SYNERGETIC TOURISM-LANDSCAPE INTERACTIONS:

Policy, public discourse and partnerships

Jasper H. Heslinga

SYNERGETIC TOURISM-LANDSCAPE INTERACTIONS

Policy, public discourse and partnerships

Jasper H. Heslinga

This research was conducted at the Faculty of Spatial Sciences of the University of Groningen. This work is part of the research programme which is financed by the Province of Fryslân. The research is a part of a collaboration between University of Groningen /Campus Fryslân, the Wadden Academy and Stenden University/European Tourism Futures Institute (ETFI).

ISBN 978-94-034-0345-8 ISBN (E-publication) 978-94-034-0344-1

Photography Jasper Heslinga

Cover and chapter photos MOCO
Cover design and layout Ruben Stoel

Printed by ProefschriftMaken | www.proefschriftmaken.nl

© J. H. Heslinga, 2018. All rights reserved. Save exceptions stated by the law, no part of this publication may be reproduced in any form, by print, photocopying, or otherwise, without the prior written permission from the author.



Synergetic tourism-landscape interactions

Policy, public discourse and partnerships

PhD thesis

to obtain the degree of PhD at the University of Groningen on the authority of the Rector Magnificus Prof. E. Sterken and in accordance with the decision by the College of Deans.

This thesis will be defended in public on

Thursday 11 January 2018 at 12.45 hours

by

Jasper Hessel Heslinga

born on 31 May 1987 in Groningen, the Netherlands

Supervisor Prof. F.M.D. Vanclay

Co-supervisor

Dr. P.D. Groote

Assessment committee

Prof. D. Dredge Prof. J.P.M. van Tatenhove Prof. J. van Dijk

TABLE OF CONTENT

List of figures and tables	VII
Chapter 1: Introduction	1
1.1 Towards synergetic interactions between tourism and landscape	3
1.2 Research focus and design	4
1.3 Theoretical framework and key concepts	5
1.4 Contribution of the research to theory	6
1.5 Methodology and case study area	7
1.6 Thesis outline	12
Chapter 2: Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas	
2.1 Introduction	21
2.2 Tourism and coastal areas as components of social-ecological systems	22
2.3 Governing tourism and landscape in coastal areas	28
2.4 An application of the social-ecological systems perspective to the Dutch Wadden	29
2.5 Conclusion	33
Chapter 3: Understanding the historical institutional context by using content analysis of loca and planning documents	
3.1 Introduction	
3.2 Data and methods	44
3.3 Background information about Terschelling and the Wadden Region	46
3.4 Tourism-landscape interactions in policy about Terschelling since the Second World War.	51
3.5 Interpreting the historical institutional context of Terschelling	55
3.6 Conclusion	57
Chapter 4: Examining social-ecological resilience: using content analysis to assess changes in perceptions of the synergetic interactions between tourism development and landscape prot	ection.63
4.1 III.IUUULLIUII	03

4.2 Synergies, social-ecological systems, institutions and resilience	66
4.3 Undertaking a Content Analysis	67
4.4 Applying Content Analysis to examine tourism-landscape interactions on the Island of Te	_
4.5 Results: What content analysis reveals about changing tourism-landscape interactions	70
4.6 Discussion: What does the fluctuating public discourse mean for Terschelling	74
4.7 Conclusions	76
Chapter 5: Strengthening governance processes to improve benefit sharing from tourism in pareas by using stakeholder analysis	
5.1 Introduction	
5.2 Governance to facilitate benefit sharing from tourism in protected areas	
5.3 Data and methods for our case study	
5.4 Case-study description	90
5.5 Identification and categorisation of stakeholders (Results Part 1)	92
5.6 Interactions between stakeholders (Results Part 2)	93
5.7 Discussion	97
5.8 Conclusion	98
Chapter 6: Conclusion	105
6.1 Introduction	107
6.2 Enabling and constraining factors for synergetic interactions	107
6.3 Reflections on methods and theory	110
6.4 Recommendations for policy makers	113
6.5 Synthesis	115
Appendices	118
Samenvatting (summary in dutch)	121
Acknowledgements/dankwoord	126

