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Reframing long-term controversies in transboundary river management. *The intermediate role of puzzling and powering in tackling wicked problems*



Jeroen F. Warner^{a,*}, Arwin van Buuren^b

^a Wageningen University, Social Sciences Group, Room 3036, Hollandseweg 1, 6706 KN Wageningen, The Netherlands

^b Erasmus University Rotterdam, Department of Public Administration, Room M8-31, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands

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ABSTRACT

In this paper we analyze how the process of visioning about ‘wicked’ long-term policy issues developed as a result of co-evolving processes of “framing”, “puzzling” and “powering”. In this article we discuss a case of cross-border joint visioning on multi-purpose land use planning in a multi-stakeholder process on the transboundary river Scheldt, whose estuary is shared by the Netherlands and Belgium, in which three different rounds can be distinguished, showing a different logic to organizing the processes of framing, puzzling and powering when the focus on the long term diminishes. This analysis helps us move beyond an often naïve perspective of beyond multi-stakeholder processes. We conclude that productive interaction between framing, puzzling and powering is more easily realized in situations of drafting a long-term vision, compared to situations in which long-term visions have to be translated in shorter-run implementation projects.

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1. Introduction

River management is no longer an issue of managing the water between the river banks only. Prompted by social and environmental concerns, river managers have started to look beyond the water to include land-use planning and people, to arrive at more integrated approaches to land and water management. This increases the number of stakes and knowledge claims considerably (Warner, van Buuren, & Edelenbos, 2012).

Land-use planning normally affects a wide variety of stakeholders. Giving these a voice in multi-stakeholder processes (MSPs) (Warner, 2007) with a view to more integrated and legitimate long-term results has been in vogue since the late 1990s. Notably Healey (1998) and Innes and Booher (1999) have been influential in promoting a consensus-building approach in complex multi-actor arenas such as land-use planning. Guided by a constructivist approach they advocate frame reflection, in recognition of the fact that negotiation always involves a strategic game of framing and re-framing. The reintroduction of value rationality in long-term planning processes, in which values are put center stage, is a way ‘to counteract the pure instrumental rationality that pure instrumental rationality that encourages an analysis of trends and extrapolates them in order to arrive at conceptions of social and economic futures’ (Albrechts, 2004: 749).

As Mitchell (1990) has noted for integrated water management, integration can be more productively arrived at when contemplating the future rather than the present. Multi-stakeholder processes likewise seem to be highly suitable for long-

* Corresponding author.

E-mail addresses: jeroenwarner@gmail.com, jeroen.warner@wur.nl (J.F. Warner), vanbuuren@fsw.eur.nl (A. van Buuren).

term visioning processes based upon joint frame-reflection and reframing. In multi-stakeholder literature, collaborative, often Habermasian consensus-seeking approaches to governance are presented as the preferable alternative to an adversarial approach. But why would parties involved go for that? Conflicting parties will still calculate the costs and benefits of different avenues of dealing with conflict: litigating, alternative dispute resolution or walking away (their 'BATNA'). They may 'power' and 'puzzle' (Hecló 1974) as an alternative or complement to consensus-building. Without underestimating how much the focus on reframing and the possibility for changed self-understandings adds to our understanding of multi-stakeholder negotiation processes, we therefore concur with Flyvbjerg (1998) who has influentially argued for bringing politics back into planning studies. In this article we therefore claim that for competent long-term visioning and conflict resolution not only frame reflection and fact-finding is necessary, but also powering, 'fighting' (Warner & van Buuren, 2009a).

We shall refer to the three central activities within a (conflictive) long-term visioning process as *reframing*, *puzzling* and *powering* (van Buuren, Vink, & Warner, 2014), and analyze how powering, puzzling and framing relate in different stages of a substantial transboundary river management process, from visioning to implementation, when the focus on the long-term diminished. *Frame reflection* is the process in which actors learn about each other perceptions, values and interpretations with regard to long-term developments and desired futures. *Puzzling* is about the process of fact-finding and information gathering, about realizing 'negotiated facts' which are acceptable and authoritative for all involved actors to be used as underpinning of policy agreements. *Powering* concerns the concrete debate about what to decide. In the present article we discuss interaction strategies used to organize the processes of framing, puzzling and powering in their mutual interaction, applied to a concrete case, and pay special attention to time frames/framing: the time horizon against which actors draft their strategies. After presenting our theoretical framework, we present a case of a rather controversial policy process in three 'rounds' (visioning, treaty-making, and post-treaty politicking) in which different routes were chosen to deal with the delicate process of framing. This can be seen as a sign that there is a relation between the way in which the tracks of framing, puzzling and powering are integrated and the results of the governance process. We conclude our paper with some preliminary insights and questions for further research. We shall first update the history of visioning for the transboundary Scheldt estuary at the start of the millennium. Our earlier work of the case in hand (van Buuren, 2006; Warner & van Buuren, 2009a), focused largely on the lead-up to the Dutch-Flemish agreement of 2005. After 2005 however, when the focus turned to translating agreements in implementation projects, Scheldt politics developed a rather different dynamic (Roovers, 2012), an aftermath that continues until today. The same holds true for the process of visioning preceding the agreement of 2005. We will therefore describe three clearly identifiable 'rounds' of policy negotiation (Teisman 1995) separately and compare the dynamics of framing, puzzling and powering in these different rounds, especially to find out how the dynamics of puzzling, powering and re-framing evolves when the focus on the long-term diminishes.

