynamics on collaborative processes. Collaborative approaches are often based on the assumption that all actors are equally empowered to contribute to the final outcome (Innes, 2016). However, the best argument does not always win. Actors are able to empower their voices with different power sources to improve their capacity to influence a decision (Hardy & Phillips, 1998). Considering the results of several literature reviews (e.g. Brisbois & de Loë, 2016a; Vink et al., 2013), the influence of these power dynamics on collaborative processes remained underexposed. To improve the understanding of the role of power dynamics, a qualitative interpretive case study was conducted in which the Meandering Meuse Project ('MM Project') was used as a paradigmatic case. The three collaborative layers in the collaborative governance arrangement of the MM Project were used to analyze the influence of power dynamics on the (midterm) result: Steering Committee Delta program Meuse (SDM), the project partners, and workshop participants. The following MRQ was formulated to fulfill the overall aim of this research:

Main Research Question

How do power dynamics influence the (midterm) result of a decision-making process in the context of collaborative water governance?

To formulate an answer to this MRQ, first three SRQs needed to be answered. This chapter gives a short overview of the conclusions of each SRQ, after which the answer on the MRQ is formulated.

Sub Research Question 1

How do actors frame the problems and issues addressed in each collaborative layer of the Meandering Meuse Project?

The aim of the first research question was to detect the frames present in each collaborative layer of the MM Project. It was concluded that actors approach the MM Project from nine different frames, or in other words: nine puzzle pieces were placed on the table to become part of the solution of the wicked problem puzzle. These puzzle pieces consisted of the water safety frame, the water quality frame, the agricultural frame, the residential frame, the nature frame, the cultural heritage frame, the recreation frame, the soil frame, and the sustainable energy frame. The nine frames were ordered per collaborative layer to examine what puzzle pieces were used to approach the MM Project by each collaborative layer. It turned out that all collaborative layers centered the puzzle piece of water safety. However, differences existed between the other frames in each collaborative layer. Where the layer of SDM had a strong focus on the water safety frame, the layer of the project partners also had a strong interest to express other frames, for example the recreation and nature frame. The last collaborative layer consisting of workshop participants had a very wide scope. Consequently, a lot of different frames were expressed by this collaborative layer. However, also in this layer the puzzle piece of the water safety frame was placed most prominent on the table.

The next step was to examine how the three collaborative layers empowered their frames in an attempt to make them part of the final solution. SRQ 2 was answered to identify what power sources were used in each collaborative layer to empower frames.

Sub Research Question 2

How do actors empower their frames in each collaborative layer of the Meandering Meuse Project?

To analyze how each collaborative layer empowered their puzzle pieces, the power sources of formal authority, resources, and discursive legitimacy were used. It was concluded that all layers use different power sources to make their frames more salient. The collaborative layer of SDM derived their power mainly from the power source of formal authority. Thereby, SDM supported their frames with the resource of expertise due to their national helicopter view. SDM was namely the only collaborative layer that focused on the complete Meuse river. The project partners empowered their puzzle pieces, just like SDM, with formal authority and resources. However, different from the SDM layer, the resources of the project partners also included monetary resources. The last collaborative layer of the workshop participants barely utilized the power sources of formal authority and resources. The only resource used by the workshop participants was the practice-oriented local knowledge. However, different from the other two collaborative layers, the frames of workshop participants derived their power mainly from the power source of discursive legitimacy.

The next step was to examine the influence of the empowerment of frames on the (midterm) result. Therefore, SRQ 3 was formulated:

Sub Research Question 3

How do empowered frames end up in the (midterm) result of the Meandering Meuse Project?

After identifying the power sources expressed per collaborative layer, SRQ 3 was answered to examine the influence of empowered frames. Frames with formal authority, resources, and discursive legitimacy all ended up in the (midterm) result of the MM Project. Puzzle pieces that were empowered more, and with multiple sources, obtained a more prominent position in the final solution compared to less empowered frames. Even frames that were barely expressed by collaborative layers were able to obtain a prominent position in the solution due to their empowerment. The water quality frame and soil frame were examples of frames that were barely expressed, but still obtained a prominent position in the (midterm) result of the MM Project. Also vice versa the influence of power dynamics was visible. Frames that were empowered insufficiently namely not reached the final plan, with as examples the agricultural frame and sustainable energy frame.

Conclusions

Together the answers on the three SRQs make it possible to formulate an answer to the MRQ:

How do power dynamics influence the (midterm) result of a decision-making process in the context of collaborative water governance?

First, the results of the SRQs showed that power dynamics have an influence on the (midterm) result of a collaborative process. The voices of actors are unequally empowered and the findings showed that this has consequences for what frames become prominent in the (midterm) result of the MM Project. Frames that were empowered more and with multiple power sources obtained a more prominent position in the (midterm) result of the MM Project. Vice versa, frames that were empowered insufficiently were also less present in the (midterm) result. Power dynamics therefore have an influence on collaborative processes and there is no reason anymore to neglect this influence in theory or practice.

Secondly, the results showed that frames from all three categories – frames with formal authority, frames with resources, and frames with discursive legitimacy – were able to empower a frame sufficiently to end up in the result of a collaborative process. Despite it remained sometimes hard to make statements about what power source was decisive for a particular frame to prevail in the (midterm) result, it was clear that frames from all three categories influenced the (midterm) result of the MM Project. For most frames a combination of power sources was needed to empower a frame sufficiently. A frame with formal authority does namely not reach the (midterm) result when nobody empowers the frame with monetary resources.

