

Collective Memory in Action: Understanding Dutch River Policy

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Introduction

This paper focuses on an analysis of the role of collective memory in the policy process. To address this issue we perform a case study of flood control and other policies geared toward the Maas River, one of the main rivers in the Netherlands. To uncover the role of collective memory in dealing with this river we first describe the policy processes involved. Next we can show where and in which ways collective memory has played a role in this particular policy domain.

To conceptualize the policy process we make use of the discourse approach developed by Maarten Hajer (1995). This Dutch political scientist has studied government as a discursive order. His interpretive approach builds on discourse analysis and considers the government as an ensemble of institutions which reproduce themselves and adapt their policies to the continuously changing realities through language. Discourses are composed of “more or less coherent ideas, concepts, and categorizations that we encounter in specific discussions” (Hajer, 2000). Discourses also give shape to the content of discussions, albeit often implicitly so. Discursive acts take place in an array of real situations or practices. These practices are both an expression and a reproduction of the discourse involved. In this approach the policy process is defined as a power struggle by means of language. Specific discursive practices are dominant and exclude other discourses. Dominant discourses are capable of realizing visions in concrete practices. In the field of Dutch river policy it is possible to identify two major discourses that we label as ‘embankment discourse’ and ‘river space discourse’.

Language of course plays a prominent part in policy processes. Language influences how we interpret reality, and this interpretation subsequently influences our actions. Although over time the ways in which people think, talk, and write about rivers are subject to change, there is also a striking continuity. Policy discourses on rivers have always been tied to specific practices. They facilitate particular actions while excluding others. The two major discourses in Dutch river policy are partly at odds with each other and imply incompatible practices.

The sociology of collective memory has mainly been concerned with the issue of how social groups (religious groups, social movements, etc.) “render account of their past” (Huizinga, 1929). The work of the founder of this research domain, Maurice Halbwachs, is still very useful. In *The Social Frameworks of Memory*, written in the early part of the twentieth century, he provided the basic framework for conceptualizing the social construction of collective memory.

According to Halbwachs (1992), human memory cannot exist without social context. Memories are shaped in interactions between individuals. He has analyzed

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how different social groups variously reconstruct the past from the present. Social frameworks are tools with which individuals in interaction with others reconstruct the past. Collective memory, therefore, rather than being a fixed entity, is the outcome of quite specific processes in which people remember the past.

Based on these insights, a research agenda for the study of collective memory has evolved in the 1980s and 1990s. Many case studies were published that focus on processes of collective commemoration. Most of these studies zoom in on organized commemorative practices (Connerton, 1989; Schwartz, 1991)

Although we will address one particular commemorative practice in this paper, we are not so much concerned with how the past is reconstructed in the present. Instead, we want to analyze how the (reconstructed) past influences the interpretation of a current situation. Our case study concentrates on the role of Dutch collective memory of earlier floods in relation to floods of the Maas River in the 1990s. This memory played a major role in how the recent floods were conceptualized.

Having indicated our interest in the role of collective memory in interpretive processes, we return to our preference for a discursive conceptualization of policy processes. By taking these processes of collective meaning attribution as unit of analysis, discourse analysis provides an effective instrument for rendering visible the role of collective memory.

Over the past decades other studies have examined the role of the past in policy processes. For example, in *Thinking in Time* (1986) Neustadt and May discussed the (un)successful use of historical knowledge in American foreign policy. They treat many cases in which US presidents and their advisors decided on a particular strategy and how historical precedents thereby played a role. The role of the past in policy design is also explored in *Lesson-drawing in Public Policy* (1993) by Richard Rose. This study analyzes the problem of policy transfer: how can we learn from similar situations in the past or in other countries?

The value of the efforts by Neustadt and May and Rose for our project lies especially in the fact that these authors were the first to study the use of historical knowledge in action. Their work underscores that policy actors invoke different kinds or levels of historical awareness. Another relevant insight is that actors tend to mobilize the past rather unsystematically (and with varying success). Both studies start from an explicit normative objective: the aim to improve policies by systematic attention for the historical dimension of policy problems.

In this paper we focus on the case of Dutch river policy as a way to gain more insight into the role of collective memory. A relevant study in this respect is one by the Dutch public administration scholar Hoogerwerf (1989). A short survey he did among top officials who work for the Dutch government revealed that policy actors may deploy the past quite differently. Hoogerwerf found that three Dutch ministries bring in historical expertise most often: Defense; Foreign Affairs; and Transport, Public Works, and Water Management. Another major conclusion was that the use of historical knowledge by top officials is generally rather indirect²: they gained access to the historical knowledge they rely on in their policy practice in popularized form via the media (Hoogerwerf, 1989). This suggests that if we are to understand how policies are formulated, it is important not only to consider references to the past by actors in the policy process, but also to look at historical reporting in the media – an issue we will elaborate in this paper. Another reason for our focus on river policy is

² In this respect the use of historical knowledge in policies does not differ from the use of social science knowledge, which according to Weiss & Bucuvalas (1980) is mainly used indirectly as well.

that dealing with floods is one of the prevailing motifs in Dutch (policy) history. In a brief intermezzo we will provide a short outline of the historical significance of the Dutch struggle against floodwater.

1952-1993: From Dikes to Nature

To understand Dutch river policy that is geared toward containing the Maas River, it is necessary first to give a concise account of the country's prior policy history with respect to its main rivers (Rhine, Maas, Waal, and IJssel) in the period after the major North Sea flood of 1953. Although for the most part the Maas River has no dikes, the debate on dikes along the Rhine and Waal in the second half of the twentieth century provided a policy basis for the Maas in the wake of its flooding in 1993 and 1995. After the 1953 flood, which inundated the coastal province of Zeeland and killed close to 2000 people, the safety of the Dutch river dikes was put on the agenda as well. In 1956, the powerful national Directorate for Public Works and Water Management (or: Rijkswaterstaat), argued in favor of assuming a risk of flooding of once in 3000 years. Initially the local boards in charge of water management hardly did any work on the dikes, with the exception of minor maintenance activities. When in the 1960s they decided to carry out the necessary dike enhancements according to the new standard after all, this gave rise to increasingly fierce protests from citizens. Angry citizens protested the demolition of old dike homes and historical villages to facilitate the dike enhancements. These protests climaxed in 1974 when in Brakel on the Waal many homes were sacrificed for a new dike. People were greatly concerned about potential further measures (Velden, 1995).

