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## A narrative perspective on institutional work in environmental governance – insights from a beach nourishment case study in Sweden

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Institutional work offers a promising lens for understanding institutional change, focusing on the efforts of actors in creating, maintaining or disrupting institutions. In this paper, we explore the capacity of a narrative approach to provide insights on institutional work, using a case study from the coast of Sweden. We identify four narratives that compete in the policy discourse regarding erosion and beach nourishment in the coastal province of Scania. The narratives reveal that actors hold different beliefs concerning the magnitude of the erosion problem, the division of responsibilities and the suitability of sand nourishment as a coastal protection measure. The narrative competition is considered reflective of past institutional discussions and ongoing institutional work in coastal management in Scania, confirming that narratives are used as sense-making and meaning-giving devices in institutional discussions.

**Keywords:** institutional work; narratives; case study; coastal management; beach nourishment

### 1. Introduction

Although institutions are recognised and studied in several domains (such as economics, political science, sociology and environmental governance) and the published literature on institutional theory, in particular, has grown enormously since the 1970s, understanding and explaining institutional change remains a challenge (Beunen and Patterson 2017).<sup>1</sup> From an organisational theory perspective, institutions can be defined as “cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour” (Scott 1995, 33). By nature, institutions and the actions (of actors) are strongly related. Lawrence, Suddaby, and Leca (2009) conceptualise the relations as discursive, in which “institutions provide templates for action, as well as regulative mechanisms that enforce these templates, and action affects those templates and regulative mechanisms” (7). As explained by Beunen and Patterson (2017), the majority of research efforts focus on institutional structures in seeking to explain organisational behaviour and actions. A more recent lens is that of *institutional work*, which pays attention to the other side of the relations: the influence of the actions of actors on the institutions themselves. Lawrence, Suddaby, and Leca (2009) conceptualise actors as carrying out three types of institutional work through their actions: creating,

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maintaining and disrupting institutions. These three verbs describe three categories of the actions of actors as they try to influence the formal and informal rules and norms of the system of which they are part: actors try to introduce new rules or norms of behaviour, try to sustain existing ones or try to alter others drastically. These attempts do not necessarily lead to institutional change. However, the concept of institutional work also pays attention to the persistent nature of the efforts of actors.

This special issue of the *Journal of Environmental Planning and Management* explores the concept of institutional work to improve the understanding and explanation of institutional change in environmental governance. In this paper, narratives are used as a discursive device to study how the institutional discussion is experienced by the actors involved. In using the term 'discursive' here, we explicitly adopt the view of Lawrence, Suddaby, and Leca (2009) of institutional work as a discussion between actors aiming to create, maintain and disrupt institutions. Furthermore, our choice to use narratives in studying the relations between the actions of actors and institutions is consistent with Czarniawska (1998) and Zilber (2009), among others, who consider narratives as interesting discursive devices for investigating taken-for-granted structures, practices and beliefs in a specific field. Narratives are considered particularly interesting because they combine reality, experience, beliefs, behaviour, interpretation and interests and because they are often collective creations. This implies that narratives can reflect thinking about institutions. However, Van Assche, Beunen, and Duineveld (2014, referring to more authors) have observed that narratives can also produce institutions. Zilber (2009) takes this a step further, claiming that narratives embody institutions, and institutions embody narratives.

Institutions are broadly acknowledged as a key element in the management of natural resources (Ostrom 1990; Ariza *et al.* 2014). In the coastal management literature, stakeholder perspectives are studied to deepen the understanding of the role of institutions. For instance, Ariza *et al.* (2014) investigated stakeholder perceptions regarding beach management in Florida and Prati *et al.* (2016) studied the perceptions of stakeholders on beach nourishment of an Adriatic coastal region. Lozoya, Sardá, and Jiménez (2014) focused their study on user expectations along the Spanish Costa Brava, while Schmidt *et al.* (2013) analysed the development of coastal policies and institutions in Portugal. In arguing for a next step in the staged, adaptive governance processes in Portugal in the form of a creative dialogue between coastal scientists, climate change scientists and the coastal community, Schmidt *et al.* demonstrated the desire of actors to influence the institutions in their environmental governance context. The field of coastal management, therefore, promises fruitful ground for a study of the concept of institutional work. Accordingly, in this paper, we explore the capacity of a narrative approach to provide insights on institutional work, using a case study from the coast of Scania, Sweden.

As emphasised by Beunen and Patterson (2017), institutional change always takes place in a particular governance context, with unique configurations of actors and existing institutions. This context-dependency makes the choice of a case study approach appropriate in studying institutional work (c.f. Yin 2003). We use a single-case study, namely the institutional discussion around the development of a beach nourishment programme to counter coastal erosion in Scania, to explore the relations between narratives, institutional change and institutional work.

In Sweden, sandy beaches are located in the southern part of the country and the erosion of these beaches has only recently been considered a growing problem. In the present governance structure, coastal management is not an established policy sector.

Interventions to protect the (common) coast form a component of spatial planning for which the municipalities are responsible. The municipality that plans a coastal intervention is also financially responsible for the intervention. There is no formal national or regional institutional structure specifically for (integrated) coastal management. Accordingly, the broader institutional environment in which a municipality needs to realise a coastal intervention is very complex. The environmental laws and related procedures, as well as the administrative entities and national agencies that each have a stake (thereby involving a variety of preferences, norms and beliefs) are overwhelming in number. The main responsibilities of the relevant administrative entities and agencies are detailed in the case description (Section 3.2). Ystad is the Scanian municipality that has the most experience in coastal management (Bontje *et al.* 2016; Larson and Hanson 2013). The people working for, and with, Ystad and other coastal municipalities feel entangled in a super-abundance of institutions and complain about a lack of support from the national level as well as a lack of clarity regarding the responsibilities for coastal erosion. Ystad's nourishment programme, which started in 2011, holds a prominent position in the coastal management discussion in Scania. This makes it a unique case for studying an institutional discussion that can help to incorporate narratives into the application of an institutional work perspective.