Finally, the findings showed that power is a dynamic concept which is exerted in interactions between collaborating actors, rather than a characteristic or capability that some actors possess and others not. A frame can be empowered in multiple ways, but this does not mean it will reach the (midterm) result automatically. An example is the agricultural frame which was empowered with discursive legitimacy and the resource of landownership. Despite this empowerment, the agricultural frame did not reach the (midterm) result because its objectives did not match with other empowered frames, such as the water safety frame or nature frame. The interaction between these two frames resulted in an exclusion of the agricultural frame. Also actors that on beforehand described their capacity to influence the result of the MM Project as nihil, were – consciously or unconsciously - able to contribute to the empowerment of frames due to power interactions. Especially actors from the workshop layer did not expect they would have an influence. However, their empowerment of the cultural heritage frame with discursive legitimacy resulted in a prominent position for this frame in the (midterm) result.

These three conclusions showed power dynamics matter while collectively puzzling about the solution of a wicked problem. Insight is created in how power dynamics influence the (midterm) result of a decision-making process in the world of collaborative water governance. To deal with the consequences of power dynamics, the next section ends with some practical recommendations for planners, process designers, and process participants.

9.2 Practical Recommendations

A better understanding of the consequences of power dynamics has the potential to improve the design and practice of collaborative processes (Brisbois & de Loë, 2016a). It is clear power dynamics matter, but how to consider them? This section offers some recommendations from two perspectives, namely the first perspective of the facilitator and process designer and the second perspective of process participants.

Recommendations for facilitators and process designers

Planners, process designers, and facilitators most of the time do not want to influence the power dynamics between collaborating actors. They take a neutral position in the collaborative governance arrangement to facilitate the decision-making process in an appropriate and unbiased way. While participating in the MM Project as a participant, I experienced that facilitators have the tendency to state that all process participants deserve the same attention and all interests are considered equally. However, as shown by this MSc Thesis, not everybody is equal in a collaborative process. Actors differ in their possibilities to empower their frame and these power dynamics dance over the table from one actor to the other in discussions. Planners, process designers, and facilitators may not want to influence these power dynamics, but they have an important role in the collaborative governance arrangement to

connect the fragmented frames of collaborative layers (Edelenbos & van Meerkerk, 2015). Planners, process designers, and facilitators therefore need to make power dynamics understandable for collaborating actors to improve the transparency of a decision-making procedure. To improve this transparency of power dynamics, two tasks are very important for facilitators and process designers, namely expectation-management and facilitating the communication between collaborative layers.

It is impossible for a facilitator to clarify all power dynamics on beforehand. The power dynamics are namely inherent to interactions between actors that will take place during the whole collaborative process. However, the tasks of expectation-management and communication facilitation are important for facilitators to avoid misunderstanding, dissatisfaction, and protest in these interactions. The goal of these two tasks is to make clear what subjects are discussed in each collaborative layer and what the capacity is of each collaborative layer to influence a decision. As shown by the nine identified frames in the MM Project, actors approach the collaborative process from different perspectives. The problems at stake are therefore not always clear for each actor on beforehand. Furthermore, collaborative governance arrangements are often highly complex and actors only have insight in the discussions in their own collaborative layer. This was also experienced while participating in the MM Project, in which other layers in the collaborative governance arrangement were often perceived as a black-box. This complexity makes it hard for collaborating actors to understand their position and role in the collaborative governance arrangement. Thereby, I experienced that ambiguity about power dynamics also can lead to suspicion about the neutral position of the facilitator or process designer. A lack of the understanding of power dynamics among collaborating actors leads to the idea that things are decided behind the scenes. Expectation-management is needed to create an overview of the scope of the decision-making procedure from the start. This could avoid misunderstandings and discussions about power issues in later phases. When the process has started it is important to clarify and explain the decisions made in the black boxes of other collaborative layers to create mutual understanding for why and where decisions are made. By improving this transparency, a lot of suspicion among collaborating actors is taken away.

Recommendations for process participants

Where the findings of this study can be used to improve the practice and design of collaborative processes by facilitators and process designers, they can also be clarifying for the participants of a collaborative process. During interviews, I experienced actors were often unaware of their opportunities to empower frames. Actors from all collaborative layers made statements without empowering them. Only puzzle pieces with wishes, interests, or ideas were placed on the table without any arguments why they should be considered. These puzzle pieces did eventually not reach the (midterm) result. Thereby, the power sources of monetary resources and formal authority were by many interviewees interpreted as most influential. Especially workshop participants considered themselves as powerless actors, because they did not see opportunities to empower their frames with these power sources. However, the results showed that frames from all three categories – frames with formal authority, frames with resources, and frames with discursive legitimacy – are able to reach the result of a collaborative process. Process participants should be aware of their opportunities to empower their frames in interactions and discussions. Especially those power sources that are scarce in a collaborative governance arrangement can be crucial to empower puzzle pieces with. Therefore, it is important for participants to be aware of the opportunities they have to contribute to results of a collaborative process. I hope this research contributed to that understanding and helps to solve future puzzles by means of collaboration.

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APPENDICES

A Interview Protocol

Date: …….

Name Interviewee: …….

Function Interviewee: …….

Layer(s) of collaboration: …….

Location: …….

1. Introduction

1. Dear ……, I am happy you found some time to contribute to my research. As you know, I am here to ask you about the collaborative process of Meandering Meuse for my Master Thesis Land Use Planning at the **Wageningen University**. In this research, I am studying the differences in power, interests, wishes, and priorities over the great variety of actors participating in the process of Meandering Meuse. My goal is to map the capacity of the different layers of collaboration to influence the process of Meandering Meuse to make the process better understandable and less complex for everyone.
2. The outcome of this interview will be used for **analytical purposes** in my master thesis only, but not without your **permission**. The results of this thesis will be **published** online at the Wageningen University Library and will also be communicated to the project teams of both cases. Also a **management version** of the results will be made which will be shared among other actors interested. In all of these results your name will not be shown, but you will be coded as [MM-L1/L2/L3-#]. By means of this your **anonymity** is secured to ensure you can talk in freedom.
3. It is no problem when you do not know the answer on a question. No right or wrong answer exists, as I am just curious about your thoughts and experiences concerning the process of Meandering Meuse. If you prefer to **skip** a question, we can go to the next. The interview will take between 45 and 60 minutes.
4. I would like to **record the audio** to be able to transcribe your answers later. These recordings will not be published, but are only used by myself. Thereby I might write down a few notes during our conversation but I'll make sure that this will not interfere our conversation. Is it okay if I audio record from here on with your **informed consent**? (If no, researcher will have to take notes instead.)