In response to this social unrest on the dike enhancement plans, the Dutch minister of Transport, Public Works and Water Management set up the River Dikes Commission. The task of this so-called Becht Commission was to study whether it was really necessary to strengthen the dikes to such degree that river flooding would only occur once in 3000 years. Another issue the Commission studied was whether there was a better way of handling citizen's participation. In 1977 the Becht Commission advised to lower the flooding standard to once in 1250 years. It also recommended carrying out the necessary dike enhancements based on "sophisticated" designs that would impact the landscape as little as possible. In 1978 the Dutch government decided to follow up on all of the commission's recommendations. This gradually caused the social opposition to die away (Heezik, 2007).

In the 1980s, however, a new discussion round on river dike construction seemed to linger. In 1984 the Directorate for Public Works and Water Management launched plans for a new round of dike enhancements, arguing that higher dikes were needed because of the higher water level caused by silting in the Waal and Merwede, while dredging these rivers was deemed infeasible. The protests led to a new gridlock. Even a trial dike enhancement project in 1987 near Sliedrecht, whereby residents were involved in discussing the various alternatives, failed.

During the discussions on river dikes, Dutch engineers were working on the completion of the Delta Plan, aimed at protecting the Dutch coast and hinterland against a repeat of a flood of the size of 1953. In the 1970s, based on major political pressure from fishermen, the environmental movement, and other organizations it was decided to build a semi-closed storm surge barrier in the Oosterschelde. The Directorate for Public Works and Water Management, which favored a fully closed barrier, thus gave in to the social pressure. In retrospect this technological

compromise can be seen as a symbol of the Directorate's changing attitude. In the 1970s it began to hire, aside from civil engineers, more and more biologists and ecologists as well (Bijker, 2002; Disco, 2002).

The growing influence of ecologists and biologists is well reflected in the changing perspectives in reports that pertain to this period's river policy. If the First Memo on Water Management (*Eerste Nota Waterhuishouding*, 1968) still stressed water *quantity* and the construction of large waterworks, the Second Memo (*Tweede Nota Waterhuishouding*, 1985) added an ecological perspective and put more emphasis on water *quality*. Furthermore, the 1987 Ooievaar Plan (1987) concentrated on nature development. This report argued for purchasing agricultural lands near the big rivers, to be turned into wetlands. The river's natural basin should be restored by, among other things, removing summer dikes and digging extra fairways. The report centered on integrating the various functions of river water, while also introducing for the first time a spatial perspective on river-related problems. The plan was swiftly adopted and already in 1989 it led to concrete projects along the IJssel River. The Third Memo on Water Management (*Derde Nota Waterhuishouding*, 1989) is generally regarded as marking the starting point of integrated water management. Rivers were now conceived as systems that fulfill several functions (nature, water discharge, transport, and recreation). Integrated water management takes into account the mutual interplay of these various functions (Bosch, Ham, Berkers, & Lintsen, 1998). The World Wildlife Fund, in its report *Living Rivers* (1993), argued for a further elaboration of the Ooievaar Plan ideas. In this period the Dutch government began to collaborate with the environmental movement in trial projects aimed at creating new nature in river forelands (such as near Gelderse Poort).

Initially, however, this ecological turn had no influence on the Maas River policy. In 1990 the first activities in the context of the Grensmaas project were carried out, notably a study of the possibilities of gravel extraction in one section of the Maas. Yet very soon, in 1991 and 1992, environmental concerns began playing a role in this project, causing it to be redefined as a project in which gravel exploitation was combined with ecological recovery (Teisman, 1995).

By and large, the issue of river dikes was still inadequately addressed in this period. In 1991 Dutch Parliament adopted a bill that demanded giving high priority to river dike enhancement. To break the stalemate around dike enhancement the minister of Transport, Public Works and Water Management decided in 1992 again to set up a commission: the Evaluation Standards River Dike Enhancements Commission (or Boertien I Commission). In early 1993 this commission issued its recommendations. The decision procedures, it argued, should be carried out more carefully, including the introduction of environmental impact assessment, a procedure aimed at assessing the environmental effects of potential plans. The Commission's overall impression was that the drastic changes in the landscape resulting from earlier dike enhancement efforts had caused inordinate damage. The Becht Commission's guidelines for sophisticated dike designs had been adhered to insufficiently. The government largely adopted the recommendations by the Boertien I Commission (Heezik, 2007; Velden, 1995). In late 1993, when an environmental impact assessment of the Grensmaas project was underway, the Maas severely flooded for the first time in decades.

Intermezzo: The Dutch and Water

To gain a better understanding of how the Dutch have dealt with flood disasters, it is instructive to explain briefly how this fight against water figures prominently in the formation of a collective Dutch self-image. This struggle is largely tied to the delta geography of the Netherlands and its history, in which water has always played a major role. Of course the country has long profited from maritime trade because of its favorable location. Apart from benefits, however, the risk of flooding has always been a great worry. The very shape of this low-lying country is largely the outcome of the changeable effects of sea and rivers, and it has caused the Dutch to adapt their life to the water, as reflected in major land reclamation and dike building projects (Aten et al., 2007; Schama, 1988). Generally the Dutch are proud of their national achievements in this respect. They like using this phrase from Voltaire: "God created the world and the Dutch created the Netherlands." It explains why many Dutch feel their particular relationship with water to be part of their national identity.

The dominant broader cultural theme thereby produced and reproduced is the storyline of the eternal struggle of the Dutch against flooding. This collectively produced image is also reproduced elsewhere. Consider, for example, this account in *The Times* on the Maas River flooding in 1995:

"The catastrophic floods in the southern provinces of The Netherlands are the worst since the great North Sea floods of 1953, and have brought untold damage. ... The Dutch have water in their veins. Much of their stoicism in the face of such disaster and the exemplary co-operation between villagers and officials in shoring up the dykes is due to the country's battle for dry land over more than a thousand years. ... something of Dutch humility must be traced to this age-old struggle against the elements." (1995b)

This collective self-image is produced and reproduced in many ways: in commemorations of floods, the media, tourist flyers, educational materials, films, museums, computer games, and so on. This is done actively as part of the effort to raise our water expertise reputation (as is done by crown-prince Willem Alexander, who is a hydraulic engineer himself, or by dredging companies and engineering agencies), as well as unconsciously, as in the interpretation of high water.