2. Methodology

To analyze the case and elaborate the co-evolving dynamics between the processes of framing, puzzling and powering, we applied an in-depth qualitative comparative case study design. For the first round we were able to conduct a longitudinal case study in which the first author observed approximately 30 meetings during the policy process. In addition some 20 in-depth interviews were conducted, and numerous documents were analyzed. Preliminary findings were extensively discussed with members of the project organization. For a detailed description, see van Buuren (2006, 2009).¹

In the interviews we asked the respondents to walk us through the policy process in detail. Especially they were asked to reconstruct the negotiation process, their own problem frames and the development of the fact-finding process. We also asked them to reconstruct the way in which their problem frames evolves and to explain these changes by examining the role of political power, or the findings of the various research projects commissioned.

For respondents it is often difficult to acknowledge that they changed their problem frames due to bargaining or due to new factual insights. After all, acknowledging that you have changed your beliefs would seem to imply that your former beliefs were incorrect. However, respondents can often describe such a development very well in other actors. We have cautiously drawn on the latter.

For the second round we could rely upon various existing analyses (Verhallen, 2012; Roovers, 2012). In addition we were able to reconstruct the development in problem frames and to devise the temporal linkages which can be found with developments in the processes of powering and puzzling drawing on secondary material like newspaper articles and policy documents. Brief, we reconstructed the processes of powering, puzzling and frame reflection, analyzed the evolution in the frames actors used and try to relate developments in these frames to the evolution in both the processes of powering and puzzling.

A particular frame type in this respect concerns time frames, both pointing forward and back in time (Eshuis & van Buuren, 2014). Should we sacrifice the present for future, or for a longing for the past—if so what should be the reference point? '(T)emporal scale can be thought of as divided into different "time frames" related to rates, durations, or frequencies'

¹ The findings are corroborated and the interpretation partly inspired by unpublished Ph.D. research on the river Scheldt visioning by the late, great Annemiek Verhallen, Wageningen.

(Cash et al., 2006: [2]). Also relevant here is the ‘zoom’: whether to look two months ahead or two centuries (cf. Dore and Lebel, 2010).

This decides the level of detail used in analysis and intervention, the ‘scale choices’ (Karstens, 2009) and time-scale mismatches (Cash et al., 2006). In this analysis, we will mainly highlight short vs. long-term, past vs. future frames and dense vs. widely spaced time frames.

3. Reframing and its challenges

We all frame the world by socially constructed mental filters through which we give phenomena meaning (Schön and Rein, 1994). Especially with regard to the uncertain future, the role of framing is crucial. These frames consist of values, interpretations and meanings which are learned and developed through social interaction (Fischer, 2003a, 2003b). Subjective frames reflect normative values and are manifested in the ways respective stakeholders frame and make sense of their policy space, acting as filters for how actors interpret and assess information and understand their world. Moreover, these normative world views lay the foundation for how actors formulate their ambitions and goals (Shrivastava and Mitroff, 1984) and can explain why actors opt for a specific strategy to change a situation perceived as problematic.

The interpretative approach of policy analysis shows how the frames of stakeholders influence the way they interpret policy problems (Fischer, 2003a; Hajer & Wagenaar, 2003; Feldman & Khademian, 2004; Lewicki, Gray, & Elliott, 2003) and the way they strategically operate in policy processes (Sabatier, 1988; Koppenjan & Klijn, 2004; Thatcher & Rein, 2004). Policy controversies are not primarily based on material interests. Actors rely on different belief systems which are based upon various normative values and result in different ways of knowing (Feldman, Khademian, Ingram, & Schneider, 2006) with which actors make their own selection of issues they frame as relevant and their mutual relationships.

There are numerous proposals on how to organize this process of frame reflection (Schön and Rein, 1994), reframing (Rein and Laws, 2000), policy-oriented learning (Sabatier, 1988), inclusive management (Feldman and Khademian, 2007) and consensus-building (Süsskind and Cruikshank, 2001).² Most of those involve a deliberately organized arrangement in which actors with different frames interact with each other in order to learn to understand how the other think and to realize shared judgements about the reality outside.

Still the focus on frames is potentially problematic. Reframing³ and frame reflection can turn into a vicious loop in which framing and reframing become ends in themselves without the realization of an authoritative pathway for collective action. Decision-making is ultimately about realizing a certain course of action. This may be the result of coercion (force, ‘hard power’) or achieving consent (persuasion, ‘soft power’), but more likely some combination of the two (hegemony).

That insight directly points us to a problem with frame reflection as a governance strategy. Frame reflection can easily fall into what we may call the *indecision trap*. When there is a strong focus upon facilitating frame reflection, it can become very difficult to formulate concrete ambitions and to realize concrete decisions. This problem is broadly acknowledged in countries with a strong consensus-oriented culture (Kickert, 2003). In Dutch politics the dominant derogatory label of public policy-making and politics is ‘poldering’: in the public eye, this inclusive consensus-building process is tantamount to interminable discussion about how to solve societal problems, without concrete outcomes, decisions and agreements. Realizing a commonly held vision of the future is unlike deciding about concrete measures to solve that problem or to realize that vision, to allocate means to concrete policy ambitions. In addition, the outcome of a long process of negotiation about a problem definition may well result in a relatively ambiguous definition which is so multi-interpretable that it delivers no concrete starting point to decide about what to do in practice (see Hendriks and Toonen, 1998). The indecision trap thus relates to the effectiveness of the consensus reached: how realistic and ‘effective’ is the problem definition as it emerges out of the process of collaborative dialogue: does it really focus on the essence of the problems and what are the ultimate costs and benefits of a specific problem definition? What do we know about the problem-solving capacity and effectiveness of the realized consensus?