In Section 2 we deepen the theoretical understanding of the potential relations between narratives, institutional change and institutional work. Section 3 details the method adopted, describing the narrative method (Section 3.1) and the case study (Section 3.2). After setting the stage from both a theoretical and methodological perspective, we describe the results of the application of the narrative method to the Swedish case (Section 4). In Section 5 we discuss how the identified competing narratives show forms of institutional work and we highlight the sense-making and meaning-giving roles of narratives in the institutional discussions. The paper ends with conclusions on the capacity of the narrative method to contribute insights on institutional work.

## **2. Conceptualising the relation between narratives, institutional change and institutional work**

Following Czarniawska (1998), narratives can be defined as conceptual structures that can render discursive materials by providing a temporal, spatial and emotional order. Since the development of the vocal faculty, people tell each other narratives, presenting events and squeezing aspects of the world into narrative form (Cobley 2013). Aristotle considered a narrative as a course of action that has a beginning (in which the protagonist usually faces a challenge or puzzle), a middle (with the development of events) and an end (e.g. puzzle solved) (Wagenaar 2011). Or, as Riessman (2008) claimed, narratives flow from orientation to complication and resolution. Here, we highlight two dimensions of narratives.

First, narratives are produced at different levels. Narratives are used by individuals to make sense of experiences. Using this "narrative understanding" (Gee 1985), people organise "events and human actions into a whole, thereby attributing significance to individual actions and events according to their effect on the whole" (Polkinghorne 1988, 18). In addition to the narrative understanding that takes place in individuals' minds, narratives also emerge within social groups (Wagenaar 2011; Zilber 2009), constructing and reflecting the thoughts, beliefs, values, affects and passions within these social groups.

Second, an analytical distinction can be made between what we define here as the *sense-making* and *meaning-giving* functions of narratives. The *sense-making function* has already been mentioned; people make sense of situations by trying to integrate them as events into a plot, by “which it becomes understandable in relation to the context what has happened” (Czarniawska 1998). But narratives can also actively be used by people to frame a policy problem (Stone 2002) or as a call for action (e.g. Throgmorton 1996; Sandercock 2003). Used in this way, narratives are political or discursive devices (c.f. Aukes, Lulofs, and Bressers 2017). We term this active use of narratives the *meaning-giving role* of narratives. In summary, where meaning-giving encompasses an active, influential use of narratives by actors, sense-making reflects the internally oriented, essentially human action of creating understanding. This sharp analytical distinction does not mean that the actions of sense-making and meaning-giving cannot be interwoven for particular actors.

To connect the concept of narratives with institutional change and institutional work, we build further on the discursive relations between institutions and actions, as described by Lawrence, Suddaby, and Leca (2009) (Figure 1(a)). Whereas the majority of institutional research focuses on the influence of institutions on the actions of actors (the upper arrow in Figure 1(a)), institutional work focuses on the influence of the actions of actors on institutions.

Within institutional work, a lot of attention has been paid to the role of institutional entrepreneurs, who invest resources in the hope of creating new institutions or transforming existing ones (Battilana, Leca, and Boxenbaum 2009). Lawrence, Suddaby,

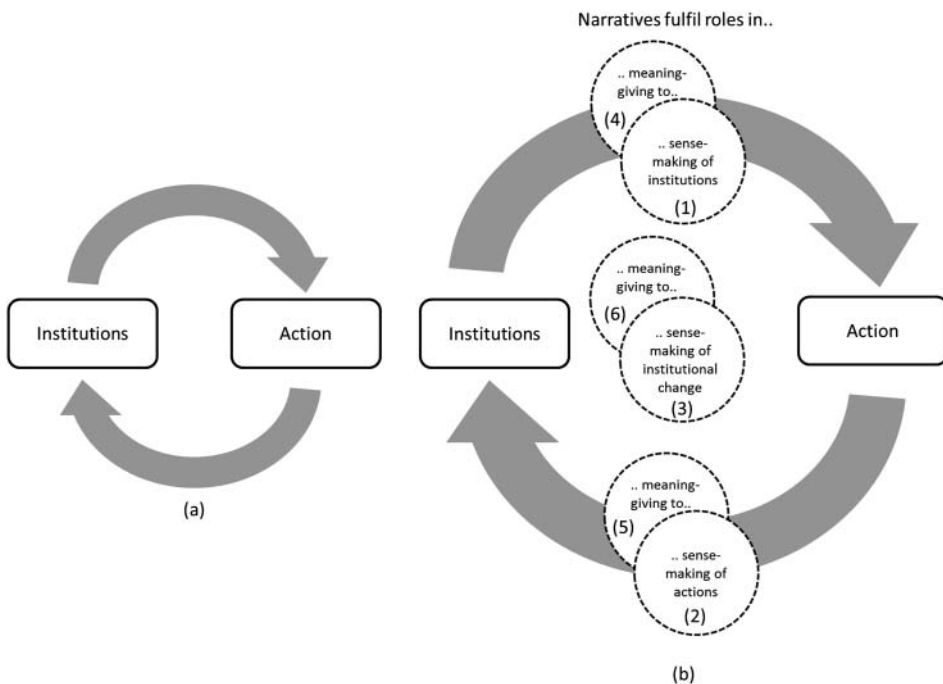


Figure 1. The recursive relationship between institutions and action (Lawrence, Suddaby, and Leca 2009, 7) (a) and the different sense-making and meaning-giving roles that narratives fulfil in these dynamics (b).

and Leca (2009) emphasise that the focus of institutional work should be on activities and intentions rather than on their accomplishment, so that research goes beyond highlighting “heroic institutional entrepreneurs creating new institutions.” By connecting the characteristics of narratives to the relations between institutions and action, we demonstrate that a narrative approach can facilitate a focus on activities and intentions in institutional work.

First, we return to the sense-making role of narratives. We assume that narratives fulfil such sense-making roles when people seek to understand and make sense of institutions (1 in Figure 1(b)), actions (2 in Figure 1(b)) and institutional change (3 in Figure 1(b)). Based on this assumption, we expect that surfacing the narratives in the Scanian coastal community will, in turn, reveal the retrospective sense-making on the institutions and “the institutional work that needed to be done.”

Second, narratives can be used as meaning-giving devices in institutional discussions, for example, by framing the problem and calling for action (4 in Figure 1(b)). They can be used influentially and actively in institutional work, for instance in maintaining institutions (5 in Figure 1(b)), as shown by Zilber (2009). She observes that, within an organisation, narratives help in constructing and confirming the identity of that organisation, and in doing so, they function as devices to maintain organisational institutions.