However, the opposite dynamic occurs as well: foreigners who produce images of the Dutch fight against flooding that are subsequently reproduced by the Dutch. A good example is the Hans Brinker myth. This myth was invented by a nineteenth-century American author of children's books who had Hans Brinker put his finger in the dike to prevent it from breaking. Through this act, so the story goes, this boy saved the residents of Haarlem from drowning. The Dutch reproduce and exploit this myth, such as in souvenirs and a statue of the fictional character. Interestingly, the Brinker story is at odds with the dominant image the Dutch promote. In this story we see emphasis on the individual: a single hero saves the lives of many, while the Dutch tend to insist on the crucial role of the community, the collective effort, in saving or protecting the country.

1993-1995: Disaster and Response

The flooding of the Maas on 22 December 1993 caused substantial damage. Some 21,000 hectares were inundated, while the economic damage would amount to some 265 million guilders (120 million euros). In response to the flood, the minister of Transport, Public Works and Water Management established the Maas Flooding Commission. The task of this Commission, again chaired by C. Boertien (hence the name Boertien II), was to inform the government about the newly emerged situation. How should one combine safety with nature development? The Grensmaas project, which was primarily geared to nature development and gravel exploitation, also became linked up with the issue of safety and protection (Bleichrodt, 1994).

On 12 December 1994 the Boertien II Commission issued its advisory report that consisted of five main points, three of which pertain to restricting water flooding, while two of them address the issue of public awareness. These points are:

- River widening, gravel exploitation and nature development in the Grensmaas.
- Deepening the river bed and sand exploitation in the Maas between Roermond and Mook.
- The construction of embankments over a length of 60 kilometers.
- Prohibiting new (building) activities in the Maas basin.
- Promoting awareness through public information and increased preparedness for new floods, because implementation of the first three measures mentioned would not remove the risk of flooding entirely. (C. Boertien, 1994)

Coincidentally, within a month after the Boertien II report's publication, new serious Maas River flooding occurred. Although the flood on 31 January 1995 caused less damage along its banks than that of 1993, this time it was decided to have a large-scale evacuation (over 200,000 residents) downstream, in low-lying areas behind the dikes along the Waal River. National and international media extensively covered efforts to prevent dikes from breaking near the village of Ochten. Special news broadcasts showed images of inundated streets, sandbags and evacuations, thus highlighting the struggle against flood water as a major theme.



Photo 1: Dutch entry for World Press Photo 1995: passing on sandbags on a makeshift dike in Arcen in order to defend the Maas from flooding. It exemplifies the dominant image spread by the Dutch after a flooding: they battle the water collectively.

To express their compassion with the flood victims, the Dutch Queen and MPs visited the flood sites. On 31 January Prime-Minister Wim Kok announced that there should be a new Delta Plan covering the country's large rivers to tackle the problem of high water. The government wanted to show its resolve by explicitly referring to the national reply to the flood disaster of 1953, the Delta Plan. That same day the Dutch Cabinet decided in consultation with the National Disaster Fund to qualify the flood officially as a 'national disaster.'³ People were encouraged to make a donation to 9575, the account number of the national disaster fund, to help the victims, while the various Dutch broadcasters (both public and commercial) collaborated in broadcasting a special night-long program to raise money for the flood victims. In the first days after the disaster, some of those known to have opposed dike enhancement in the past even received anonymous threats. They were accused of having put the life of others on the line out of self-interest.

This pattern of responses to the 1993 and 1995 floods – visits by ministers and the queen, evacuations, images of flooding in the media, raising money, and setting up a commission – underlines the highly ritual character of the events and barely differs from the response to earlier disasters. The earliest, still available sources on royal visits in such a situation go back as far as 1809, when King Louis Napoleon visited the inundated region between the Maas and Waal rivers. Other floods that warranted royal or ministerial visits included the floods of 1926 (1926) 1953, and 1984 (1984a). In these years fund-raising drives for victims already took place as well.⁴

³ That another decision is also possible is shown by the reaction to the 1926 flood disaster by then Prime-Minister H. Colijn. He claimed that this tragedy was not in the same category as the 'national disaster' of the previous year, a hurricane in Borculo, because it was impossible to prevent a hurricane through human intervention. By contrast, dike breaks were a result of insufficient human intervention; good dike maintenance, after all, would prevent floods (G.P.van de Ven et al., 1995).

⁴ For a more extensive historical overview of these rituals, see G.P.van de Ven, A.M.A.J.Driessen, et al. (1995)

The fundamental question posed after the floods of the 1990s is: what exactly had happened? How should one interpret these floods? Were they indeed national disasters or just a matter of local water problems? And how did these river floods compare to the major North Sea flood of 1953?

In the process of understanding and interpreting the Maas floods, collective memory played a prominent role. We tend to interpret current situations based on historical precedents. Our argument below therefore addresses in particular how those involved drew analogies with historical situations. In Table 1, for instance, policy analysts from the Directorate of Public Works and Water Management compare the technical details of the various floods to arrive at an interpretation of recent floods.

tabel 3.2
Topwaterstanden
bij de extreme
hoogwaters van
926, 1993 en 1995

| locatie | topstanden (in m + NAP) | | |
|-------------------|---|--|--|
| | januari 1926 afvoer ca. 3000 m ³ /s te Borgharen | december 1993 afvoer 3120 m ³ /s te Borgharen | januari/februari 1995 afvoer 2870 m ³ /s te Borgharen |
| Borgharen-dorp | 46.10 | 45.90 | 45.71 |
| Heel-boven | 23.60 | 22.81 | 22.69 |
| Roermond-Buggenum | 21.55 | 20.52 | 20.59 |
| Venlo-haven | 18.80 | 18.35 | 18.46 |
| Sambeek-boven | 14.53 | 13.92 | 14.02 |
| Grave-beneden | 10.95 | 10.39 | 10.58 |
| Lith-dorp | 7.75 | 6.32 | 6.54 |
| Hedel | 5.74 | 4.60 | 4.81 |

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Table 1. Historical comparison between data of three floods (Goudriaan, 1995:12)

