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Changing climate, changing frames
Dutch water policy frame developments in the context of a rise and fall of attention to climate change

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ABSTRACT

Water management and particularly flood defence have a long history of collective action in low-lying countries like the Netherlands. The uncertain but potentially severe impacts of the recent climate change issue (e.g. sea level rise, extreme river discharges, salinisation) amplify the wicked and controversial character of flood safety policy issues. Policy proposals in this area generally involve drastic infrastructural works and long-term investments. They face the difficult challenge of framing problems and solutions in a publicly acceptable manner in ever changing circumstances. In this paper, we analyse and compare (1) how three key policy proposals publicly frame the flood safety issue, (2) the knowledge referred to in the framing and (3) how these frames are rhetorically connected or disconnected as statements in a long-term conversation. We find that (1) framings of policy proposals differ in the way they depict the importance of climate change, the relevant timeframe and the appropriate governance mode; (2) knowledge is selectively mobilised to underpin the different frames and (3) the frames about these proposals position themselves against the background of the previous proposals through rhetorical connections and disconnections. Finally, we discuss how this analysis hints at the importance of processes of powering and puzzling that lead to particular framings towards the public at different historical junctures.

1. Introduction

In September 2008, a major Dutch political advisory committee – *the Delta Committee* – presented its advice to the government concerning the state's flood safety in light of climate change (Delta Committee, 2008):

> "The main conclusions from the advice are:
>
> [...]
> - Climate change and sea level rise are facts;
> - From now on the Netherlands should work on the improvement of its flood safety;
> - Water safety means: flood protection, ensuring fresh water supply and the conservation of estuaries;
> - The safety behind the dykes should be increased by a factor of at least 10;
> - A ministerial steering committee headed by the Prime Minister should monitor the implementation of the twelve recommendations made by this Delta Commission.
>
> [...]
>
> According to the Delta Committee, a sea level rise of 0.65 to 1.3 m in the year 2100 and 2 to 4 m in 2200 should be taken into account; more than has been assumed to date. The committee believes that it is wise to reckon with possible

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upper limits, so that decisions and measures will hold for a long time span.''

This is a remarkably outspoken statement given the complex issue of climate change. It also includes top-down governance prescriptions which seem at odds with the traditional Dutch consensual decision-making approach known as ''poldering.'' For centuries, consensus through negotiation has been the cornerstone of legitimate collective action in heterogenic polder communities fighting unpredictable storm surges and a rising sea level (Dolfing and Snellen, 1999; De Vries and Wolsink, 2009; Koningsveld et al., 2008). Local water management institutions called water boards have had to deal with planning dilemmas which many scholars describe as ill-defined, ill-structured or wicked, demanding complex negotiations over diverging problem definitions or *frames* (Rittel and Webber, 1973; Hisschemöller and Hoppe, 1995; Schön and Rein, 1994; Lach et al., 2005; Warner, 2008).

These planning dilemmas are not specific to the Dutch context; rather, they are encountered in densely populated deltas all over the world. Although dealt with in context-specific ways, the general heterogeneous character of delta societies with their wide variety of publics, interests and problem definitions or *frames* (Schön and Rein, 1994) often make water management dilemmas subject to debate and prone to controversy (Norgaard et al., 2009; Kallis et al., 2009; Lebel et al., 2005; Kirby et al., 2010; Adekola and Mitchell, 2011). Correspondingly, one would expect that the complexities of the climate change issue would only amplify the rhetorically challenging task of public policymaking about flood safety in these plural societies (Hulme, 2009; Giddens, 2009; Adger et al., 2009).

However, the public announcement of the Delta Committee's findings seems surprisingly bold about the meaning of the climate issue for the Dutch delta area. Its deviant problem framing led the committee to recommend rather drastic top-down interventions in both the country's physical water management system and its institutional water governance arrangements. Perhaps even more surprising is the ease with which the committee succeeded in getting the new water management frame and related governance approach accepted by government (Ministerie van Verkeer en Waterstaat, 2008) and the moderate debate this produced in parliament (De Vaste Commissie voor V&W, VROM & LNV, 2009) and society (Verduijn et al., 2012). This is especially surprising given the high costs, the rising controversy on climate change in science and society, the far-reaching consequences for several waterfront towns, and the friction between the top-down prescriptions and the predominantly consensual governance approach at the time (De Vries and Wolsink, 2009; Disco, 2002). Apparently, the committee's public announcements about a potentially controversial policy proposal struck a chord and were hard to disagree with.

1.1. *Aim and structure of the paper*

Triggered by the example of the Delta Committee's remarkable and apparently successful public framing of flood safety policy, this paper examines how flood safety policy is framed in public announcements at different points in time, in the context of the emerging issue of climate change. Given the knowledge-intensive nature of the water and climate policy domains (Termeer et al., forthcoming), we also focus on how knowledge is mobilised in these publicly framed policies. Because every policy proposal is understood against the backdrop of earlier policies and proposals, we also look at how the different points in time relate to each other by analysing the rhetorical connections and disconnections between different frames employed over time.

Accordingly, this paper compares three public announcements of major policy proposals in Dutch flood safety policy. The first announcement, in 1996, presents the policy proposal called Room for the River, before climate change emerged on media and policy agendas. The second announcement, in 2008, presents the Delta Committee's recommendations discussed above, a proposal with a comparable aim but more than a decade later and with climate change high on media and policy agendas. The third announcement, in 2011, presents a follow-up policy proposal to the Delta Committee's recommendations, called the Delta Programme, in a context where the issue of climate change had become controversial in the media and had disappeared from the Dutch policy agenda.

Through these analyses, the paper aims to addresses three research questions. First, how do the announcements of three key policy proposals publicly frame the flood safety issue? Second, what knowledge is mobilised to construct these frames? Third, how are these frames rhetorically connected or disconnected as statements in a long-term conversation? We address these questions taking into account a societal context where the issue of climate change over time emerges, gains currency and becomes controversial.

To answer these questions, this paper builds a theoretical framework starting from the characteristics of wicked problems, focusing on the role of framing and knowledge. We use Schön and Rein's (1994) ideas on how metaphors and storylines can be used as structuring elements for framing policy, and then turn to Jasanoff (2003), Turnhout et al. (2008) and Turnpenny et al. (2009), who indicate an entanglement of scientific knowledge and policy framing. We take the frame analysis a step further by using theory on textual conversations (Edwards, 1997; Hardy et al., 2005) to analyse how the announcements implicitly refer back to and position themselves towards earlier policy proposals. In Section 3, we explain our frame analysis and justify the selection of the analysed policy texts. The resulting frame analysis leads us to a discussion focusing on a comparison of the frames and knowledge mobilised over time. Linking back to our theoretical framework, we discuss how these frames are rhetorically connected or disconnected as statements in a long-term policy conversation. Finally, we discuss how our results hint at an interplay of powering and puzzling processes (Heclo, 1974; Turnpenny et al., 2009) that might have led to these frame developments.

2. Theoretical framework

2.1. *Framing wicked problems*

In planning studies and political science, scholars refer to both water and climate issues as classical wicked problems (Rittel