Finally, we refer to the work of Van Assche, Beunen, and Duineveld (2012) and Beunen, Assche, and Duineveld (2013) which indicates that narratives also play a role in the success or failure of policy. Success and failure are non-neutral terms; they are defined in discourses (Van Assche, Beunen, and Duineveld 2012 in line with Foucault). We assume that this claim is valid for the success experiences of change in general and thus also for success experiences of institutional change. According to Van Assche, Beunen, and Duineveld (2012), narratives of success (or failure) can be used as devices in spreading the experiences of success (6 in Figure 1(b)). The potential for spreading narratives of success also depends on the configuration of the discursive environment. Because narratives can render discursive structures (Hajer 1995; Van Assche, Beunen, and Duineveld 2014), we expect that the narratives within a policy community will provide insights into the characteristics and configuration of the discursive environment.

Figure 1(b) depicts the relations between institutions, actions and narratives, providing a structured overview of the theoretical relations that we will now examine empirically.

### **3. Research approach**

The narrative approach to the empirical study is described next, followed by an introduction to Ystad’s beach nourishment in which the programme and its actor-network are described.

#### **3.1. Method**

The discussions about Ystad’s beach nourishment programme started before 2000 and are still ongoing even though the programme is now in its implementation phase.

The main data source for the case study is interviews, complemented by a document study of relevant articles, reports and policy documents (for triangulation purposes, c.f. Yin 2003). The identified actors were assessed for their distribution among the actor-network and their suitability on the grounds of their accessibility to the researchers.

Twenty-three interviews were conducted in two rounds (Appendix). The majority of the interviewees represent different actors within coastal management in Scania, working at different administrative levels: the municipal, regional and national level. Because of travelling distances and time constraints, interviews with employees of national agencies were the most difficult to organise. However, there was still time to interview five employees of national agencies.

The first round of interviews was conducted by Wang (2015). His semi-structured explorative interviews focused on the experiences of the actors in relation to the nourishment programme. Each interview was transcribed and the interviewees were asked to verify the accuracy of the transcripts after they had received them by email. After the first round of interviews and the document study, it was possible to compose a timeline for the nourishment programme and its related discussions.

Adopting a 'narrative lens', the transcripts were then analysed qualitatively, using Atlas.ti software. All potential narrative elements were encoded using Initial Coding (Saldaña 2009). This implies that text fragments were labelled with codes that reflect their content. The codes and their quotations were analysed for variations, contrasts and similarities, leading to several narrative categories. The recursive movement from data to narratives (Polkinghorne 1995) was inspired by the narrative-elements of Riessman (2008): narratives were composed using an 'orientation-complication-resolution' outline. The narratives were then presented to stakeholders (c.f. Patton 1987) in the second round of interviews to establish their validity.

In the second round of interviews, conducted by the chief author, four respondents from the first round were interviewed again. Using the same interview design for each interview, an additional 10 actors were interviewed. The interviews were designed in such a way that the respondents could reflect on the narratives indicating whether they recognised them, how they related the narratives to each other and to the coastal community and how the narratives developed over time. After this round of interviews, transcriptions were again prepared and interviewees were asked to verify the accuracy of the transcripts by email.

The transcripts were coded to indicate the recognition of the narratives by the interviewees, the interviewees' personal attachments to these narratives and to establish to which actors the interviewees attributed each narrative. In addition, we coded how interviewees viewed the relations between the narratives using the labels 'competition' for quotes of how respondents relate to the narratives, 'change' for quotes of alterations in these relations and 'action' for quotes in which respondents refer to the actions of actors. Finally, the information was organised so that an overview of the perceptions of the narrative competition and its dynamics could be obtained. More details of the method are provided in Bontje (2017).

### ***3.2. Case description: Ystad's beach nourishment programme in its institutional context***

There are two major erosion spots in the Municipality of Ystad; Ystad Sandskog and Löderups Strandbad, with a net export of sand from both bights (Figure 2). The beaches are considered important for inhabitants and visitors to the municipality and for the local economy (Municipality of Ystad and Erosion Damage Centre 2005). A portion of the visitors are owners of approximately 1,000 holiday homes located close to the beaches (Statistics Sweden 2010).



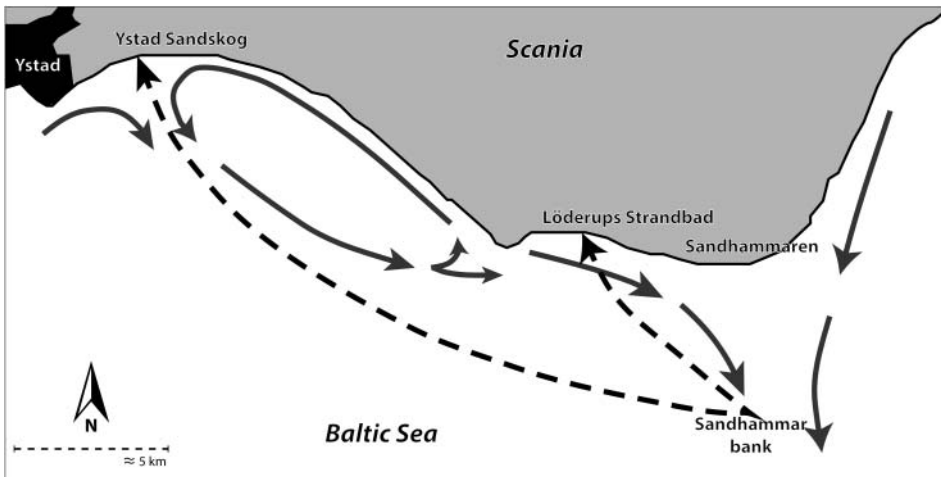


Figure 2. The nourishment sites of Ystad's nourishment programme. The continuous arrows indicate the sand transport patterns on this part of the Scanian coast and the dashed arrows indicate the intervention. Sand is taken from the Sandhammar bank and the beaches at Ystad Sandskog and Löderups Strandbad are nourished. Source: Map adapted from Almström and Hanson (2013) with permission for publication.