The debate on the proper interpretation of the floods did not only play out in policy circles, but also in the national media. If we start from Halbwachs's thesis that collective memory is shaped in the interactions between individuals, public platforms where people exchange views are preeminent sites for studying the (re)formation of collective memory. Newspaper articles constitute one such 'memory site' (Nora, 1989). A good illustration of how the past figures in the interpretation of the present is the quotation below, in which it is argued that one should not compare the 1993 flood with that of 1953:

"The Flood Disaster of February 1953 in the South-West Netherlands had 1835 casualties. One may well reiterate that astounding figure now that preliminary conclusions can be drawn about the floods along our main rivers. The high waters of the Maas, Rhine, Waal and IJssel have claimed zero fatalities and zero wounded. This is why any comparison of the two disasters falls short, even if the media may sometimes have given the impression that inundated Limburg evolved into a second Zeeland." (Brendel, 1993)

We can study these historical references for their structural aspects, which may reveal patterns in collective memory.⁵ The table in the appendix represents word frequency

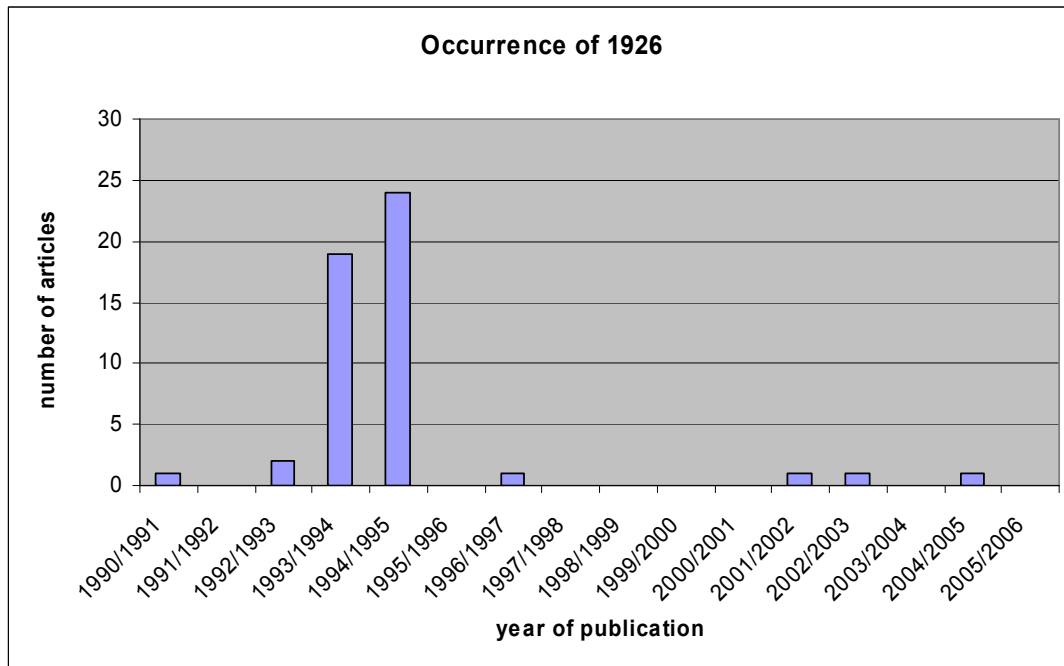
⁵ We realize that this is just one of many ways in which the concept of 'collective memory' can be applied.

of referenced years in articles in Dutch national newspapers in which the words 'Maas' and 'flood(s)' occur.⁶ The table indicates to which years references are made at specific points in time. We have opted to work with years that run from 1 July of one year to 1 July of the next year, because most floods occur during the winter season and in this way every 'year' comprises a high water season in which floods may have occurred. The years are based on a sampling from the sample of the year 1993/1994, because it would be too time-consuming to enter all years. The selected years are years in which the Maas has flooded (with the exception of 1953).

To indicate the relative frequency a word is used in the selected articles of one year in relation to the total number of selected articles in that year, in the second column the percentage is added. This offers us more insight into the interrelationships between historical references. We first consider the total number of newspaper articles. In 1993/1994 and 1994/1995 substantially more articles appeared containing the words 'Maas' and 'flood(s)' than in the years before or afterward. This is hardly surprising, because in those years the Maas River flooded. That in the year 1994/1995 there were over twice as many can be explained by the fact that this set also includes the six months before the January 1995 floods; the articles of this period still discuss the floods of the past winter. Another possible explanation for the high number of articles in 1994/1995 is that in this year a high water situation occurred simultaneously in the Rhine and the Waal. The large-scale evacuations led to much media attention for the problem of flooding (Meurs, 2003). Another possible partial explanation is that in 1994/1995 the notion arose that one had to do with a structural problem, given that in the previous year there had been major flooding as well. Another peak is the year 2002/2003; the comparatively higher number of articles than usual can probably be attributed to that year's sizable high water problems along the Maas. In the other years the number of publications varies from about 30 to 70 each year. After the floods of 1993/1994 and 1994/1995, then, the Maas floods have continuously received attention in the national newspapers.