The second problem with framing may be called the *relativist trap*: when every effort is spent on realizing shared frames, the outcome of a process of frame reflection and consensus building on future visions can be ‘negotiated nonsense’: the outcome is shared by the actors, but is not a valid or realistic interpretation of the future (van Eeten & Ten Heuvelhof, 1998) and thus no useful basis for realizing effective policy choices because this problem definition does not match the perceived problem reality. An important objective of deliberative governance is ‘keeping the conversation going’ (Rorty, in Fischer, 2003) but does this mean that societal problems are really solved in the long run? How powerful and feasible is the consensus realized, can it be implemented without many problems, does the package deal actually reflect the problem definition?

² The concrete methods to facilitate convergence between frames come under different labels. Sometimes they are presented as participatory policy analyses (Geurts and Joldersma, 2001). Others have called them collaborative dialogues or public learning. In the Netherlands they are presented as interactive policy-making (Edelenbos and Klijn, 2006), network management (Koppenjan and Klijn, 2004) and process management (de Bruijn et al., 2000).

³ Reframing is about changing “the conceptual and/or emotional setting or viewpoint in relation to which a situation is experienced and to place it in another frame which fits the ‘facts’ of the same concrete situation equally well, or even better, and thereby changes its entire meaning.” (Watzlawick et al., 1974). Parties to a conflict need to put themselves in the other party’s shoes, and in so doing, understand the other’s assessment of the situation in one’s own terms. This would then enable the construction of shared frames and cross-frame discourse (Schön and Rein, 1994).

So, we need to think about ways of organizing the framing process such that it is prevented from falling into either the relativist trap or the indecision trap. Brief, to think through the possibilities of combining the art of framing with the arts of puzzling and of powering. The next two sections will describe both.

4. The power of puzzling

Knowledge plays an important role in long-term strategic decision-making. Scenario analyses and other forms of future studies can improve the exploration of sustainable pathways to the future (Duinker & Greig, 2007). However, if we accept the socially constructed character of reality and the intervening functioning of mental frames when observing and describing it, we cannot separate knowledge in policy processes from the frames of its producers and receivers. In situations of frame controversies much of the knowledge generated is mobilized in the context of a specific frame or way of knowing: different actor coalitions sharing a specific frame raises questions that are answered by specific research reports. A clash between different research reports ('report war') frequently results in research that only reconfirms existing policy beliefs and is not able to stimulate a process of critical reflection (van Buuren, 2009).

Nevertheless within policy processes expert knowledge can still play an authoritative and mediating role in the whole process of frame reflection (Lamb, Burkardt, & Taylor, 2001). We can try to overcome factual controversies with forms of joint fact-finding, participatory analysis and collaborative science (Busenberg, 1999; Jäger, 1998). The outcomes of these exercises are not 'facts' in the classical meaning of the concept, but 'agreed-on facts', to be abandoned when new and more convincing insights are gained which command a broader consensus (Ehrmann and Stinson, 1999; Susskind, Levy, & Thomas-Larmer, 2000).

Policy analysts can play an important role in the whole argumentation process (Majone, 1992). They provide arguments based on sound analysis which helps actors within the deliberative process to underpin their argument and to discriminate between valid and invalid claims and arguments. For long-term visioning scenarios are important tools to enable a debate about possible implications of different policy choices (Thompson et al., 2012).

That means that puzzling (organized in a context of coproduction) can have a 'purifying' impact upon the process of long-term visioning and policy-oriented learning (Sabatier, 1988). Puzzling can provoke frame-reflection as it can help to discriminate between more and less valid and reliable future scenarios and thus can objectify and simplify the process of frame reflection, and by mobilizing new pieces of information, unknown insights and innovative ideas.

To make puzzling really impact on the process of reframing, it is important to carefully intertwine both processes. To arrive at 'agreed-on facts' which can stimulate a process of frame reflection, certain conditions need to be satisfied, which are derived from insights about joint fact-finding (Ehrmann & Stinson, 2000).⁴

5. The art of powering

Puzzling and framing deliver a variety of arguments that can be valuable in the process of long-term visioning. However, they do not necessarily deliver ambitions, let alone decisions. They may only deliver valuable input and 'food for thought' within a process of deliberation. In addition, however, there has to be some kind of powering, negotiation and determination: a process in which involved actors decide to choose a specific solution or measure that can be implemented. In this political process of bargaining, negotiating and 'dealing and wheeling' ambitions are exchanged, outvoted, accepted or intertwined.

A process of reframing enables a legitimate process of powering: without frame reflection and consensus about problem definitions powering only results in more controversies and less legitimacy. However, without some sort of powering the process of framing remains indecisive: the problem is reframed more collectively but there is no decision taken about how to solve the problem. At the same time powering can help the process of framing into a more open, constructive and decisive way. It can help to facilitate choices about which long-term strategies are desired and which are not.

The mutual gains approach (Susskind and Cruikshank, 2001) reminds us of the importance of uncovering the various interests at stake in a controversial policy process. Exactly the clash between these interests can lead to a richer consensus. A process based upon the principles of the mutual gains approach aims at:

1. identifying and emphasizing the shared, collective interest which surpasses the individual interests and does not necessarily collide which individual interests;
2. protecting the core values of all participants involved;
3. enabling a dialogue in which participants can clarify their ambitions without an immediate bargain about who gets what;
4. a collective exploration of possible mutual gains, based upon the principle of maximising the individual gains in the context of a collective solution or compensation of the potential losers;

⁴ First of all, actors with different frames have to be involved in the formulation of the research questions (realizing consensus about the research questions is the first step in realizing consensus about the problem definition). Secondly, the different frames have to be taken into account in the research design: in the selection of research institutes, the choice of methods and the formulation of the alternatives which have to be analyzed. Furthermore, research will have to be transparent for all involved actors: in a process of joint fact-finding actors can build trust in the researchers and the research. Finally, research will need to be interpreted in joint deliberation: mere research results ('facts') are devoid of meaning. By interpreting them in a deliberative effort of stakeholders and researchers consensus about the facts can grow (McCreary et al. 2001; Sabatier, 1988).