Hydraulic structures such as seawalls, revetments and groynes were the norm in the past, but have not prevented further erosion at these spots. On the advice of a professor in coastal engineering, the municipality started to opt for so-called soft-protection measures; making use of natural materials (such as sand) rather than 'hard' concrete, to improve the sand balance (Municipality of Ystad 2008). The main objective of Ystad's programme is to counter beach erosion by improving the sand balance.

The programme involved four rounds of nourishment in which 340,000 m<sup>3</sup> of sand was to be distributed to the beaches. 100,000 m<sup>3</sup> of sand was planned for the first round in 2011 and the residual amount was to be divided equally over the following three rounds (Swedish Geological Survey 2011). The duration of the programme is from 2011 to 2021, when the permit to extract sand will expire. The sand extraction zone is an accumulation area, near the Sandhammar bank in the Baltic Sea (Figure 2). This sand has the same composition as the sand on the local beaches.

Under the Swedish governance system, the Municipality of Ystad is the leader in applying for permits and realising the programme. The municipality therefore had to deal with many government-related stakeholders, such as ministries, national agencies and regional bodies.

Although the municipalities have a strong position regarding spatial planning, spatial plans need to be approved by the County Administrative Boards (CABs), in this case the CAB for Scania. The board represents the national government and needs to check whether the spatial plans for the municipality cohere with national interests. A national regulation on climate adaptation has assigned the CAB a stronger role in coordinating climate adaptation within the region (Storbjörk and Ugglå 2014, based on Government Offices 2009) increasing the stake of the CAB for Scania in coastal management.

The elected Regional Council of Scania (RCoS) is another political-administrative body that plays a role. The RCoS has different responsibilities to those of the CAB. Some of their interests, however, such as regional development, make the RCoS a stakeholder in coastal management issues.

During the permitting procedures, the municipality encountered more stakeholders. The Environmental Code states that a permit from the Land and Environment Court is necessary for beach nourishment. This permitting process has an open design: all agencies and administrative bodies can advise during the procedure.

A permit related to the Continental Shelf act is also needed for extracting sand from the sea. These permits are issued by the Geological Survey of Sweden (SGU) that can also ask the higher administrative levels (ministries) to decide. Within this permitting procedure, national agencies and administrative bodies can advise regarding the request.

In addition to their reviewing activities during the permitting procedures, several agencies are also directly involved in erosion issues. The Swedish Civil Contingencies Agency (MSB) provides some financial support for projects that counter river erosion, but – to the regret of the Scanian municipalities – not for projects countering coastal erosion. The Swedish Agency for Marine and Water Management (SwAM) is in charge of marine spatial planning, including preventing conflicts about marine resources (SwAM 2013).

In short, a Scanian coastal municipality such as Ystad carries most of the responsibility for coastal management in their area, but the procedures and activities associated with a nourishment programme form a complex institutional context. Any deviations from standard procedures therefore require institutional work.

#### **4. Case study results**

Analysis of the first interviews and documents yielded a timeline, sketching the boundaries of the institutional discussion regarding the Ystad's beach nourishment programme and indicating that institutional work was taking place (Section 4.1). Using the narrative method, we brought to light active narratives about Ystad's beach nourishment programme within the Scanian coastal management institutional context (Section 4.2). Interviewees from the coastal management community then reflected upon the narratives, following which the narratives were analysed further for instances of institutional work (Sections 4.3–4.4).

##### ***4.1. A timeline of a process that indicates institutional work***

The Municipality of Ystad had realised hard defence structures in the past, but started to think about beach nourishment as an alternative engineering solution towards the end of the twentieth century. They initiated the 'Erosion Damage Centre' (EDC) thereby creating new institutional interactions. Established in 1994, the EDC consists of a group of Scanian municipalities and other parties that work together by sharing experiences and collectively lobbying for attention for coastal erosion within the higher political and administrative levels (Municipality of Ystad and Erosion Damage Centre 2005). These first plans for a beach nourishment programme, and the collaboration between municipalities, can be considered as the inception of minor institutional change within the Swedish coastal management community (Figure 3).

When the municipality applied for the permits needed for a beach nourishment programme, the permit by the Land and Environment court was granted in 2001, but the application for sand extraction at the SGU proved far more difficult. The application of the municipality was the first request for sand extraction from the seabed in around 25 years. After two rejections, SGU finally granted the permit 10 years later, in 2011, providing room for new institutional ways of managing the coast.

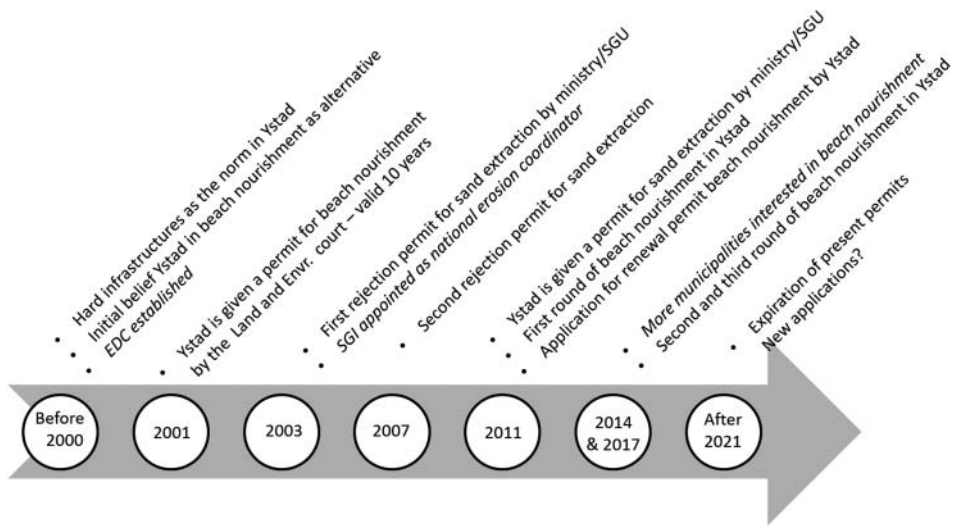


Figure 3. A brief timeline from the development of Ystad's nourishment programme, adapted from Wang (2015) with permission for publication. It also shows the main developments around the nourishment discussion in the region (in italics).