2. General Questions

1. What is your role in the collaborative processes of MM?
2. What is your reason to participate in the collaborative process of MM?
3. What organizations do you represent in the collaborative process of MM?

3. Main part

1. **The Concept of Framing**
   1.1. What is according to you the problem addressed in MM? (If necessary ask 1.1.1 & 1.1.2)
      1.1.1. How would you define the problem addressed in MM?
      1.1.2. What problem is solved in the collaborative process of MM?
   1.2. What are according to you the most important issues/topics addressed in the collaborative process of MM? (If necessary ask 1.2.1 & 1.2.2)
      Topics under discussion:
      Agriculture, housing, nature, recreation, sustainable energy, and cultural heritage.
      1.2.1. Which topics are for you the most important in the case of MM?
      1.2.2. What are according to you the topics that should be dealt with in the collaborative process of MM?
   1.3. What is according to you the solution for the case of MM?
2. The Concept of Power: **Discursive Legitimacy**
   2.1. What group do you represent in the collaborative process of MM?
   2.2. Why would the collaborative process of MM consider your values, interests, or opinion?
   2.3. When you experience your interest is not sufficiently considered in the process of MM, how would you change this?
   2.4. What documents do you refer to in the collaborative process of MM?
3. The Concept of Power: **Authority**
   3.1. What are the legal authorities or capabilities of your organization?
   3.2. Have you (or your organization) imposed any rules, laws, or requirements to the process of MM?
   3.3. What was your influence on the structure of the collaborative process of MM?
4. The Concept of Power: **Resources**
   4.1. What tangible resources (e.g. money, people, or technologies) did you or your organization insert into the process of MM?
   4.2. What intangible resources (e.g. expertise, knowledge, culture, capabilities) did you or your organization insert into the process of MM?

4. Closing

1. Okay, thank you for sharing your experiences so far. We are approaching the end of the interview. Do you have any more comments or remarks on what we have discussed? Is there something else which you would like to share which we did not discuss so far?
2. Thank you very much for your time and the nice talk. I will turn off the recorder now. If you have any remarks or questions left you can always approach me via [contact details]. Thank you very much and have nice day!

B Quote Translations

5 STARTING THE PUZZLE

Quote 5.1.1 (MM-04-01)

"The only main task is the dike reinforcement imposed by the government. Dike reinforcement, water management, water safety. That are the issues. You can discuss all kinds of topics: esthetics, nature development, recreative possibilities, and so on, but only one subject is important and that is water safety."

"Er is één hoofdopdracht gekomen uit het Rijk en dat is dat de dijkverbetering. Dijkversterking, waterbeheersing, waterveiligheid. Dat zijn de issues. Dan kun je er van alles bijhalen: esthetiek, natuurontwikkeling, recreatieve mogelijkheden, noem maar op, maar er is maar één ding belangrijk en dat is de waterveiligheid."

Quote 5.1.2 (MM-03-06)

"Last summer, because of low river discharges, the Meuse was one of the first rivers that was completely filled with blue algae."

"Afgelopen zomer was er nauwelijks tot geen rivier afvoer waardoor de Maas een van de eerste rivieren was die helemaal vol zat met blauwalg."

Quote 5.1.3 (MM-03-08)

"Let them use the higher floodplain soils for agriculture. I understand people do not want to see 50 hectares of maize. That is no longer possible. A variety of crops need to grow there, such as maize, grass, beets, potatoes or wheat. Diversity is what all people want to see in this area."

"Laat ze de hogere uiterwaardegronden benutten voor landbouw. Ik snap best dat de mensen niet 50 hectare maïs willen zien. Dat kan niet meer. Daar moeten gewoon verschillende soorten gewassen komen, zoals maïs, gras, bieten, aardappelen of tarwe. Dat is ook iets wat de mensen willen zien, want iedereen die je hoort wil diversiteit in het gebied zien."

Quote 5.1.4 (MM-03-03)

"The quality of life in the small villages is an important point of attention. What I see in Megen is when houses are build, or other developments take place, new possibilities arise. The school gets an impulse, because the number of pupils increases. It becomes more attractive for the youth to stay in the village. It is about the protection of the social structure of the village."

"De leefbaarheid van de kleine kernen is een aandachtspunt. Ik zie het gebeuren in Megen. Zodra er ook maar enigszins geïnvesteerd wordt in woningbouw of in andere ontwikkelingen in de kern dan zie je dat er ook andere dingen ontstaan. Dat de school weer een impuls krijgt, dat het leerlingaantal toeneemt. Het wordt aantrekkelijker voor jongeren om hier te blijven. Het is het behoud van de sociale structuur van je kern."

Quote 5.1.5 (MM-02-06)

"A huge area of floodplains is located outside the dike. This area has enormous potentials to create a natural river landscape. There is plenty of space for river processes. I even think that doing something different than nature development would devalue the area."

"Er ligt hier een enorm areaal buitendijks gebied en dat heeft een enorme potentie voor een natuurlijk rivierlandschap. Dan heb je de ruimte om rivierkundige processen de ruimte te geven. […] Ik denk zelfs dat als je hier iets anders gaat doen dat je het gebied tekort doet."

Quote 5.1.6 (MM-03-06)

"Bakenbomen are very characteristic for the Meuse. You can sail over every river, nowhere you will find trees on the shore like at the Meuse. They are characteristic for this area and should be preserved. It would also be a pity when characteristic buildings, located at nice places, disappear."