5. steering with deadlines to put pressure on the negotiation process (Süsskind & Cruikshank, 2001; de Bruijn, ten Heuvelhof & in't Veld, 2000).

Compared to reframing and frame reflection, powering-oriented approaches are much more focused upon forging (or forcing) a concrete “deal”, a concrete choice, towards selecting feasible policy options, also for the long-term. The process of powering can contribute to the quality of long-term visioning because it can urge a process of frame reflection, for example by proposing a controversial decision with big consequences for future options available and thus by finding a solution urgent for stakeholders or by proposing an attractive package deal that makes actors willing to rethink their problem representations. Furthermore, it can steer the process of framing towards a concrete decision by illuminating the actual ambitions of actors and by formulating standards for the ultimate outcome of the process. It can qualify the various normative positions by provoking actors to translate their problem perceptions into ambitions and to make concrete choices about what they really want. Finally, a mutually attractive package deal, based on an extensive negotiation process in which all actors are given a say, can help to shed new light on the problem and its possible solutions and can stimulate a process of frame reflection because all actors get convinced that there is something in for them.

5.1. Long-term visioning and its building blocks

Where framing thus refers to the process of interpreting problems, the process of puzzling is about fact-finding about the issue at hand and the consequences of measures, and the process of powering is about negotiating about different agendas and stakes related to the issue. All these activities play a role in long-term visioning and are necessary for competent visioning (van Buuren, 2006). As we described, both puzzling and powering can contribute to processes of reframing in a constructive way. But what about their interaction in processes of long-term visioning? And how do these dynamics change when the emphasis on the long-term diminish?

Some assumptions can be made. First of all, although long-term visions become more powerful when they are supplemented with a concrete agenda and when they are supported by robust analyses, it seems helpful when visioning processes are organized at a distance from political negotiations and when they leave much room for non-scientific input. The role of powering and puzzling thus can be relatively small. Gathering support for a long-term vision is especially served by a process of frame reflection in which different actors come to a shared problem definition and shared interpretation of a desired future. However, in the absence of powering and puzzling, long-term visions can become not only very indecisive, but also very vague and ambiguous.

At the same time, when the short-term came in and visions have to be translated in action plans and programs, both powering and puzzling gain in importance. Powering becomes important because actors are now confronted with more concrete measures, whether congruent or conflictive with their own agendas. Puzzling also becomes more important, not only because of procedural requirements with regard to assessment and underpinning, but also in order to get legitimacy for concrete measures. However, in this process of translation, the role of powering and puzzling can also become too strong, resulting in stalemate controversies and ‘fact-fighting’. With the help of the case study we set out to analyze what happens in practice.

5.2. The Scheldt vision: a controversial decision-making process

To concretise the different modalities of interacting processes of framing, puzzling and powering, we analyze three decision-making rounds about the deepening of the fairway to Antwerp in combination with a package of measures with regard to the safety and ecological quality of the Schelde (Escaut in French, Scheldt in Dutch) estuary.

5.3. The first step: a long-term vision

The Scheldt estuary is shared by the Netherlands and Flanders (the Dutch-speaking region in federal Belgium). The estuary is a unique ecological system, a Ramsar Site of Special Scenic Interest. Because the Scheldt is also the fairway to the port of Antwerp, the second largest port of Europe, Antwerp is a key stakeholder.

Crucially, the largest part of the fairway to Antwerp is located in the Netherlands: ships sailing from the sea to Antwerp or vice versa have to pass through Dutch territory. Because both governments have to negotiate about deepening of the fairway, Antwerp deems this necessary to accommodate ever-bigger container ships.

In the context of this asymmetrical interdependence, political relations between Dutch and Belgian authorities over the Scheldt have been fraught since the 17th century (Meijerink, 1998; Warner & van Buuren, 2009b; Warner & Zawahri, 2012). After Belgium broke free from the Netherlands in 1839, a treaty was signed obliging Belgium to pay a fee for each ship passing through the river Scheldt, and the Netherlands to maintain the *status quo ante*. The Dutch claimed this meant each system change would need to be negotiated (Vanfraechem, 2003a, 2003b).⁵

⁵ We will not complicate matters by going into the role of Wallonia here, but concentrate on Flanders, which is the Dutch speaking part of the federal state of Belgium.

Non-state actors became actively involved in transboundary politics however when in the 1980s the deterioration of the estuary became increasingly visible. Nature conservation organizations protested the impact of the economic activities in the estuary. In 1982 the Flemish authorities requested a second deepening of the fairway. The ultimate decision to deepen was taken in 1997, after fifteen years of stalemate in negotiations. Finally a package deal between various difficult bilateral dossiers caused the breakthrough in the negotiations. After this decision, mutual trust was extremely low. The Flemish actors were convinced that the Dutch only kept obstructing the deepening to safeguard the economic interests of Rotterdam. A 'linkage strategy' arguing that two smaller Dutch harbors, depending on the same estuary, would benefit from fairway deepening too, failed (Vanfraachem, 2003a,b).

The residents of Zeeland, the Dutch province where the Scheldt empties into the North Sea, were heavily opposed to the decision because they feared the external risks and the European obligation to compensate the ecological harm caused by the deepening. This compensation could only be realized at the expense of agriculture, giving fertile agricultural land back to the estuary.