Among the reviewers of the applications for the permits were many national agencies,<sup>2</sup> providing diverse forms of feedback on the applications for the nourishment and the sand extraction. Examples of these agencies, in addition to the MSB and SwAM, are the Swedish Meteorological and Hydrological Institute (SMHI), the Environmental Protection Agency (EPA), the Swedish National Board of Housing, Building and Planning (Boverket) and the Swedish Geotechnical Institute (SGI). To the regret of the initiators, the many agencies aired different opinions about the nourishment programme. The municipality was dependent on the (different) ideas and opinions at the regional and national level, making the approval of the sand extraction permit a long and difficult process. In short, many of the agencies initially acted to maintain existing coastal management institutions, but finally conceded the room for a new approach.

In the meantime, the lobby for attention for the erosion problem led to the appointment of the SGI as 'national erosion coordinator' in 2003, a new institutional arrangement (further discussed in Section 4.3). Recently, more coastal municipalities have become interested in beach nourishment, indicating that the discussions on beach nourishment will continue.

#### 4.2. Narratives about Ystad's beach nourishment programme

The narratives surfaced from the interview transcripts are presented in Table 1 as Ystad's nourishment narratives (YNN) 1 till 4. The titles of the narratives and accompanying visualisations were presented to interviewees during the second round of interviews. The different narratives are rooted in many of the transcripts (indicating that many interviewees are aware of the different ideas and opinions within the coastal management field), but row 2 in Table 1 indicates in which transcripts the narratives are primarily

Table 1. The four narratives as distinguished from the narrative analysis of the Ystad interview transcripts.

Title				
The non-acknowledged national problem (YNN1)	<p>Orientation: "Skåne has suffered coastal erosion for a long time now. Beaches have disappeared, dunes are damaged and houses slump into the sea. Swedish territory - with its infrastructure and buildings - is threatened. However, "Sandy Skåne" is located far from the national government in "Rocky Stockholm" and the responsibilities are divided and unclear. It seems that no-one wants to take responsibility for this costly problem. This means that the municipalities in Skåne, for instance Ystad, need to protect the coastline themselves.</p> <p>Complication: However, climate change and accompanying sea-level-rise</p>	<p>The non-urgent local problem (YNN2)</p> <p>Orientation: "Municipalities of Sweden have the authority and the responsibility regarding physical planning. They have at their disposal several planning instruments that allow them to plan and develop the municipal territory. In other words; they can intervene in the physical environment.</p> <p>Complication: Municipalities in the Skåne region face the challenge of coastal erosion. Climate change and accompanying sea-level-rise make this an issue, both now and in the future.</p> <p>Resolution: Because of their strong position in relation to planning and interventions, it is the responsibility of the municipalities to deal with the problem. For example the</p>	<p>A (potential) harmful unknown that threatens the marine environment (YNN3)</p> <p>Orientation: "In Sweden, the environment is considered very important. Protection of the environment is established in the Environmental Code that aims to guarantee a healthy and sound environment for future generations. It prescribes handling the environment with care and taking precautionary measures when needed, so that the valuable environments are maintained into the future.</p> <p>Complication: A municipality in Skåne region would like to carry out a beach nourishment project to combat the process of erosion. That idea implies extraction of sand from the seafloor. This can be harmful for the marine life around the extraction area, as was seen</p>	<p>A nature friendly and flexible solution (YNN4)</p> <p>Orientation: "Skåne region suffers coastal erosion and Ystad is one of the places that faces this problem since the 19th century. Over the last decades the municipalities have carried out several projects to counter erosion and to protect their beaches, dunes, infrastructure and buildings. Nowadays, we know that some hard infrastructures have negative side-effects or can even increase erosion. Soft solutions, like using sand, are seen as nature friendly ways of encountering erosion in many areas of the world. Adding sand to the coastal line is also a flexible solution; you can stop doing it whenever you want. Ystad also wanted to carry out a</p>

(continued)

<p>make the situation worse: the problem is more widespread and the urgency increases. More and more assets are vulnerable to erosion. The municipalities are in need of support from the national government.</p> <p>Resolution: Persisting with ideas and projects to protect the coast, Ystad and the other municipalities seek to cooperate. They clarify the problem, explain the need for research on the coastal system, and identify potential solutions. Finally, the national government will come to realise that coastal erosion is a national problem and will then support the regions that suffer from it."</p>	<p>comprehensive plan is a planning instrument that they can use to come up with an integrated approach to deal with sea-level-rise. Municipalities can consider authorising planned retreat (of the coastline) or different interventions to protect economically interesting beaches. They – the municipalities – are equipped to deal with these issues. The national government, in the meantime, works on issues of national interest, or at the national scale, or on issues that are particularly dangerous."</p>	<p>for example on the Danish side of the Oresund channel. It is not desirable that other municipalities become interested in such interventions, also simply because the amount of sand in the Swedish seas is limited.</p> <p>Resolution: We have to exercise care in providing permits for these kinds of projects, and we must not encourage other municipalities to think of sand nourishment. Only if we persist in being careful, can we maintain the quality of our natural environments."</p>	<p>beach nourishment using sand from a marine area where the sand from the region naturally accumulates. The sand is re-used by closing the sand transport cycle. In addition, no rare species inhabit the extraction area.</p> <p>Complication: In spite of all advantages of using sand to counter erosion, the permitting process turned out to be very difficult. That is due to the novelty of the project. Some people in the process were uncertain and didn't take it upon themselves to make a positive decision.</p> <p>Resolution: Although the municipality received a few "no's" during in the permitting process, they persisted. They kept explaining the idea to different organisations and institutions. Realising the beach nourishment pilot project at Ystad and showing positive results will open doors for the more flexible sandy solutions."</p>
<p>(2) Primary rooted in transcripts of interviewees with:</p>	<p>Local and regional actors</p>	<p>National and regional actors</p>	<p>Local actors (such as Municipality of Ystad and the coastal professor)</p>
<p>(3) Primary associated with:</p>	<p>Local and regional governmental bodies</p>	<p>National government and national agencies</p>	<p>Municipality of Ystad, a coastal professor and SGI</p>