"Bakenbomen zijn voor de Maas heel karakteristiek. Vaar over elke rivier die je wil, maar nergens staan bomen langs de oever, alleen bij de Maas. In dat op zicht is het iets karakteristieks wat bestaan zou moeten blijven. Ook zou het zonde zijn als karakteristieke gebouwen met een mooie ligging weg moeten."

Quote 5.1.7 (MM-03-05)
"I would be very excited when they make a small marina near Megen, just like near Ravenstein, to make it possible for boats to visit the small city. That is not possible at the moment. It would be a great option when the old meanders are excavated."

"Ik zou het geweldig vinden als je straks bij het stadje Megen, net als bij Ravenstein, een haventje krijgt en een aanlegplaats dat bootjes het stadje kunnen bezoeken, wat nu niet kan. Dat zou een geweldige optie zijn als ze de oude maasmeanders uitgraven."

Quote 5.1.8 (MM-02-03)
"A lot of soil is needed for the dike. When too much soil is excavated from the floodplains it also can have negative effects. Therefore, the topic of soil movement is for me the most central issue in this project, which also brings different aspects together. It links river widening and dike reinforcement and also indirect the nature development. Thereby, it is important to balance the costs."

"Veel grond is nodig voor de dijk. Waar te veel grond wordt weggegraven, kan het ook negatieve consequenties hebben. Daardoor zie ik dat eigenlijk als meest centrale issue in dit project wat ook de dingen samenbrengt. Dat brengt rivierverruiming en dijkversterking samen en daarmee ook indirect de natuurontwikkeling. Het is ook belangrijk om een sluitend kostenplaatje te krijgen."

Quote 5.1.9 (MM-03-07)
"Everything has to be more sustainable. So, when implementing a new project you can better utilize it. Future-oriented, it would be logical to consider sustainable energy. It does not have to be extreme, but a couple of solar panels for example."

"Alles moet duurzamer, dus als je dan toch met een nieuw project bezig bent kun je het net zo goed meenemen. Toekomstgericht zou het meer dan logisch zijn om duurzame energie mee te nemen. Het hoeft niet extreem, maar er kunnen best een paar zonnepanelen in."

Quote 5.2.1 (Deltaprogramma Rivieren, 2014, p. 6)
"To create a robust river system a sophisticated combination of dike reinforcement and river widening is needed, to prevent increasing water levels and to realize risk reduction"

"Voor een robuust riviersysteem is een uitgekiend samenspel van dijkversterking en rivier verruimende maatregelen nodig, gericht op het voorkomen van waterstandsverhoging en het realiseren van risicoreductie."

Quote 5.2.2 (MM-01-01)
"The measure of river widening, for example by lowering floodplains or digging bypasses, offers opportunities to connect with other objectives or functions such as KRW-, nature-, or recreative objectives. That is also possible with the measure of dike reinforcement, because you can also add a foot- or bicycle path, but measures in the floodplains offer more opportunities."

"Voor rivierverruiming geldt dat je door bijvoorbeeld uiterwaarden te vergraven of hoogwatergeulen in te richten de mogelijkheid hebt om ook andere doelen of functies mee te koppelen, bijvoorbeeld KRW doelen, natuurdoelen of recreatiedoelen. En dat kan met een dijkversterking ook, want een dijkversterking kun je ook combineren met een wandel- of fietspad, maar met ingrepen in de uiterwaarden heb je meer mogelijkheden."

Quote 5.2.3 (MM-01-02)
"While the current projects progress, it becomes clearer that the soil movements are an important pillar. It is important to make smart combinations to ensure soil demand and soil supply are balanced. I think the MM Project will succeed in this."

"Hoe verder de huidige projecten komen, hoe duidelijker het wordt dat de grondstromen een belangrijke drager worden. Het is zaak om slimme combinaties te maken zodat de vrijgekomen grond en grondbehoefte bij elkaar aansluiten. Binnen het project Meanderende Maas denk ik dat dat een hele mooie samenloop gaat krijgen."

Quote 5.2.4 (MM-01-02)
"Dikes, river widening, nature, and recreation are good combinations. Agriculture is a hard topic, since friction exists there. Concerning the energy transition, it remains unclear if it becomes a new pillar, or driver, or if it will also cause friction."

"Dijken, rivierverruiming, natuur en recreatie doen het heel goed samen. Landbouw is een beetje lastig, dat wrijft. Maar voor de energietransitie moet nog ontdekt worden of dat een nieuwe drager of driver kan worden of dat dat ook een wrijvingspunt wordt."

Quote 5.2.5 (MM-02-06)
"This area will become the river nature park of the Netherlands. Nowhere in the Netherlands such a big area is located. It is three times bigger than the Gelderse Poort, two times bigger than the Oostvaardersplassen. This will become an enormous green lung. Areas like the Dutch coast, the Waddeneilanden, the Veluwe, Zuid-Limburg, or other areas with comparable green lungs flourish economically. They attract people and generate economic activities."

"Dit wordt het riviernatuurpark van Nederland. Nergens in Nederland ligt een areaal wat zo groot is. De Gelderse Poort kan er drie keer in. De Oostvaardersplassen kunnen er twee keer in. Dus dat wordt een enorm groen long. Ga maar kijken naar de Nederlandse kust, de Waddeneilanden, de Veluwe, Zuid Limburg, al die gebieden waar zulke grote groene longen liggen, die draaien economisch als een tierelier. Die trekken mensen aan en genereren economische activiteit."

Quote 5.2.6 (Stuurgroep Meanderende Maas, 2016, p. 4)
"The dikes in this area form the recreative link between cultural heritage (series of fortified cities and castles) and religious heritage (monasteries and churches)."

"De dijken fungeren in dit gebeid als recreatieve schakel tussen het cultuurhistorisch erfgoed (reeks van vestigingsstadjes en kastelen) en religieus erfgoed (kloosters en kerken)."