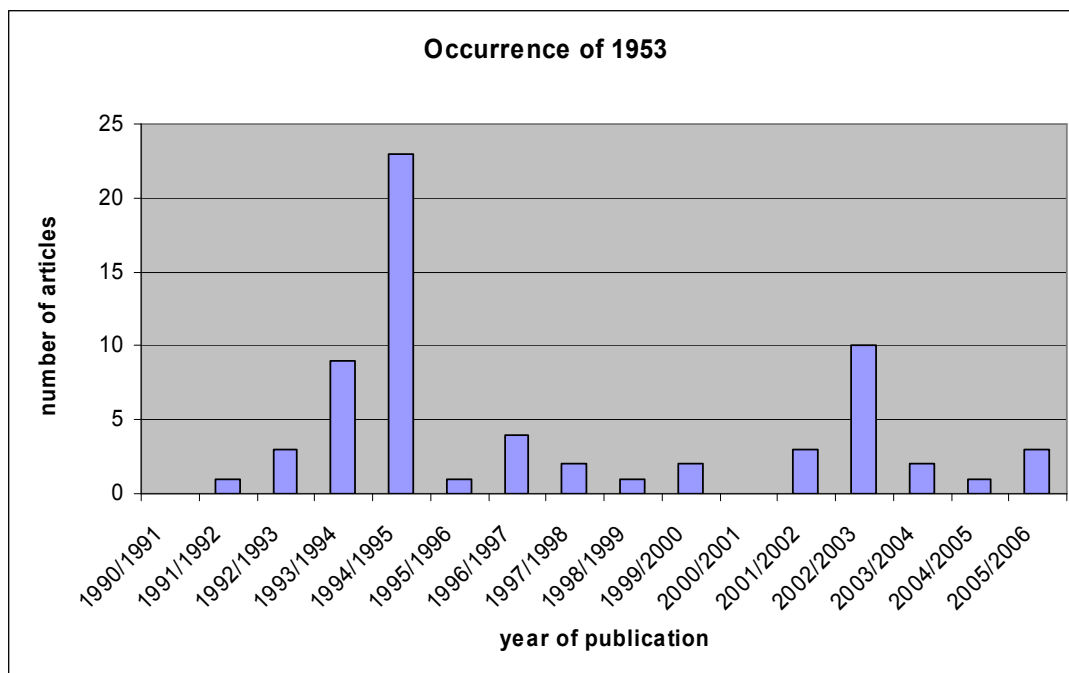
⁶ We searched for years in which floods occurred (e.g. "1953" or "1984") in our specific set of articles on Maas floods in the Lexis-Nexus newspaper database. One assumption is that articles in which the words 'Maas' and 'flood(s)' occur actually refer to flood(s) of the Maas. A qualitative sample indicated that this is in fact true in most cases, even though there are sporadic exceptions.

Another relevant aspect is that the selected years were years in which a flood occurred. Yet this does not guarantee that a reference to a year in one of the selected articles automatically refers to that year's flood; it may also refer, for instance, to a year in which a report on river policy was presented. Another drawback of our selection method is that non-numerical time indications, such as 'in the previous century' or 'in the eighties', are not included. We also tried to work with search terms such as '19**' and '18**', but that led to two problems: these sets contain many non-year references and they contain the year of the sample itself (as in the copyright indication), while such a selection also implies that distinguishing individual years involves an additional step.



If we consider the development of the number of references to the 1926 flood (see graph) over time, we can notice a trend: during the floods of 1993/1994 and 1994/1995 the 1926 flood is frequently referred to, 19 and 24 times, respectively. Apparently, the presence of a ‘trigger event’ is a precondition for memories of this flood. The 1926 flood is seen by many as the last major flood prior to 1993/1994 and 1994/1995.⁷ After the floods of 1993/1994 and 1994/1995, however, the events of 1926 are invoked only 4 times (and spread across the years). This may be an indication that in the national newspapers a narrowing of collective memory took place after the floods of 1993/1994 and 1994/1995. The recent floods, in other words, had erased the memory of the 1926 flood.

⁷ That references to 1926 were not a temporary phenomenon is reflected by a newspaper heading during the coverage of the 1984 Maas flood: “Worst flood since 1926 (“Ergste overstrooming sinds 1926”) (1984b)



References to the flood of 1953 (see graph) persisted throughout the entire period measured, suggesting that the memory of this flood has a structural presence in Dutch collective memory, as well as in the country's national newspapers. Whenever a flood occurred, newspaper articles would refer to it (regardless of whether comparison was justified). Also in years without floods we see a structural occurrence of specific references, albeit more marginal. The peak in 2003 is associated with the 50th anniversary of the 1953 flood and its being commemorated in various ways.

In retrospect, it shows that in newspapers one continues to make references to the years 1993/1994 and 1994/1995,⁸ with a peak in the year 1994/1995 when newspapers refer to the previous year (see table). Moreover, in the first years after the floods, 1994 plays a prominent role as well. This is the case because the floods persisted after the turn of the year 1993/1994. Later on, the articles in our sample increasingly refer to the years 1993 and 1995 as a single category. In other words, over time a new icon was added to our collective memory: the floods of 1993 and 1995 (Edelman, 1977). Undoubtedly, this icon is bound to become a point of reference for policy makers during future river floods (Sturken, 1997).

When considering the total number of historical references pertaining to the 16-year-period measured (1 July 1990 to 1 July 2006), one can say that 1993 (27%) and 1995 (16%) occur the most by a wide margin. They are followed at a distance by 1953 (6%) and 1926 (5%) and the floods of the 1980s (both 2%). The floods of the nineteenth century are hardly mentioned anymore.⁹

⁸ No more references are made to 2003 as flood year later on, which is why this period is not part of our analysis. A possible explanation is that this flood was not bad enough to live on, which agrees with the 80% occurrence of the word 'flood problem' ('wateroverlast') in that year's selected newspaper articles.

⁹ This agrees with an analysis of the occurrence of years in the Dutch newspaper *NRC Handelsblad* (Pollman & Baayen H, 2001). This study revealed that the frequency of a year decreases when it is further removed from the present. An exception to this rule applies to culturally shocking events, as reflected by the years 1940 and 1945. If we, like Pollman and Baayen, had included all years from the past century in our specific set, the 1926 and 1953 floods would have figured as such events.

1995-2007: The Aftermath and New Space

Given the large social pressure to prevent future floods, the national government could not refrain from taking measures swiftly. Together with the Limburg provincial government, the Dutch government decided that the plans of the Boertien II Commission were to be realized in an accelerated fashion. To this end, the government formulated the Delta Plan Large Rivers. It consisted of the plans of the Boertien II Commission, supplemented with extra embankments – with a total length of 143 km – to put more emphasis on safety and protection (G.P.van de Ven, A.M.A.J.Driessen, & W.Wolters, 1995).

The risk of floods should be reduced from 1:50 to 1:250 based on a set of measures. The Grensmaas project was integrated in the Delta Plan as well. The construction of new embankments started already in 1995 because the national government quickly managed to set aside funds, totaling 100 million guilders (45 million euros).

The Delta Plan contains an interesting passage: “Effective implementation of the recommendation means a protection level of 1/250 in the Maas valley. This improvement in the protection of properties and goods goes hand in hand with an increase of the unsafety in the areas to be embanked. Regarding the pace of implementation the government decided in the wake of the high water in the Maas in January 1995 that the construction of embankments as indicated in the plan will be started immediately” (1995a:7). This paradoxical notion that the safety decreases when protection goes up is a reference to the critical attitude of the Boertien II Commission regarding the construction of embankments. It argued that when 1/250 years was used as standard one had to erect embankments that lead to a reduction of the economic damage. However, if the river floods these embankments (which will statistically happen once in 250 years), this leads to a raised risk of drowning, a risk that is absent without the embankments because then the water will rise much slower. For this reason engineers from the Directorate of Public Works and Water Management tried to keep the building of embankments outside the Delta Plan Large Rivers. They favored “adapting habitation to the river’s volatility. Their proposals were not feasible, however, partly because of the Dutch tradition of struggle against the water instead of living with the water and partly because of the political moment, which demanded assertive government measures after the floods of 1993 and 1995”(G.P.van de Ven et al., 1995).