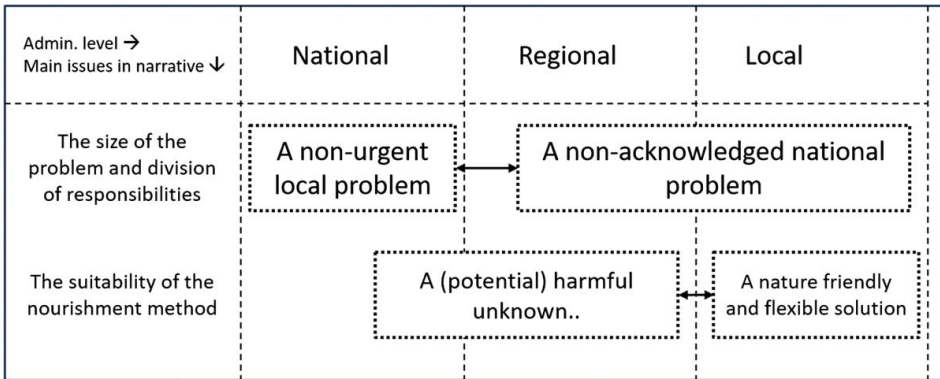


Figure 4. Schematic of the relations between the narratives within the discussion of Ystad's nourishment programme. Although there are synergies between the narratives, they also compete, mainly between administrative levels, as indicated by the arrows.

rooted. In the second round of interviews, all interviewees showed recognition (to differing degrees) when each narrative was presented. Most of the interviewees spontaneously connected the narratives with several organisations. Others were specifically requested to do this. Row 3 of Table 1 shows with which organisation each narrative is primarily associated.

Table 1 contains two 'pairs' of narratives (Figure 4). The first pair ("the non-acknowledged national problem" vs. "the non-urgent local problem") is structured around the questions of how big the problem of coastal erosion is and how the responsibility should be divided. On these issues, the regional bodies seem to be positioned in the middle between the local actors, strongly believing that erosion is part of a national problem and that new supportive institutions are required (supporting "the non-acknowledged national problem") and the national actors who wanted to maintain the present governance structures (supporting "the non-urgent local problem"). Although there are synergies between the narratives, such as recognition of the erosion problem and that this problem will grow in the future, this pair of narratives reveals an institutional conflict about disrupting the existing institutions for coastal management and creating new ones, versus maintaining the present formal institutions.

The second pair of narratives focuses on the method of beach nourishment: are nourishments a complication ("the harmful unknown") or resolution ("a nature friendly and flexible solution")? This represents a discussion in which the CAB of Scania in particular ("the harmful unknown") and the Municipality of Ystad ("a nature friendly and flexible solution") take the strongest positions. On the national level, there were several doubts about the method. During the permitting process, the EPA and the SwAM were uncertain about the method. The SGI, however, can be seen as a supporter of beach nourishment methods, as they have contributed to a nourishment handbook (Hanson, Rydell, and Andersson 2006). This method-conflict is related to different beliefs and values of the actors, making it a conflict rooted in the normative pillar of the institutional environment. People who are critical or doubtful about the method of beach nourishment and contributed to the "harmful unknown" narrative generally favour maintaining existing institutions and advocate a strategy of coastal retreat: let the coastline erode wherever possible. Or, an even stronger version: let the coastline erode, the people retreat, and (re)move the infrastructure. People supportive of beach nourishment wanted

to remove obstacles to their “nature-friendly and flexible solution”, by disrupting the conservative institutions.

These types of discussions are taking place at several locations around the world, such as in New Zealand and the United Kingdom (Gesing 2016). Cooper and McKenna (2008a) stated: “The term ‘coastal protection’ means different things to different people.” (315) and the narratives “the harmful unknown” and “a nature friendly and flexible solution” as distilled in this case study exemplify this type of discussion.

#### **4.3. *The two narratives about the size of the problem and the division of responsibilities***

While reflecting on the dynamics in the narrative competition about the size of the problem and the division of responsibilities regarding coastal erosion (“the non-acknowledged national problem” vs. “the non-urgent local problem”), the interviewees referred to several efforts that were made by both the local and national actors. The local actors explored a few routes to get the problem acknowledged at higher administrative and political levels, namely:

- The King, crown prince, ministers and parliament members were all invited to visit Ystad. This may have increased the awareness in Stockholm, but it did not lead to changes in the institutional system. For example, local actors received honours from the King for their efforts for the region. But, – since the King of Sweden is not part of the government – acknowledgement by the King did not change the formal institutions, instead they were maintained.
- Another way to move the issue through governmental layers could be via regional politics, i.e. via politicians of the RCoS, to the members of parliament in Stockholm. However, people were aware that it takes time to settle in and that a change of political chairmanship could hamper any progress made via this route (respondent B). Also here, the existing institutions were maintained.
- Additional efforts to create new institutions by forming a critical mass of informed advocates were not successful. For instance, lobbying the former governor and trying to organise a meeting in 2014 between local actors and representatives in the national parliament to present and discuss storm damage along the Scanian coast.
- Advocates lobbying for acknowledgement also tried to connect the coastal erosion issue to the broader theme of climate change. From a narrow perspective, erosion could be considered “a problem for the municipality that is losing its beach.” From a broader, climate change perspective, the erosion problem could be considered as an impact of climate change, potentially influencing more Swedish municipalities in the future. The legitimacy of this perspective, however, was questioned by people who emphasised that erosion is, in the first place, a natural process (for example respondent U). The broad perspective was also undermined further by the actors who emphasised that the erosion problems are not only the problem of the municipality, but also the responsibility of house-owners. This discussion is related to the social justice aspects of coastal erosion management, as discussed by Cooper and McKenna (2008b). They argue that the case for intervention is the strongest at the smallest scales. Indeed, the advocates lobbying for acknowledgement of the problem were active at the local scale. Interestingly, by including climate change, these ‘local’ advocates used arguments that refer to larger spatial and temporal scales, trying to link their issue to institutional arrangements at the national level.

The advocates lobbying for acknowledgement also pointed to the overabundance of national agencies and other governmental organisations that somehow have a stake (responsibility or expertise) in the coastal erosion issue. This lobby resulted in the appointment of SGI as national erosion coordinator, creating new institutions and institutional interactions. In its role as erosion coordinator, SGI aims to improve knowledge and expertise among the different actors by organising yearly coastal meetings (a platform where national agencies, researchers and local and regional actors can meet and discuss), coordinating a network of agencies for coastal erosion, and participating in a broader network National Platform for disaster risk reduction, coordinated by the MSB.