Quote 5.2.7 (MM-02-05)
"The bakenbomen are important for us. In the past they were used to mark the river for shipping on foggy days. When the sonar and radar were introduced the trees lost their function. However, when cycling over the dike the line of trees is still visible. Nowadays the trees are marking the river for the recreants and tourists cycling over the dike, rather than for shipping."

"De bakenbomen vinden wij belangrijk. Voorheen werden ze gebruikt om de rivier te markeren voor de scheepvaart op mistige dagen. Later is de sonar en radar gekomen dus zijn ze overbodig geworden, maar als je nu over de dijk fietst zie je de bomen nog steeds langs het lint van de rivier. Nu markeren de bomen de rivier voor de fietsende recreanten en toeristen die over de dijk fietsen in plaats van voor de scheepvaart."

Quote 5.2.8 (MM-02-04)
"The soil needed for the dike reinforcement at the Gelderland side [around 2030] should be transported from somewhere else, when the floodplains at the Gelderland side are excavated to reinforce the dikes at the Brabant side. Thereby, when lowering the floodplains at the Gelderland side the water dynamics can change, leading to seepage, infiltration, or piping."

"Wanneer je de Gelderse uiterwaarden afgraaft om de dijken aan de Brabantse kant te verhogen, dan houdt dat in dat de grond bij de dijkverbetering aan de Gelderse kant [rond 2030] ergens anders vandaan moet komen. Daarbij kan het zijn dat het afgraven van de uiterwaarden aan Gelderse kant leidt tot een nieuwe waterdynamiek, met kwel, wegzijging, of piping."

Quote 5.2.9 (MM-03-02)
"During the workshops is explained how a dike is constructed and what the possible measures are. I really enjoyed to hear that. I have a somewhat technical background, but I do not know about these techniques. Because of this approach my understanding for a dike reinforcement increased. I understand better why a dike reinforcement is needed and what area is protected by the dike. I never expected that this dike also protects 's-Hertogenbosch."

"Gedurende de werkplaatsen wordt uitgelegd hoe een dijk opgebouwd is en welke maatregelen ze kunnen nemen. Dat vond ik leuk om een keer te horen. Ik heb enigszins een technische achtergrond, maar niet die technieken. Door deze aanpak is mijn begrip voor een dijkverzwaring alleen maar toegenomen. Je weet nu waarom iets gebeurd en welk achterland er mee beschermd wordt. Ik had namelijk nooit verzonnen dat dat tot 's-Hertogenbosch zou gaan."

Quote 5.2.10 (MM-03-06)
"It is important that recreation creates added economical value to ensure restaurants and coffee houses have a good survival rate during the summer months and that during the winter months sufficient inhabitants are visiting the facilities to make them profitable."

"Het is belangrijk dat recreatie een toegevoegde economische waarde heeft en dat daarmee restaurantjes en koffiehuizen een goede overlevingskans hebben gedurende de zomermaanden en dat er gedurende de wintermaanden voldoende aanloop is vanuit de dorpen zelf waardoor ook in de wintermaanden mensen een boterham kunnen verdienen."

Quote 5.2.11 (MM-03-04)
"Leave the ferries in service, because they have charm and ensure a certain degree of peace in the area."

"Laat de veren alsjeblieft in dienst, want ze hebben charme en het geeft een bepaalde rust in het gebied zelf."

Quote 5.2.12 (MM-03-06)
"I would love to see nature that is attractive for all forms of life. Good for the birds and good for the welfare to ensure people also enjoy their walk outside. […] I enjoy it when I am looking through my window in the morning and I see all kinds of things moving and flying. Variation in nature is important."

"Ik zou graag natuur zien die voor alle vormen van leven aantrekkelijk is. Goed voor de vogelstand en goed voor het welzijn waardoor mensen ook weer met een fijn gevoel naar buiten lopen. […] Als ik 's ochtends naar buiten kijk en ik zie van alles lopen en vliegen dan heb ik het naar mijn zin. Er moet variatie in het aanbod zijn."

Quote 5.2.13 (MM-03-07)
"We would love to see that the old Meuse meanders are reactivated, because they are attracting a lot of nature. However, it needs to be accessible to ensure people can enjoy the nature. It does not have to be a jungle. Some riverside woodland is acceptable, but it should not dominate the floodplains."

"Wij zien graag dat oude Maasmeanders worden gereactiveerd, omdat daar veel natuur op afkomen. Het moet wel toegankelijk zijn zodat ook mensen ervan kunnen genieten. Het moet geen oerwoud worden. Ooibos is goed, maar het moet niet te overheersend worden."

Quote 5.2.14 (MM-03-05)
"I do not like it when everything is full of maize. I am not in favor of that. A possibility for this project is to implement grazing as they did it in the past. That is implemented at more places in the surroundings. Deep red cattle are grazing there in the summer months. That looks beautiful and that is typically Dutch. It would be nice to implement that in this project too."

"Van mij hoeft niet alles vol met mais te staan. Daar ben ik geen voorstander van. Je zou hier wel beweiding kunnen doen zoals het vroeger gebeurde. Dat gebeurt momenteel op meer plekken in het gebied. In de zomer lopen hier brandrode runderen. Ik vind dat een prachtig gezicht wat hoort bij Nederland. Dat zou in dit project ook geweldig kunnen passen."

6 EMPOWERING THE PUZZLE PIECES

Quote 6.1.1 (MM-01-02)
"We want that the individual projects are realized within the financial and water safety boundaries. That's also monitored by us. When it turns out that the Meandering Meuse Project is able to realize a water level decrease of 10 or 20 centimeters, we monitor the project to ensure they will achieve it."

"Wat wij vooral willen is dat de individuele projecten de realisatie vormgeven binnen de financiële en hoogwaterveiligheidsvoorwaarden. Dat monitoren we ook. Dus als er wordt gezegd dat de Meanderende Maas 10 of 20 centimeter waterstandsdaling kan halen, dan wordt dat ook bewaakt zodat dat gaat gebeuren."