In 1998 the Port of Antwerp however requested another round of deepening. '(T) he Flemish had an urgent issue at stake: they wanted the deepening to take place preferably 'yesterday' the Dutch highly valued the ecological system of the Scheldt Estuary' (Karstens, 2009: 4). Both governments however decided that a new process of stalemate negotiations was not preferable and they started a joint deliberative process to establish a long-term vision on the Scheldt on an urgent issue. The year 2030 was established as an appropriate operationalisation of that time frame. Bilateral working groups were set up to prepare this Vision and in 2001 the Vision was accepted by both governments. In this Vision three ambitions were formulated:

- 1 to maintain the accessibility of the Port of Antwerp;
- 2 to enhance the ecological quality of the estuary;
- 3 to safeguard safety from floods in the whole river basin (and make it climate-proof).

Besides these, two conditions for decisions were formulated:

- 4 the physical system characteristics needed to be safeguarded;
- 5 decisions were to be made in a cooperative spirit.

The LTV, remarkably, is seen as a 'neutral' policy document. It was written by public officials and commissioned by the Technical Committee on the Scheldt which governs transboundary river management. The introduction declares that 'no weighting has been made between the priorities of safety, accessibility and ecology of the estuary'. An integral vision is sketched, which is seen as helpful for political decision-making about the appropriate balance between the various ambitions.

The vision was not based upon an extensive consultation process with stakeholders (they are only informed). However, the scientific underpinning of the Vision is rather extensive, mainly with regard to the morphological aspects, which are crucial in realizing the various ambitions.

5.4. Analysis

To enable a breakthrough in the entrenched frames of involved actors, it was necessary to enforce negotiations about a commonly accepted agenda. The Flemish and Dutch government were successful in their attempt to focus the process on joint framing: a technical, bureaucratic process aimed at realizing a rough sketch about the future of the estuary, without the pain of making concrete choices tomorrow. Puzzling was not used to make the process of framing more concrete or selective. The first agreement (the long-term vision) was a pragmatic mix of statements in which the most important values of the estuary were addressed.

Nonetheless most frames were not changed in this process. The Vision was a common document but also a Catch-22: it was impossible to serve one interest at the cost of the others. As such it was mainly a Dutch success in the eyes of the Flemish actors: deepening the fairway would be only possible in combination with other (difficult to realize) measures. The vision showed the indecisiveness of the main actors involved: it contained no one concrete choice between the main values of the estuary and did not clarify which strategic choices were need to move towards this desired future state.

5.5. From Long-term Vision to Development Plan

In 2002 both governments decided to develop this Vision into a concrete Plan for (Estuary) Development with a planning horizon for 2010. This plan must contain specific measures to realize goals as mentioned in the Vision and must have broad support from all stakeholders. In addition a robust scientific foundation for the measures had to be provided in order to prevent difficult discussions about the legitimacy and quality of the proposed decisions. Parties involved had especially strong differences about the environmental effects of deepening the fairway (both those associated with the last round and the next).

To realize the scientific process, a full-fledged process of joint fact-finding was set up. A bilateral project organization was set up which organized a full-fledged collaborative process, with much emphasis upon the organization of joint fact-finding and realizing consensus about the decisions which had to be taken.

So, two parallel tracks were organized: a track in which an SEA and a socio-economic and environmental cost-benefit analysis were conducted and a process in which a weighty advice of all stakeholders to both governments was prepared.

Stakeholders were involved both in working groups and an 'Advisory Group' (*Adviserend Overleg Schelde*) which were meant to review research results and to discuss research questions, assumptions, methods and so on. By doing so the project organization guaranteed the transparency of the research and organized a process of joint fact-finding.

The stakeholders brought together in a 'Consultative Group' (*Overleg Adviserende Partijen*). They were requested to lend unanimous advice about the development plan. A less than unanimous advice would considerably weaken their position and would give both national governments the possibility to decide unilaterally on the development plan.

Most parties involved started the process with very deep-rooted perceptions of the other actors. They were deeply suspicious about the value added of the collaborative process. For example the Port of Antwerp deliberated seriously about the question whether to participate in the process at all. The environmental organizations had a clear message: should the collaborative process prove insufficiently successful, they would go to court.

But despite harsh words spoken in early meetings, these strongly negative images gradually softened. Due to their frequent interactions, both informal and formal, actors developed a better understanding of each other's interests and started looking for creative solutions. Ultimately the Consultative Group delivered unanimous advice about the development plan. This advice was built around two cornerstones:

- a the conviction that the research results showed that a deepening was less harmful than expected and could be done in a less invasive way, combined with ecologically valuable measures;
- b satisfaction that a package deal could be realised in which all actors recognized some of their ambitions.

In an integrative rather than distributive (Fisher and Ury, 1983) package deal all actors try to 'enlarge the cake' in order to safeguard each interest. This is realized on multiple levels. Both national governments reached a package deal between a couple of bilateral dossiers. In the context of the Consultative Group, compensatory natural values, safety measures and fairway deepening are intertwined in one deal. On the Dutch side a package deal was struck between the national government who gave the Zeeland region the promise of extra investments in their economy and infrastructure. The province of Zeeland in turn is obliged to implement the nature compensation/restoration projects (van Buuren, 2009).⁶

6. Analysis

To realize really shared ambitions for the short term (the period to 2010) a more thorough process of frame reflection was necessary; but avoiding for such a process to be 'toothless'. Therefore a joint fact-finding exercise was organized which helped actors overcome endless discussions about the human impacts on the estuary without a shared scientific basis, while the studies gave the deliberations an aura of objectivity. For example, a rather arbitrary time frame was chosen as a reference value for a 'natural state' in the SEA: the year 1900. From this basis, ecological damage incurred between 1900 and 2000 seemed rather limited. In so doing defusing the ecological NGOs involved.