Despite appointing a national coordinator, the national government seems to maintain its institutional position as portrayed in “the non-urgent local problem”, emphasising the existing leadership role and accompanying duties of municipalities in regard to spatial planning.

#### **4.4. The two narratives about the suitability of the method**

In the competition between the “potential harmful unknown” and “nature friendly and flexible solution”, the advocates for using beach nourishment methods to counter erosion, were working to ‘educate’ politicians, public servants and the public (respondents A and N). A process that, in their view, takes root slowly. Most of this institutional work aiming to influence coastal management institutions is done by a small group of advocates, with a professor in coastal engineering often in the lead:

- Once the professor – an authority on coastal processes and erosion – realised that ‘hard’ structures alone would not be enough to counter erosion and that sand could be helpful, he became the first person communicating and advocating this idea (respondent N).
- He gave numerous lectures to politicians, public servants and the public, which were effective in influencing Ystad’s politicians to embrace the new ideas, according to other interviewees.
- The professor together with SGI published a “handbook on nourishment” to inform practice guidelines.

When the permitting process for Ystad’s nourishment became very troublesome, a group of ‘advocates,’ comprising people from the municipality and consultants, went to Stockholm to inform different ministries and agencies, such as the EPA. They attempted to influence existing normative institutions by explaining the technical material and connecting this to the interests of the marine biologists working at EPA.

The advocacy of the professor and the municipality has received support and the group of advocates has grown amongst the politicians, officials and entrepreneurs based in Ystad municipality. One of the results of this influence strategy is that actors in favour of using the beach nourishment method (such as respondents A, C, N, F and W) share the same type of metaphors in explaining that every type of measure needs maintenance: “*painting a house* and *renovating a road* are activities that always need to be repeated”, they say “and no-one is questioning that.”

On the other hand, there are also people working on spreading “the (potential) harmful unknown” narrative.

- The Danish extraction of sand in the Øresund, a strait between Denmark and Sweden, has caused negative feelings about sand extractions. In 2014, when



Denmark issued permits for more sand extraction from the Øresund – already affected by earlier extractions – a protest was organised by Greenpeace, the World Wildlife Fund, fishermen and others (Helsingborgs Dagblad 2014). The media attention was high and interviewees think that this discussion will influence the discussion about the nourishment plans for the municipality of Ängelholm, which is situated not far from the Øresund region.

- Respondents D and Q mentioned a radio interview that ended in a conflict between an advocate and opponent of beach nourishment.
- The biggest fear is the potential impact on Swedish waters, such as the Baltic Sea. This sea is considered very vulnerable compared with the North Sea (respondents K, L and S). The Swedish people care about the water and sea as reflected in the establishment of the SwAM in 2011, a government institute focusing on exactly these issues.

Each of these examples represents the institutional work of maintaining existing institutions.

Although realising the nourishment in Ystad has helped in acknowledging beach nourishment as an accepted method, Swedish people remain suspicious (as formulated by A). Looking at “a harmful unknown” and “a nature friendly and flexible solution”, it is not surprising that these two narratives keep each other in balance: they have different beliefs regarding ‘nature’ and ‘nature friendly.’ The supporters of “a nature friendly and flexible solution” would like to explore further possibilities that nourishments can offer and consider the Environmental Code – with its precautionary principle – as a restrictive institution, while supporters of “a harmful unknown” are backed by the Environmental Code. These ‘cautious actors’ emphasise the need for more knowledge about the environmental effects (respondents K, L, T, U and V). There is a knowledge-deadlock here, stimulating institutional work on the part of the people involved. The advocates of the nourishments emphasise that there is much information available about the effects of beach nourishment, but the opponents argue that this information is not specific to the special (and vulnerable) circumstances in the Baltic Sea. The advocates argue, in turn, that new projects will increase the knowledge base for the Baltic region, while the opponents of the nourishments (mainly opponents of sand extraction) do not want to realise projects for which the effects are not known.

Respondent Q doubts whether ‘more knowledge’ can bridge the gap between the two camps. We concur, because the knowledge-deadlock is based on a classical clash between ‘environmentalists’ and ‘engineers.’ Indeed, “a harmful unknown” has a relatively strong basis in these governmental organisations which, according to N, influences the starting position of coastal engineering solutions.

But the two narratives are not always perceived as competing and do not always negate each other. According to two local policy officials (D and O), the two narratives needed each other. The critical undertone of the “harmful unknown” forced the municipality, as initiator of the nourishment programme, to work carefully.

Many interviewees thought that a “nature friendly and flexible solution” will gain a foothold and engender the institutional change necessary to accommodate this. Several interviewees noted that the main advocate of “a harmful unknown” seemed to have changed his mind in the last couple of years, by acknowledging that nourishment can be a suitable solution in a few places. People from the CAB continue to emphasise that this solution is not universally suitable and that caution is required, continuing to maintain the existing precautionary approach.

## 5. Discussion

The narrative method applied to the Scanian case has revealed a narrative competition involving four narratives about Ystad's beach nourishment programme in the Swedish coastal policy community (Section 4.2). The competing narratives exemplify polarised standpoints recognisable from other coastal management studies (for example Ariza *et al.* 2014). By analysing the narratives (Sections 4.3 and 4.4), we have deepened insights on the institutional work undertaken in the Ystad sand nourishment case (Section 5.1), and have provided input to the discussion about the roles of narratives in institutional work and institutional change (Section 5.2).

### 5.1. *The competing narratives and institutional work*

First, we return to the contentions about the size of the erosion problem and the division of responsibilities. Actors at the local and regional level are disappointed by the effects of their efforts, indicating that their efforts are forms of institutional work. The organisation of site visits, the lectures, the political lobbying and the attempts to connect coastal erosion to climate change can be classified as institutional work that intends to introduce and reinforce (new) beliefs at higher governmental levels. These actions can be viewed as attempts *to create* institutions. The reluctance of the national government to acknowledge the problem and engage more intensively, pointing instead to the present governance structure, is a clear example of *maintaining institutions*. The institutional work from both sides causes an impasse; the municipalities want the issue acknowledged and desire support, which, according to some interviewees, means that they want financial resources. However, the national government does not agree that coastal erosion is a national governmental responsibility, nor do they want to finance protective measures. Gradually, some supportive initiatives have been started at the regional level, but at the same time, the municipalities (some more than others) are reluctant to receive guidance from a higher governmental level, manifesting, in their turn, a form of *institutional maintenance*.