Quote 6.1.2 (MM-01-02)
"Our goal is to link the sectoral objective of water safety with broader social objectives. Participating parties have the opportunity to bring in their goals, interests, and resources which possibly results in social support for interventions in a region. That is a very important administrative ambition; to link the sectoral interest of water safety with other objectives to create social improvements in an area."

"Wat we willen is hoogwaterveiligheid als sectorale opgave verbinden aan bredere maatschappelijke opgaven. Hierdoor kunnen partijen die meepraten hun doelen, belangen en middelen inbrengen waardoor een ingreep veel draagvlak kan krijgen in een regio. Dat is bestuurlijk een heel belangrijk ambitieniveau; om niet alleen voor het sectorale belang van waterveiligheid te gaan, maar dat ook te verbinden met andere opgave zodat we bouwen aan de maatschappelijke verbetering van een gebied."

Quote 6.2.1 (MM-02-01)
"You can pretend if everything is open for discussion, but that is not true. Policies and guideline exist and about some topics you cannot philosophize about wishes and desires. Sometimes that is clarified in a limited way. That creates a risk in terms of expectations."

"Je kunt wel doen of er niks vastligt, maar dat is niet zo. Er bestaat beleid, er zijn richtlijnen en er zijn zaken waar je niet over kan filosoferen hoe je het zou willen. Soms wordt dat maar beperkt verteld. En dan loop je qua verwachtingen grote risico's."

Quote 6.2.2 (MM-02-04)
"We are designated by the Netherlands to keep the dikes safe and that is our primary goal."

"Wij zijn door Nederland aangewezen om de dijken veilig te houden en dat is dus ons primaire doel."

Quote 6.2.3 (MM-02-06)
"We have communicated from the beginning that the project at Dieden-Demen continues. […] We have been very open about that from the beginning. That is a moving train for us and it keeps on driving. When they state that train has to stop than we quit the decision-making process."

"Vanaf begin af aan hebben wij gecommuniceerd dat het project bij Dieden-Demen doorgaat. […] Daar zijn wij heel open in geweest. Dat is voor ons een rijdende trein en die blijft rijden. Als ze zouden zeggen dat die trein stopgezet moet worden dan stappen wij uit het proces."

Quote 6.2.4 (MM-02-02)
"We have developed policies for the project area. We have for example an economic policy plan which states something about the accessibility of the port of Oss, but also a tourism and recreation plan in which the development of touristic functions at this side is stated. […] The policies will be adjusted, when arguments exist to do that. However, the existing policies form the starting point since the local council and inhabitants agreed on it."

"We hebben beleidsplannen voor het gebied ontwikkeld. Zo hebben we een economisch beleidsplan waar iets in staat over de bereikbaarheid van de haven van Oss, maar ook een toerisme en recreatieplan over het ontwikkelen van toeristisch recreatieve functies aan die kant. […] Als er argumenten zijn om het beleid anders uit te voeren dan ontstaat er een aanpassing, maar het beleid is wel het uitgangspunt waar de Raad en de gemeenschap achter staan."

Quote 6.2.5 (MM-02-06)
"The complete area needs to become nature. That is not new, because that was already stated in the nature reserve plan. That is not a job for the Water Authority, but the province has the competent authority for nature policy. […] However, nature policies are implemented on the basis of voluntariness. Pressure exists, because the ambitions have to be realized in 2027. In contrast to water safety, no instruments exist to enforce nature development."

"Het hele gebied moet een natuurfunctie krijgen. Dat is niet nieuw, want dat was al bepaald in het natuurgebiedsplan. Daar gaat het waterschap niet over, maar de provincie heeft het bevoegd gezag voor natuurbeleid. […] Natuurbeleid wordt echter uitgevoerd op basis van vrijwilligheid. Daar zit wel druk achter, want de ambitie is dat gebiedsplan in 2027 gerealiseerd is, maar je hebt geen instrumenten om dat af te dwingen in tegenstelling tot waterveiligheid."

Quote 6.2.6 (MM-02-02)
"We participate in this project, because an important part of the measures takes place at our territory. […] They are our inhabitants and therefore it is in our interest to participate."

"Wij doen mee aan het project omdat een belangrijk deel van de maatregelen op ons grondgebied gaat plaatsvinden. […] Het zijn onze inwoners en het is daarom in ons belang om deel te nemen."

Quote 6.2.7 (MM-02-04)
"We participate as a consultant, co-thinker, and as a representative of the Gelderland side."

"Wij doen mee als klankbord, meedenker en als vertegenwoordiger van de Gelderse kant."

Quote 6.2.8 (MM-02-05)
"The disappearance of the ferries is not negotiable for us. Thereby, the project must not make it difficult to reach the ferries. The ferries must absolutely be preserved."

"Het verdwijnen van de pontjes is onbespreekbaar voor ons. Het project moet het ook niet moeilijk maken om de pontjes te bereiken. De ponten moeten absoluut in stand blijven."

Quote 6.3.1 (MM-03-03)
"At the moment it is possible to formally react on the NRD [Notitie Reikwijdte en Detailniveau, onderdeel MER-rapportage]. You can formally react when we as inhabitants think the quality of life is an important topic and we have an idea how to examine that topic to ensure it becomes part of the decision-making or research procedure."

"Je kunt op dit moment inspreken op de NRD. Je kunt formeel inspreken als je bijvoorbeeld als bewoners het onderwerp leefbaarheid belangrijk vindt en je hebt een idee hoe dat onderzocht kan worden zodat het meegenomen kan worden in de besluitvorming en onderzoek systematiek."

Quote 6.3.2 (MM-03-01)
"I think it is impossible to avoid public participation nowadays. When taking decisions of which everybody is experiencing the consequences, without participation and involvement, a lot of mutiny may follow. Maybe even via the judge or Council of State. Municipalities and provinces stand stronger when they are able to show they listened carefully to the people, followed public consultation procedures, and created social support."