The construction of embankments thus had a major symbolic function, denoting the government’s firm stance. In the period 1995-1997 the dominant issue on the policy agenda was to guarantee safety and protection. This did not mean that the activities associated with the integral approach of the Grensmaas project and the Boertien II Commission came to a halt. The environmental impact assessment was performed and planning continued. The project, in line with the Boertien Commission II plans, had to be a cost-neutral project. The idea was that the extraction of minerals generated money for funding dike construction and nature development.

The implementation of the Delta Plan was accompanied by the introduction of a unique act called "Delta Act", which was meant to ensure stepped-up implementation. This made it possible for the actors to speed up the sluggish decision process on dike enhancement. It even became possible to arrange faster expropriation of parcels of land. However, in practice this measure proved barely necessary because of the huge social pressure in the years after the floods. Who dared to be against more

safety and protection for those living near the river? No one would want to be blamed for frustrating these measures. Similarly, discussion on technical and safety aspects, which before 1993 was common, no longer took place. The erecting of new embankments was therefore begun in the course of 1995 already (Driessen & Gier, 1998).

In April 1997 the Grensmaas project was subsumed under the newly started-up Maaswerken Project. The goals of the sub-project now primarily involved ensuring safety and protection, followed by nature development combined with gravel extraction. Another sub-project was the Zandmaas project. This project was primarily geared toward building embankments against floods, with nature development and recreational opportunities as secondary objectives. The final sub-project was the Maasroute project, aimed at adapting the river so that larger ships could navigate it.

Already in August 1997 the project met with setbacks because there were not enough funds for completing the plans before 2005, as stipulated in the Delta Plan Large Rivers. It became clear that the profit from selling gravel had been estimated way too high by the Boertien II Commission. The sand and gravel companies had already bought up large pieces of land, especially the most profitable sites for exploitation. They thus acquired a strategic negotiation position. The cartel of gravel companies claimed only to be willing to dredge the most profitable sections. If the managers of the Maaswerken Project wanted to see more dredging, they needed significantly more government funds (1998a).

Another problem was the costly removal and storage of polluted river silt. By law it is required to deposit this material in so-called 'dredgings depots'. The Maaswerken Agency, in charge of carrying out the plans, developed alternative, cheaper plans in its report entitled *Maasvarianten* (1997b). Moreover, the manager of the Zandmaas project, Van Kleuningen, claimed in *de Volkskrant* that unless more funds were made available, his project had to defer certain priorities: "If we do not receive more money, nature development also has to be postponed until after 2005" (Dirks, 1997). Meanwhile the minister in charge ensured Dutch Parliament that the Maaswerken Project would give priority to safety measures (1997a).

During the summer of 1998, public participation procedures were started in the context of the Grensmaas project. The local residents feared disturbance caused by noise and dust associated with gravel extraction. There were also many concerns about the polluted silt that was to be partly removed and partly deposited on the spot. Doubts also arose on whether Belgium was going to join the project. In the Grensmaas region, the Maas constitutes the border between the Netherlands and Belgium. If the Belgians refused to collaborate, the project could not be further executed according to the original plans (Nieuwenhuis, 1998). In September 1998, high water problems occurred near the tributaries Geul, Gulp, and Jeker, yet the Maas did not flood. The Province of Limburg capitalized on the ensuing fears to urge the national government no longer to postpone making the extra funds available (1998b).

What follows was a slow and difficult process of negotiations between the various actors. The gravel companies and the project managers were basically condemned to work together and after years of negotiations they reached an agreement, even though there continued to be a lack of support among the local population. Similarly, the environmentalists and farmers continued to oppose both the land claims involved and the resulting gravel pits, which from an environmental angle are worthless. The negotiations were slowed down even more when the European Commission started to investigate the gravel cartel, eventually to prohibit it. After three years of negotiating a compromise was reached on this issue as well. In the

years after 1998 several embankments were erected and work on sites that were not controversial got underway. However, work on the bulk of the various measures had yet to be initiated. Nature development and river widening, which according to the original plans would play a major role, gradually became prominent again on the policy agenda. Clearly, the river space discourse gained the upper hand.

Conclusion

In Dutch river policy two discourses can be identified: embankment discourse and river space discourse (see diagram below). They each constitute a vision on dealing with flood control and other river concerns, but they are also tied to specific practices.¹⁰

| <u>Dutch river policy discourse coalitions</u> | <u>Embankment discourse</u> | <u>River space discourse</u> |
|--|---|--|
| <u>Vision on relation between humans and river</u> | We must tame/control the river by building dikes and other waterworks | We must create space for the river, and integrate its diverse functions |
| <u>Interrelated practices</u> | Build and enhance dikes and other waterworks | Deepening and broadening rivers, creating natural storage capacity |
| <u>Floods are the result of...</u> | human failure (neglected maintenance of dikes) and can be avoided | human failure (creating not enough space) and are not avoidable, but can be controlled within limits |

In the period from 1953 to 1993 the flood control debate was initially dominated by the issue of dikes. The discussions took place from the angle of the embankment discourse. After the 1970s the river space discourse gradually gained terrain, and by the early 1990s it had become a fixed ingredient of relevant policy plans. This is also why the Boertien Commission reports contain elements from both discourses.

The floods of 1993 and 1995 constituted a turning point, however. The embankment discourse again became dominant, while the river space discourse began to lose ground. In practice the Delta Act was deployed only a few times (Driessen & Gier, 1998). That there was hardly any local resistance against the dike enhancement plans suggests that the embankment discourse had a strong normative effect in the period right after the floods. Evidently, safety and protection had gained a solid discursive footing: no one would like to receive the blame of a possible flood. In a fairly short period embankments were put in along a substantial stretch of the Maas in Limburg where there used to be no dikes before. This effort, which even met with opposition from several actors within the Directorate of Public Works and Water

¹⁰ Hajer (1995) uses another definition of 'practice'; in his work it is the setting (context) in which language is used. We use the term 'practice' for non-linguistic acts.