Meanwhile, where initially there was much discussion about the perceived negative impacts of deepening, now more insight was developed into the consequences of deepening. Especially with the help of research from the Port of Antwerp's Team of Experts it became clear that human interventions (paradoxically for critics) can have positive impact by stimulating the emergence of intertidal areas. Due to the many guarantees expressly built in by the project organization to convince stakeholders about the quality and the independence of the research, the research results actually functioned to stimulate frame reflection and frame convergence. While the Dutch (Zeeland) perception persisted that the Scheldt is merely being developed to serve Belgian interests, the earlier Dutch frame – claiming that a deepening cannot be harmless – changed over time.

The second impetus to this process of reframing however was the *powering* of both national governments and of some stakeholders, especially the Port of Antwerp, in the process. These strategies were used to steer the process of deliberation in such a way that decisive outcomes were realized. A clear deadline, clear conditions for the outcome (concrete agreements about accessibility, environmental quality and safety), and the threat that both governments would decide on their own when there was no unanimous advice were helpful devices to realize a process of frame reflection which was decisive and resulted into a concrete package deal. It is interesting to see that the Flemish strategy of creating a sense of urgency (concrete decisions are needed immediately), consisted of shortening the time horizon for the planning process drastically: concrete

⁶ Nature compensation and restoration are often mixed up. After the second deepening, compensation was deemed necessary, but for the envisaged third deepening compensation would only be necessary if deepening combined with mitigation was to lead to significant effects. The social EIA of 2004 showed this not to be the case. Depoldering the Hedwige polder therefore was delinked from the deepening. There was however a parallel drive for nature restoration to make up for the summary loss of natural values in the preceding century. (Verhallen, 2012).

agreements about the next deepening are needed now. The long-term ambition (to organize an integral development trajectory for the estuary) is thus left for a more pragmatic and calculating strategy.

A careful process of puzzling stimulated reflection on deep-rooted frames. Organizing *puzzling* in close interaction with the process of framing stimulated frame reflection. In the Westerschelde case the process of puzzling led to a consensus about a synthesizing frame in which the ecological value of the estuary is emphasized but also the impact of a deepening is qualified (van Buuren, 2009).

Powering has played different roles in the Scheldt estuary. The most important form of powering was the pressure of the national governments on the Consultation Group to deliver a unanimous advice and thus to overcome interest conflicts between stakeholders. Second, because of the way in which the Consultation Group perform their job: they realized consensus by formulating a package of measures which was attractive enough for all actors to nuance their negative mutual perceptions and not to begrudge the other actors their successes.

6.1. Implementing the development plan: 2005–2013

In 2005 the prominent Zeeland delegate, Thijs Kramer, died in a car accident in 2005. Widely seen as the architect and broker of the Dutch–Belgian bargain, his untimely passing helped materialise the final deal honoring his zeal to forge consensus. All the while however some stakeholders had also looked for outside constituencies and fora to oppose the deal.

The dredging started as agreed, but the return to the water of parts of the coastline did not. Especially the Hertogin Hedwige polder, in the east part of the Zeeuws Vlaanderen peninsula, diked up in 1907, proved a political bone of contention. The treaty promised 600 ha of natural values by way of compensation for the deepening, which would make space for more natural tidal morphology and ease the pressure from flooding. This was however to be realised by returning poldered land to the sea, an extremely sensitive solution in Zeeland given the human and economic toll taken there by the February 1953 storm surge disaster. The Dutch coalition government chose to ignore this unease.

The rebellious undercurrent surfaced in 2007 when Zeeland farmers and citizens successfully lobbied members of Parliament coming from the area. In 2009 the support of a Zeeland MP became indispensable in securing a parliamentary majority for the ruling coalition in the House of Commons, and the subsequent year, it was again a Zeeland MP who was sorely needed.

To assuage the ill-feeling yet not to antagonise the Belgians too much, a process of serial ‘puzzling’ was started. First, a State Advisory Commission was instated in 2007 at the behest of a Parliamentary motion from Ad Koppejan, MP. The commission headed by former liberal Minister for the Environment, Nijpels and the Deltares consultancy looked into 78 alternatives and advised in 2009 to flood the polder anyway,⁷ as land acquisition elsewhere would be more costly and problematic. Linking with a populist victimisation frame, local interests being sacrificed for foreign and European good, Koppejan successfully stipulated in his parliamentary motion that any solution would have to proceed ‘without expropriation’. Both the Flemish and the European Commission found this ‘unreasonable’ and put increasing pressure on the Dutch government (‘powering’) to deliver.

The Dutch promised to study alternative solutions. A host of reports was issued examining the merits of partial flooding, alternative areas being flooded, etc. In November 2011, for example, it was suggested that flooding two other small polders instead of Hedwige would have the same effect. The European Commission begged to differ and negotiated a different plan: the partial flooding of both the Hedwige as well as the other polders. While this prospect satisfied the European Commission, it was rejected by the Dutch House of Commons which sent Agriculture Minister Bleker back to the drawing board. In March 2012 Dutch Minister Bleker failed to convince EU Commissioner Potocnik the Netherlands was doing enough. Upon being scolded for tardiness, Bleker disputed the EU’s authority in this, which according to him is only repressive (*i.e.* applied after the fact).⁸

Above it was noted NGOs started the process. Now that the treaty was endangered, conservationist NGOs sought to assert themselves as an interested party and to force the Dutch government to comply. A Dutch national court however ruled out its material interest asserting it is an international dispute. Undaunted, the Dutch Society for the Protection of Birds (Vogelbescherming), Flemish conservationist NGO Natuurpunt fiercely and successfully lobbied with the European Commission (van Tilburg, 2010). Meanwhile in July 2011 Meire and Hermans published an article in Belgium’s *De Standaard* daily, signed by 19 Dutch and Belgian full professors and repeated this some days later in Dutch newspaper *NRC*, urging Belgium to reject the Dutch position.