"Ik denk dat men tegenwoordig niet meer onder inspraak uitkomt. Als je grote beslissingen neemt waar iedereen de gevolgen van gaat ondervinden en er is dan geen inspraak, dan kan het best zijn dat er later een hoop muiterij komt. Misschien zelfs via de rechter of Raad van State. Provincies of gemeentes staan sterker wanneer ze kunnen aantonen dat ze hun uiterste best hebben gedaan om goed naar de mensen te luisteren, een inspraakprocedure te volgen en draagvlak te creëren."

Quote 6.3.3 (MM-03-06)
"If people are invited to participate, you take a lot of suspicion away. This excludes the idea that everything has already been decided about. If people get the feeling they have no opportunities for public participation, they start to resist, object, and litigate."

"Als je mensen laat meepraten neem je een heleboel achterdocht weg bij mensen. Dan hebben ze niet het idee dat dit allemaal al in kannen en kruiken is gegoten. Als mensen het gevoel hebben dat ze geen mogelijkheden hebben tot inspraak dan worden de hakken in het zand gezet en dan gaat men bezwaar aantekenen en procederen."

Quote 6.3.4 (MM-03-05)
"We are born and raised here. We know the Meuse since our childhood. We have swum in it, learned to water-ski, learned to sail, and so on."

"Wij zijn hier geboren en getogen. We kennen de Maas van jongs af aan. We hebben er in gezwommen, leren waterskiën, leren zeilen, ga zo maar door."

Quote 6.3.5 (MM-03-07)
"The workshops exist to consider the perspective of inhabitants, because people can create ideas behind their desks, but that does not always match with practice. This creates insight into the consequences of the project for people who work and live there and in the end have to deal with the end-result."

"De werkplaatsen zijn er om ook het perspectief van de burgers mee te nemen, want mensen kunnen wel vanachter hun laptop gaan bedenken hoe ze het gaan doen, maar zo werkt het in de praktijk niet altijd. Zo ontstaat er inzicht in de gevolgen van het project voor de mensen die er echt wonen en leven en het uiteindelijk met het eindresultaat moeten doen."

Quote 6.3.6 (MM-03-03)
"I think decision-makers can only do a good job and have satisfied citizens if they really listen to what people have to say, what's going on and what issues exist."

"Volgens mij kunnen bestuurders alleen goed werk leveren en tevreden burgers hebben als ze écht luisteren naar wat de mensen te vertellen hebben, wat er speelt en waar ze mee te maken hebben."

Quote 6.3.7 (MM-03-04)
"I do not think much of democratically elected representatives of a government or water authority, because in the end they do whatever they want. So for me it is really relevant that the workshops exist."

"Ik heb niet zo'n hoge pet op van democratisch gekozen vertegenwoordigers van een regering of waterschap, want meestal doen ze toch wel waar ze zelf zin in hebben. Dus ik vind het heel relevant dat daarnaast nog werkplaatsen zijn."

Quote 6.3.8 (MM-03-01)
"The approach is to realize the project in consultation with residents in order to create the largest possible social support. If inhabitants are no longer involved in the next phases, you will get resistance."

"De insteek is om het project in overleg met bewoners te realiseren om een zo groot mogelijk draagvlak te creëren. Als je in volgende fases bewoners er niet meer bij betrokken worden dan ga je krijgen dat mensen in verzet komen."

Quote 6.3.9 (MM-03-05)
"Publicity can be of great influence. When a population group manages to mobilize and publishes in the newspapers in particular, the course can be adjusted."

"Publiciteit kan van grote invloed zijn. Wanneer een bevolkingsgroep zich weet te mobiliseren en met name de krant zoekt dan kan de zaak ineens kantelen."

Quote 6.3.10 (MM-03-08)
"The ZLTO made a lot of propaganda in the last month, because it is ridiculous that good soils for food production go away. The ZLTO is really committed to that."

"De ZLTO maakt de laatste maand behoorlijk wat propaganda, omdat het te gek voor woorden is dat goede grond voor voedsel weg gaat. Daar maken ze zichzelf hard voor."

Quote 6.3.11 (MM-03-05)
"When the general public of the villages and cities will turn against the project, the chance increases that different considerations will be made."

"Wanneer het grote publiek van de dorpen en steden in de buurt zich tegen het project gaat keren, dan heb je de kans dat er een andere afweging gemaakt wordt."

Quote 6.3.12 (MM-03-07)
"I do not see any input of youth. Recently, I told the girl next door about the project and she did not even know it existed. That is actually a shame, because the youth is very important."

"De input van jeugd zie ik niet terugkomen. Ik heb pas mijn buurmeisje over het project vertelt en ze wist niet eens dat het bestond. Dat is eigenlijk jammer, want de jeugd is heel belangrijk."

Quote 6.3.13 (MM-03-07)
"It would be nice if more forms of sustainable energy were considered in the plans. Not too dominant, but in the end it is the younger generation who has to solve it, so it would not have been wrong."

"Het was goed geweest als er wat meer duurzame energie in het plan had gezeten. Niet te overheersend, maar het is uiteindelijk toch de jonge generatie die alles op moet lossen, dus het was niet verkeerd geweest."

Quote 6.3.14 (Projectteam Meanderende Maas, 2018, p. 2)
"Striking was the motivation to participate [among workshop participants]. Some even arranged a babysitter or a free afternoon. That results in respect and motivates the project team to create meaningful meetings."

"Opvallend was de motivatie van iedereen om deel te nemen. Sommige hadden zelfs oppas of een vrije middag geregeld. Dat dwingt respect af en motiveert het projectteam extra om er zinvolle bijeenkomsten van te maken."

7 CONNECTING THE PUZZLE PIECES

Quote 7.1.1 (MM-04-04)
"Alternative Z is way more open, more grass and focusses on the characteristics of a cultural landscape with an old parcel structure. While in alternative X a self-managing nature system is created. That will be densely overgrown and create a new landscape. […] People are always longing for grandfather's landscape. People go on holiday to the landscapes they recognize from their youth."