Management, reveals how strongly the rituals are anchored in the effects produced by the embankment discourse. As floods go back further in the past and our memory of them fades away, the river space discourse and its interrelated practices again become more prominent.

How should we understand the above-mentioned turning point in the policy history? The renewed prevalence of embankment discourse can be explained by linking this discourse to the broad cultural theme of the Dutch effort to fight and contain floods. This concern is deeply rooted in Dutch society and is expressed in the rituals, solution practices, myths, national identity, and collective memory that the Dutch produce and reproduce time and again. These rituals, which are performed in a rather habitual or intuitive manner, have led to this discourse's persistence and reproduction.

On account of the collective nature of the ways in which the Dutch deal with floods, this issue is rapidly turned into a national concern. The flooding of the Maas River in the 1990s was soon framed as a 'national disaster', a tragedy which the Dutch must tackle as a group. Because for politicians and policy makers the problems were all but self-evident, they engaged in a process of collective 'sense making' (Edelman, 1977). In this process certain meanings were stabilized while other interpretations were marginalized. In this process historical precedents form a repertoire that allows actors to interpret the present in a particular way.

We should interpret Prime-Minister Wim Kok's launching of the Delta Plan Large Rivers precisely in this light. It was a national response to a problem that was experienced as national, as was true of the original Delta Plan, the national government's response to the tragic flood of 1953. The framing of the floods of the Maas River as a 'national disaster' implied that the plans for the Maas became integrated in the Delta Plan Large Rivers.¹¹ In addition, the national government set aside ample funds for measures aimed at preventing future floods.

Knowledge of the past plays a major role in this process of collective sense making (Edelman 1977). In determining the meaning of a critical event, the period in which it unfolds and the one immediately following it are crucial. Past disasters have provided a repertoire (variation) for interpreting present disasters. The outcome of this process of meaning attribution constitutes the frame within which solutions can be explored (selection). Our study of historical references in news reporting on floods reveals that people look back largely during and right after the floods. In short, collective memory plays a major role in the very first stage of interpretation. This early meaning stabilization is of crucial importance in the formulation and implementation of new policies. Some options are opened up; others are closed off. This process in which policy actors reflect on the present based on the past we also encounter in the work of Neustadt and May and Rose.

In this paper we used a macro-historical perspective. A following step is to study how individual policy actors mobilize the past. They do so in quite divergent ways, such as by using historical data or making a historical reconstruction of problems and solutions, but also by using historical standards (recovery of the natural situation prior to human intervention) or by invoking emotions through historical images and analogies, such as drawing a direct link between raised river dikes and the *Atlantikwal*. We will consider these different ways in more detail, and perform an

¹¹ This is all but evident because the problem of the Maas, which has (largely) no dikes, differs from that of the other large rivers in the Netherlands, which do have dikes.

analysis of the various rhetorical strategies actors deploy in the policy process, as well as of the role thereby of particular kinds of historical knowledge and awareness.

Appendix 1. Table of references to specific years in Dutch national newspapers

AD, NRC, Parool, Trouw, De Volkskrant, de Telegraaf
Maas AND overstroming (floods)**

| Floodseason 1 July- 1 July | 1990/1991 | | 1991/1992 | | 1992/1993 | | 1993/1994 | | 1994/1995 | | 1995/1996 | | 1996/1997 | | 1997/1998 | | 1998/1999 | | 1999/2000 | | 2000/2001 | | 2001/2002 | |
|----------------------------|-----------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| Total | 3 | | 14 | | 22 | | 153 | | 323 | | 48 | | 36 | | 45 | | 53 | | 73 | | 41 | | 62 | |
| 1818 | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| 1825 | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| 1886 | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| 1926 | 1 | 33% | 0 | 0% | 2 | 9% | 19 | 12% | 24 | 7% | 0 | 0% | 1 | 3% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 2% |
| 1953 | 0 | 0% | 1 | 7% | 3 | 14% | 9 | 6% | 23 | 7% | 1 | 2% | 4 | 11% | 2 | 4% | 1 | 2% | 2 | 3% | 0 | 0% | 3 | 5% |
| 1980 | 0 | 0% | 0 | 0% | 2 | 9% | 10 | 7% | 6 | 2% | 0 | 0% | 1 | 3% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| 1984 | 0 | 0% | 1 | 7% | 4 | 18% | 9 | 6% | 3 | 1% | 0 | 0% | 1 | 3% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| 1993 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 148 | 46% | 15 | 31% | 14 | 39% | 9 | 20% | 17 | 32% | 23 | 32% | 12 | 29% | 7 | 11% |
| 1994 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 5 | 10% | 4 | 11% | 2 | 4% | 4 | 8% | 3 | 4% | 2 | 5% | 1 | 2% |
| 1995 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 15 | 42% | 13 | 29% | 30 | 57% | 22 | 30% | 17 | 41% | 15 | 24% |

AD, NRC, Parool, Trouw, De Volkskrant, de Telegraaf
Maas EN overstroming**

| Floodseason | 2002/2003 | | 2003/2004 | | 2004/2005 | | 2005/2006 | | Total | |
|--------------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-------------|------------|
| Total | 124 | | 27 | | 34 | | 29 | | 1087 | |
| 1818 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 0% |
| 1825 | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 3% | 2 | 0% |
| 1886 | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 0% |
| 1926 | 1 | 1% | 0 | 0% | 1 | 3% | 0 | 0% | 50 | 5% |
| 1953 | 10 | 8% | 2 | 7% | 1 | 3% | 3 | 10% | 65 | 6% |
| 1980 | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 20 | 2% |
| 1984 | 0 | 0% | 1 | 4% | 0 | 0% | 0 | 0% | 19 | 2% |
| 1993 | 27 | 22% | 7 | 26% | 9 | 26% | 7 | 24% | 295 | 27% |
| 1994 | 1 | 1% | 0 | 0% | 0 | 0% | 1 | 3% | 23 | 2% |
| 1995 | 39 | 31% | 7 | 26% | 12 | 35% | 9 | 31% | 179 | 16% |
| | | | | | | | | | 655 | |