In the discussion on the suitability of the beach nourishment method, we identify institutional work on the part of both the cautious actors and the advocates of nourishment. The cautious actors appeal to the Swedish precautionary tradition regarding nature and the environment (*maintaining institutions*). The advocates prefer a disruption, or at least transformation of the strict environmental regulation concerning the beach nourishment method – which they view as relatively environmentally friendly (*disrupting institutions*). Now the Ystad programme is running, its positive (and non-harmful) impact can be promoted by the advocates. Although people experienced this as supportive of the “nature friendly and flexible solution” narrative and also observed a mind shift on the part of one of the strongest opponents, the conflict is still ongoing. There is a knowledge-deadlock, caused by the different belief systems of people with an ‘ecological’ and an ‘engineering’ mindset, stimulating further institutional work.

### 5.2. *Reflecting on the relation between narratives, institutional change and institutional work*

In this section, we distinguish both the sense-making and meaning-giving activities related to the interactions between institutions and actions, referring to Figure 1(b).

During the second round of interviews, the narratives were presented to the interviewees, and were recognised by all interviewees. When a narrative was in line with how they themselves made sense of the institutional situation, they often spontaneously reacted with “Yes that is true!” or “Yes. What can I add to that?” (1 in Figure 1(b)). The interviewees could also allocate the narratives to several actors, as exemplified in the reaction “And this one, the harmful one, is the County Administrative Board, obviously.” Such reactions reveal that the narratives are also recognised as the meaning-giving narratives and influence strategies of other actors in the field of coastal management (4 in Figure 1(b)).

The competition between the narratives (as described in Sections 4.3 and 4.4) includes several ‘storytelling’ activities, such as ‘educating the people’ and framing ‘the problem as part of climate change’ (4 and 5 in Figure 1(b)). However, the sense-making of actions (2 in Figure 1(b)) was less prevalent in the case study. Only components of the four narratives contained sense-making of actions. For instance, “A nature friendly and flexible solution” contains the fragment “some people in the process were uncertain and didn’t take it upon themselves to make a positive decision.” So, in this case study, the sense-making and meaning-giving functions of narratives in institutional discussions (1, 2, 4 and 5 in Figure 1(b)) could be confirmed, albeit to different degrees. In Section 2, we discussed the relation between narratives and the success experience of institutional change (3 and 6 in Figure 1(b)). However, the case study results indicate that the narrative competition is ongoing and that significant institutional changes have not been realised as yet. Still, we can reflect on the success experiences of Ystad’s beach nourishment programme itself. The advocates of the nourishment method wanted to use the (experienced) success of Ystad’s programme to garner more support for nourishment methods in general. In line with the notion of Van Assche, Beunen, and Duineveld (2012), the configuration of the discursive environment may limit the potential for spreading their success story. Indeed, the narrative competition in this case study shows that (undisturbed) nature, an important value in Swedish culture, also forms a significant component of the discursive environment in which coastal issues are discussed. This hampers the spread of the success story about using sand to counter erosion.

## **6. Conclusion**

By applying a narrative approach to a case in environmental governance, this paper reveals that narratives are used both as a sense-making and meaning-giving device in the realisation of an environmental intervention. The study provides examples of storytelling used in attempts to maintain, disrupt or create institutions. The narrative method also makes it possible to configure the narrative competition reflective of such institutional work, together with interviewees. The narratives reveal what people think about the formal and informal rules and norms around a beach nourishment project and how they acted, and are acting, to maintain or disrupt these institutions, or create new ones. The narratives also reflect how people interpreted the position of other actors and their accompanying actions. Specifically, this case reveals that ideas and discourses do not only act as drivers of institutional change (c.f. Hajer 1995 and others<sup>3</sup>) but can also contribute to institutional maintenance and reveal instances of less successful institutional work and deadlocks. This narrative method therefore has the capacity to reveal the efforts and intentions of institutional work rather than merely displaying the results of “heroic institutional entrepreneurs” (Section 2).

The value placed on nature was identified as an obstacle in spreading the success story of using beach nourishment in Scania, Sweden. It is intriguing to apply this narrative method to cases in other discursive environments, to see whether such an analysis can deliver insights on more experiences of success. Our initial analysis of a Dutch coastal case, The Sand Engine, indicates that the discursive environment of this case provides more potential to spread success stories about sand nourishment as a solution to coastal erosion (Bontje and Slinger 2017). The relationships between the experience of success in institutional change and narrative competition remain an active area of research (Bontje 2017).

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### Notes

1. See Beunen and Patterson (2017) for more references.
2. Sweden has relatively small ministries, which are supported (with expertise, knowledge) by many national agencies.
3. See Beunen and Patterson (2017) for more references.

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## Appendix. Overview of respondents

Respondents	Position	Interview type	
		Block 1 November– December 2014	Block 2 November 2015
Respondent A	Project manager consultancy firm	x	X
Respondent B	Governmental official at national geotechnical institute	x	
Respondent C	Regional politician for Scania region, former local politician	x	X
Respondent D	Local official at municipality	x	X
Respondent E	Regional official at Scania region	x	
Respondent F	Regional official at County Administrative Board	x	
Respondent G	Project manager at national geological survey		X
Respondent H	Regional administrator (political) for Scania region	x	
Respondent I	Marine biologist from consultancy firm	x	
Respondent J	Marine biologist from consultancy firm		
Respondent K	Regional official at County Administrative Board	x	
Respondent L	Regional official at County Administrative Board		
Respondent M	(Former) local official, director at municipality, (former) advisor of Land and Environmental court	x	
Respondent N	Professor and advisor	x	X
Respondent O	Local official at municipality		X
Respondent P	Governmental advisor at national agency for marine and water management		X
Respondent Q	Researcher at institute for the marine environment		X
Respondent R	Local official at other coastal municipality		X
Respondent S	Researcher at national geological survey		X
Respondent T	Regional official at County Administrative Board		
Respondent U	Project leader at Scania's association of local authorities		
Respondent V	Regional official at Scania region		X
Respondent W	(Former) director at national geotechnical institute		X