"Alternatief Z is veel opener; meer gras en gericht op kenmerken van het cultuurlandschap met een oude verkavelingsstructuur. Terwijl in alternatief X een zelfsturend natuursysteem wordt gecreëerd. Dus dat wordt veel dichter, een nieuw landschap. […]

Mensen hebben altijd het verlangen naar grootvaderslandschap. Mensen gaan op vakantie naar de landshapjes die ze nog uit hun jeugd kennen.“

Quote 7.1.2 (MM-04-04)
“It is a general principle [referring to the smart soil movements]. We try to estimate how it could be solved. How can we limit the nuisance and how can the costs be reduced? For BV Nederland it is also nice if we do not spend 4 euros per cubic meter but limit it to 3.5 euros. I think it's worth thinking about when we need 2 to 3 million cubic meters."

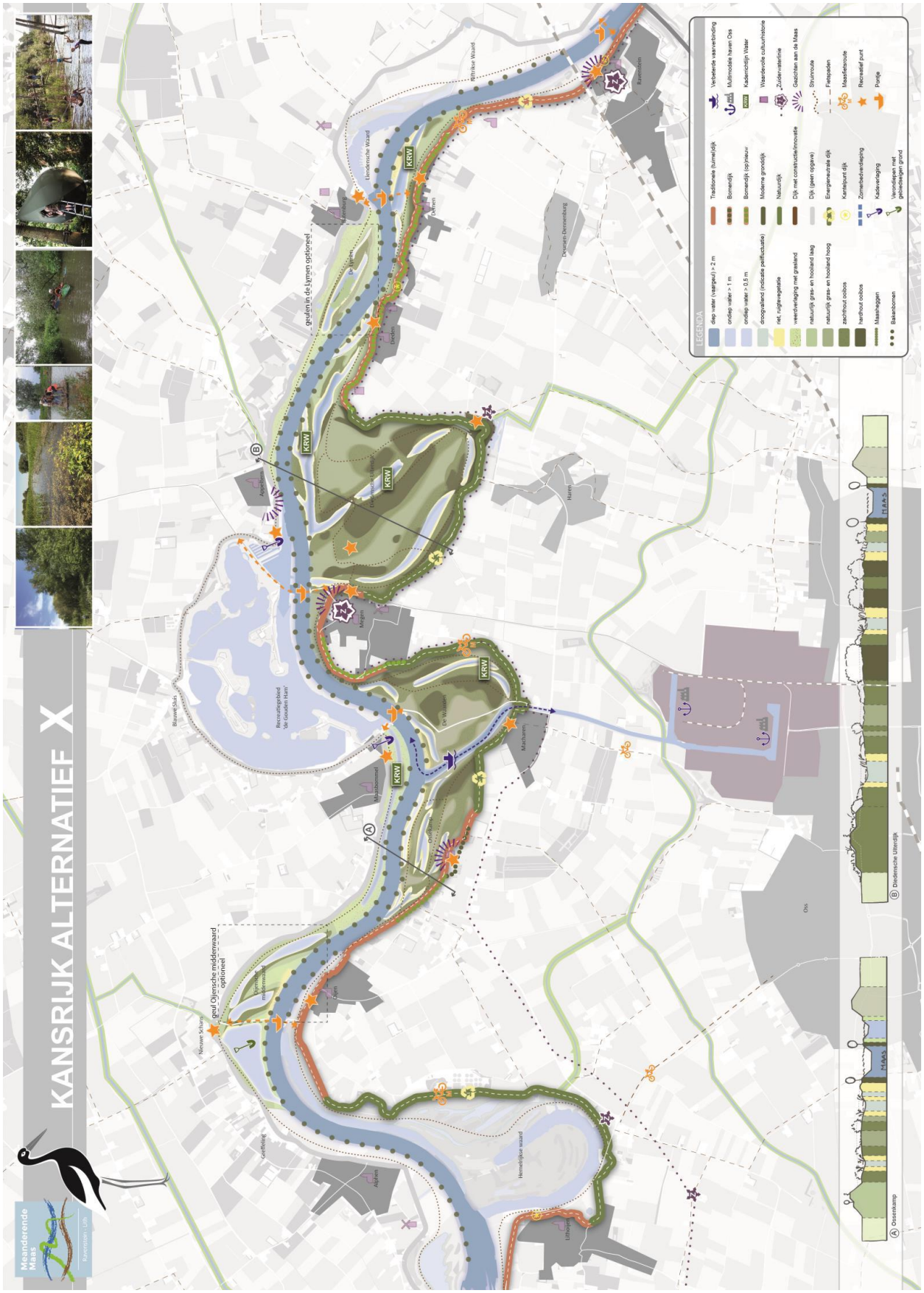
“Het is een wetmatigheid [verwijzend naar het slim gebruiken van grond]. Wij proberen in te schatten hoe dat opgelost zou kunnen worden. Hoe we de overlast kunnen beperken, hoe de kosten gedrukt kunnen worden. Voor BV Nederland is het ook prettig als wij niet 4 euro de kuub uitgeven, maar het tot 3,5 euro beperken. Ik vind het de moeite waard om over na te denken als we 2 tot 3 miljoen kuub nodig hebben.”

Quote 7.1.3 (MM-04-04)
“A lot of information is gathered during the workshops, for example about beaches. That will come back in a later stage. It collected well and it will be back later, but that does not make the difference between alternative X or Z. In the end, that beach will be made somewhere.”

“Veel informatie is opgehaald gedurende de werkplaatsen, bijvoorbeeld over de strandjes. Dat komt allemaal nog wel. Dat is goed bewaard gebleven en dat komt later terug, maar dat maakt niet het verschil tussen de twee alternatieven. Dat strandje maken we echt wel ergens uiteindelijk.”

C (Midterm) Results MM Project

Alternative X



Alternative Z