References

- (1926, January 2). De Koningin en de Prins naar de door den watersnood geteisterde streek. *Nieuwe Rotterdamsche Courant*.
- Dagblad voor Noord-Limburg, februari 1984. In de greep van de Maas* (1984a). Venlo: Dagblad voor Noord-Limburg.
- (1984, February 10b). Water tot aan lippen: Omvangrijkste overstromingen sinds 1926. *Dagblad voor Noord-Limburg*.
- Deltaplan Grote Rivieren* (1995a). Den Haag: Ministerie van Verkeer en Waterstaat.
- (1995, February 2b). Dutch Courage. *The Times*.
- (1997, October 2a). Maatregelen Maas in 2005 driekwart klaar. *NRC Handelsblad*.
- (1997, August 14b). Werk aan Maas loopt tien jaar vertraging op. *NRC Handelsblad*.
- (1998, June 13a). Grindproducenten: half miljard extra nodig voor de Grensmaas. *de Volkskrant*.
- (1998, September 16b). Waterkeringen Limburg niet op de proef gesteld. *Trouw*.
- Aten, D., Ginkel, E. J. v., Ham, W. v. e., Heezik, A., Neve, R. G. d., & Tielhof, M. v. (2007). *De Hollanders en het Water: twintig eeuwen strijd en profijt*. (1 ed.) Hilversum: Verloren.
- Bijker, W. E. (2002). The Oosterschelde Storm Surge Barrier: A Test Case for Dutch Water Technology, Management, and Politics. *Technology & Culture, 43*, 569-584.
- Bleichrodt, G. ([1994]). *De Maas slaat toe... : verslag hoogwater Maas, december 1993*. [Maastricht]: Ministerie van Verkeer en Waterstaat, Directoraat-Generaal Rijkswaterstaat, Directie Limburg.
- Bosch, A., Ham, W. v. d., Berkers, E., & Lintsen, H. W. (1998). *Twee eeuwen Rijkswaterstaat : 1798-1998*. Zaltbommel: Europese Bibliotheek.
- Brendel, Carel (1993, December 30). Vergelijking tussen twee watersnoodrampen gaat mank. *Algemeen Dagblad*.
- Bruijn, d. D. (1987). *Ooievaar: de toekomst van het rivierengebied* Stichting Gelderse Milieufederatie.

- C.Boertien (1994). *Onderzoek Watersnood Maas: De Maas Meester* Delft: Waterloopkundig Laboratorium.
- Connerton, P. (1989). *How Societies Remember* . New York: Cambridge University Press.
- Dirks, Bart (1997, September 6). De Zandmaas moet zijn plaats kennen. *de Volkskrant*.
- Disco, C. (2002). Remaking "Nature": The Ecological Turn in Dutch Water Management. *Science, Technology, & Human Values*, 27, 206-235.
- Driessen, P. P. J. & Gier, A. A. J. (1998). Deltawet grote rivieren : evaluatie van een bijzondere wet na de wateroverlast van 1995. *Bestuurskunde : orgaan van de Vereniging voor Bestuurskunde*, vol. 7, 74-86.
- Edelman, M. (1977). *Political Language: words that succeed and policies that fail*. London: Academic Press Inc.
- G.P.van de Ven, A.M.A.J.Driessen, & W.Wolters (1995). *Niets is bestendig... : de geschiedenis van de rivieroverstromingen in Nederland*.
- Goudriaan, J. (1995). *De Maas slaat weer toe... : verslag hoogwater Maas, januari/februari 1995*. [Maastricht]: Ministerie van Verkeer en Waterstaat, Directoraat-Generaal Rijkswaterstaat, Directie Limburg.
- Hajer, M. A. (1995). *The politics of environmental discourse*. Oxford: Clarendon Press.
- Hajer, M. A. (2000). *Politiek als vormgeving* . Amsterdam: Vossiuspers AUP.
- Halbwachs, M. (1992). *On Collective Memory*. London: University of Chicago Press.
- Heezik, A. (2007). *Strijd om de rivieren*. Technical University Delft, Delft.
- Hoogerwerf, A. (1989). Het gebruik van geschiedenis in het beleidsproces. In *Geschiedenis buiten de perken. De waarde van de geschiedwetenschap voor andere wetenschappen, politiek en beleid en cultuur* (pp. 63-74). Leiden: Stichting Leidschrift.
- Huizinga, J. (1929). *Over een definitie van het begrip geschiedenis*. Amsterdam: Koninklijke Akademie van Wetenschappen.
- Meurs, V. R. (2003). *Hoog water. De macht van de boerenrepublieken in het riviereengebied*. Amsteden/Antwerpen: Uitgeverij Contact.

- Neustadt, R. E. E. R. & May, E. R. (1986). *Thinking in Time. The uses of history for decision makers*. New York: The free press.
- Nieuwenhuis, Willebrord (1998, June 27). Tien jaar lawaai voor mooie Grensmaas. *NRC Handelsblad*.
- Nora, P. (1989). Between Memory and History: Les Lieux de Memoire. *Representations*, 26, 7-25.
- Pollman, T. & Baayen H, R. (2001). Computing Historical Consiousness. A Quantitative Inquiry into the Presence of the Past in Newspaper Texts. *Computers and the Humanities*, 35, 237-253.
- Rose, R. (1993). *Lesson-drawing in public policy: a guide to learning across time and space*. New York: Chatham.
- Schama, S. (1988). *The embarrassment of riches : an interpretation of Dutch culture in the Golden Age*. Berkeley: University of California Press.
- Schwartz, B. (1991). Social Change and Collective Memory: The Democratization of George Washington. *American Sociological Review*, 56, 221-236.
- Sturken, M. (1997). *Tangled memories: The Vietnam war, the Aids epidemic, and the politics of remembering*. Berkeley: University of California Press.
- Teisman, G. R. (1995). Het project Grensmaas. *Bestuurskunde : orgaan van de Vereniging voor Bestuurskunde*, 370.
- Velden, van der Ben (1995, January 31). Op onderhoud werd bezuinigd, in afwachting van de dijkversterking. *NRC Handelsblad*.
- Weiss, C. H. & Bucuvalas, M. J. (1980). *Social science research and decision-making*. S.l.: Columbia University Press.
- WWF (1993). *Levende rivieren Baarn*: Bosch & Keuning.