In May 2012 Flanders’ patience ran out and the Flemish filed a case with the International Court of Arbitrage (*De Morgen*). Failing a result, Belgium seriously contemplated the next step: in October 2012, PM Peeters demanded flooding the polder within 6 weeks. The lengthy procedure of European arbitration, which can take 6–12 months, bought the Dutch extra time, sensing a change of political mood: a new ruling coalition willing to agree that the polder was to be flooded. After the government coalition depending on the Zeeland vote disintegrated, the tension also dissipated and more constructive

⁷ <http://ikmaakmezorgen.nl/plaatjes/Deltares-en-cie-Nijpels.pdf>.

⁸ EU wil snel antwoord over Hedwigepolder, *Nu.nl*, 24 October 2012; http://www.europa-nu.nl/id/vj40iymuklzt/nieuws/eu_wil_snel_antwoord_omver_hedwigepolder?ctx=viqnmotsqbwr; EU weersprekt visie Bleker over bemoeienis Europa, *Nu.nl*, 9 December 2012; <http://www.nu.nl/politiek/2878266/eu-weersprekt-visie-bleker-bemoeienis.html> Both sites last checked 12 December 2015.

solutions were developed. The bill for the delay however would be placed at the Netherlands' doorstep. To enable eventual flooding of the Hedwige polder, in March 2013 Dutch opened negotiations with the proprietor to gain ownership of the polder. The current land owner, a Belgian nobleman, has core business interests in dredging and agriculture as a landlord leasing plots to 12 farm operators.

6.1.1. Analysis

This third, conflictive, phase saw different dynamics between framing vs. puzzling and powering, in quick succession. The dominant frame underlying the Treaty was challenged by Dutch politicians and stakeholders. The latter put pressure on the provincial and the national government to find alternative solutions for depoldering and tried to establish a counter-frame in which the Dutch farmers were the victims of the expansion of the Port of Antwerp. Various research committees were instated to fuel the powering process and to substantiate the claim that alternative solutions are possible to restore the ecological values of the estuary, rather than flooding polders. The long-term vision, based upon a set of equivalent principles and values, disappeared from view and lost its connective capacity.

From the Flemish side powering tactics were used to force a decision on the implementation of the compensation measures. While the Dutch more the ever seemed to bide their time for political expediency, seeking space to puzzle, irritated Belgian politicians presented the Dutch with very tight deadlines to present their alternatives. Ultimately, these powering tactics further weakened the common frame underlying the long-term vision and the development plan because it reinforced the perception that the Flemish were entirely focused upon safeguarding the deepening of the Scheldt.

All in all, we can conclude that in concretising a long-term vision in terms of short-term measures, it proved to be impossible for actors to bind each other in a shared frame. Both puzzling and powering are used by both actor coalitions to let their own their own frame prevail.

7. Comparative analysis, discussion and conclusion

The long-term visioning for the Scheldt estuary has been unique for its involvement of non-state stakeholders and its joint fact finding with a view to reconciling contradictory goals and pre-empting future conflict. Its three stages involved different stakeholder configurations and expectations, as the plans were ever more concretised. This multi-stage process gave us an excellent opportunity to consider the role of framing, powering and puzzling, expanding our first cut at this in van Buuren et al. (2013), which delved into climate frames in the Netherlands. In both cases, we find framing for long-term visioning can benefit from the intermediary role of both puzzling and powering. The present case however is not only transboundary and substantively different from the climate case discussed in van Buuren et al. (2013), but also multi-stage, and explicitly involved visioning for the estuary. The different parameters of the three stages identified here are reflected in different frame interactions.

The first stage of the Scheldt long-term vision was relatively abstract, informed by a team of natural scientists. The second stage, concretising the vision through research and stakeholder deliberation, involved four years of careful puzzling while seeking to avoid concrete choices. While the Belgians were noticeably annoyed at the extensive, interminable process they felt the Dutch imposed on them, they applauded the eventual consensual deal the puzzling enabled, arrived at in 2005. A transboundary Multi-Stakeholder Platform was designed to enable learning and forestall escalation of the conflict (Warner & van Buuren, 2009a). While in the spirit of ADR and social learning, this platform came to an agreement under high time pressure, with most of the pressurizing done by the port of Antwerp ('powering on puzzling', Visser & Bentzen 2006).

After 2005, the transboundary multi-stakeholder bargain however began to unravel due to more local 'powering' outside the negotiation arena, mainly on the part of Dutch farmers. Their lobby was successfully taken up at the national level, where an elaborate high-wire stunt was pulled to save face while catering to a dominant populist frame. While puzzling dominated the preceding stage, this third phase can be labelled one of powering on the Dutch side under the guise of puzzling. From the start, the already weary Belgians could not avoid seeing the slow procedure as more delay tactics favoring the competitive

Table 1
Reframing, puzzling and powering.

	Reframing	Puzzling	Powering
<i>Subject</i>	Consensus about normative values and convictions	Consensus about factual representations of reality	Consensus about the stakes with have to be taken along in the ultimate decision
<i>Level of disagreement</i>	Frames and interpretations	Knowledge and information	Ambitions and interests
<i>Coordination principle</i>	Frame reflection; social learning	Joint fact-finding; cognitive learning	Bargaining, negotiation
<i>Managerial strategy to realize consensus</i>	Collaborative learning	Joint fact-finding	Dispute resolution; mutual gains approach
<i>Contribution to decision-making</i>	Consensus about the dominant problem definition used within a policy process	Authoritative weighing of alternatives; shared understanding of most preferable alternative	Satisfaction about the gains resulting from the policy process

position of the Rotterdam harbor on the Dutch side (Vanfraachem, 2003a, 2003b) and threatened to take the matter to the International Court of Justice.

Throughout the three phases, then (Table 1), the growing importance of powering between actors and a diminishing role for a broadly shared long-term vision can be observed. Long-term planning is essentially a matter of reflexive governance in which learning between actors with different frames is vital (Voß, Smith, & Grin, 2009). The shorter the time horizon used, the more actors try to safeguard their own interests and the more they use hard bargaining to influence the outcomes of decision-making. In the sequence of phases, the role of puzzling was also increasingly politicized, although in the second phase it contributed to the process of joint framing. Especially in the third phase puzzling appears to have been nearly exclusively deployed for a 'battle of analyses' between the actors.

Table 2 below summarizes the main characteristics of the three phases.

The deliberate input of knowledge (negotiated but ultimately authoritative for all involved actors) proved necessary to prevent *the relativist trap*; a concrete discussion of and negotiation about concrete ambitions (powering) is required to prevent being caught in the *indecision trap*. Both activities are not only necessary to complement the process of reframing but also to stimulate it and to nourish it. Powering can help to counteract the voluntary, non-committal character of collaborative dialogues by setting some quality criteria for the output of this dialogue. As such it is clearly lacking in the first phase of visioning on the long term future of the estuary.

The second phase of the Scheldt case illustrates that powering can also be useful to make a mutually attractive deal which can help actors to take distance from earlier points of view and nuance their mutual frames. A focus on puzzling stimulated and facilitated frame reflection, successfully promoting a 'meta-frame' encapsulating existing frames and counter-frames. At the same time, the question remains how inclusive such a meta-frame can be. As shown in the third phase, the resulting frame was not inclusive enough to safeguard enough societal support.

We find integrating both puzzling and powering in the context of framing requires a specific organization of these two. Both need to be organized with due respect for the frame controversies within the process and to be interlinked with this process. This implies that puzzling benefits from joint fact-finding: the serious involvement of stakeholders in the different phases of the research process, but also providing serious quality checks to prevent vulnerability to easy criticisms. Powering in this context involved trying to realize a minimum consensus about shared or integrated ambitions and terms of reference.

The third phase of the Westerschelde debate revealed the many problems arising when puzzling and powering no longer aim at facilitating frame reflection, but are used to reinforce partial and divergent frames.

Table 2
Main characteristics of each phase of the long-term vision building for the Scheldt estuary.

	Phase 1: long term vision	Phase 2: development plan 2010	Phase 3: implementation
Framing	Administrative attempt to present a 'neutral' vision of the future in which the main values of the estuary are integrated Long term dominates.	Gradual frame reflection and joint framing aimed at developing a concrete package deal. Harbour insists on swift action and feels Dutch are dragging their feet; Dutch uphold long-term (sustainability) focus. Reference point for 'good natural status' (1900) undermines ecologists' strategy.	Gradual frame divergence. Aspects of long-term plan become politicised for short-term political opportunism in NL, causing diplomatic incident. B backed up by EU forces NL back into the fold
Puzzling	Puzzling focused upon the issue of morphology, in order to prevent for controversies on this sensitive issue	Puzzling focused on realizing agreement on the level of the facts by means of joint fact-finding.	Puzzling used as fact-fighting, to prevent for unwelcome decisions.
Powering	Powering mainly implicitly present: the vision has to keep all options open	Powering aimed at realizing a mutual attractive deal in which the various interests were intertwined	Powering used to renegotiate the former deal and to prevent for depoldering.
Interaction between puzzling and framing	Puzzling used to underpin the claim that good morphological management is conditional for realizing the other functions of the estuary.	Process of joint fact-finding enhanced frame reflection as it showed the impact of deepening and the way it can be mitigated.	Fact-finding used to reinforce clashing frames as it is used to disprove earlier insights in favor of certain agendas
Interaction between powering and framing	Absent	Powering used to put (productive) pressure on the process of deliberation.	Powering used to frustrate mutual interaction and reinforce clashing frames
Traps	Indecision trap: no concrete choices made	Relativist trap: fundamental controversies overlooked	Indecision trap: stalemate discussion without much progress

The deliberate intertwining of *puzzling* and *powering* with framing can support the resolution of problems many long-term visioning processes encounter:

1. they are overly focussed on realizing shared problem definitions, without clear insight in the reality of these problems (*puzzling*);
2. they are used as cheap additives to processes of *powering* in which the real decisions have already been taken;
3. they result in endless processes of talking and framing without concrete, feasible and effective choices which possess real problem-solving capacity.

As our case illustrates, the relative severity of these challenges may change in the course of a multi-stage trajectory. When the perspective is only long-term, it is difficult to employ sufficient *powering* to prevent for indecisiveness. But when such a process becomes more and more focused on the short term (implementation), and one side puts the pressure on, joint framing is easily disregarded in favor of hard bargaining.

Visioning (which can be seen as framing about different possible futures) is an essential building block for long-term decision-making as it can help to reflect upon underlying assumptions related to alternative pathways (Frame, 2008). However, its real impact on decision-making remains limited when visioning remains completely disconnected from the crucial question on political power: 'who gets what, when and how?' (Lasswell, 1936) To ensure that long-term visions really can function as a point of reference when policy processes enter the implementation phase, they need to be constructed by an intertwined process of framing, *puzzling* and *powering*.

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