LIST OF FIGURES AND TABLES

List of Figures		Page
Figure 1.1	Overview map of the Dutch Wadden Sea Region indicating the island of Terschelling	9
Figure 1.2	An overview of the dissertation	12
Figure 2.1	Finding synergies between tourism and landscape	24
Figure 2.2	Co-evolutionary behavior of the integrated tourism-landscape system	27
Figure 2.3	The Dutch Wadden	30
Figure 2.4	Dune landscape and the main village	31
Figure 2.5	Tidal flat area seen from ferry boat	31
Figure 3.1	Land use on Terschelling	49
Figure 3.2	Business park West-Terschelling	50
Figure 3.3	Change in the relative proportions of three main topics in planning documents by year	53
Figure 3.4	Policy orientations per document type	54
Figure 3.5	The development of 'synergy' on Terschelling	55
Figure 3.6	The number of subcodes relating to 'synergy' in planning documents about Terschelling by year	56
Figure 4.1	The Wadden Sea region	70
Figure 4.2	Relative proportion of the three overarching code words depicted as a rolling three year average	72
Figure 4.3	Relative proportion of 'synergy' weighted by newspaper article size (three year rolling average)	73
Figure 4.4	Relative share of subcodes contributing to 'synergies'	74
Figure 4.5	Frequency of use of the top five subcodes for synergy over time	74
Figure 5.1	Map of the Dutch Wadden showing the location of Terschelling	92
Figure 5.2	Interest-influence matrix for Terschelling	94
List of Tables		Page
Table 1.1	An overview of the topics, research questions, and methods and data	8
Table 2.1	An overview of perspective on resilience	26
Table A.1	Coding scheme for policy documents	120
Table A.2	Coding scheme for newspaper articles	121

CHAPTERS

Four chapters included in this thesis are reprints of publications or manuscripts. They are the following:

Chapter 2:

Heslinga, J.H., Groote, P.D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism Futures*, 3(1), 23-38.

Chapter 3:

Heslinga, J.H., Groote, P.D. and F. Vanclay (2017). Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tourism Management* (in press).

Chapter 4:

Heslinga, J.H., Groote, P.D. and F. Vanclay (2017). Examining social-ecological resilience: using content analysis to assess changes in public perceptions of the synergetic interactions between tourism development and landscape protection. In J. Saarinen and A.M. Gill (Eds.), *Resilient destinations: Governance strategies of tourism in the transition towards sustainability* (in press). Abingdon: Routledge.

Chapter 5:

Heslinga, J.H., Groote, P.D. and F. Vanclay (2017). Strengthening governance processes to improve benefit sharing from tourism in protected areas by using stakeholder analysis. *Journal of Sustainable Tourism* (in press).





1.1 Towards synergetic interactions between tourism and landscape

Tourism is a phenomenon that has been experiencing a rapid expansion and diversification worldwide in the past decades (UNWTO, 2010; Holden, 2016). It can be defined as "the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year, for leisure, business and other purposes." (OECD, 2001, p.1). Tourism is considered to be the sum of the phenomena and relationships which arise from the interactions between tourists, business suppliers, host governments and host communities. Especially those forms of tourism that are based on nature, landscape and natural heritage have become increasingly popular (Newsome et al., 2013).

This interest of tourists to visit and experience nature areas and landscape has consequences for the landscape and host communities at the destination. Often, tourism is considered to have a negative impact on the landscape (Buckley, 2012; Saarinen, 2006) and host communities (King et al., 1993; McCombes et al., 2015). Nevertheless, it also provides income and jobs (Libosada, 2009). In addition, tourism can also contribute to improve the understanding of natural heritage, to gain public support for nature protection and as a way to acquire funding for conservation (Libosada, 2009; McCool and Spenceley, 2014). The statements above show that tourism and landscape are inseparably interlinked, and because of this, there is a need to consider the interactions between tourism and landscape and how these can be managed in a more sustainable and balanced way. This seems particular the case for coastal areas (or deltas) where high nature values can be found, but which are also densely populated areas (Wesley and Pforr, 2010). There is a need to study the way tourism and landscape interact and how these interactions can be changed to find a good balance between socio-economic development and nature protection (Terkenli, 2004; Strickland-Munro et al., 2010).

In this dissertation, the opportunities for synergetic interactions between tourism and landscape are analyzed and to what extent they can help build social-ecological resilience in an area. Synergies are situations of mutual gains in which the interactions between elements of a system combine in ways that result in a sum-total that is larger than only the sum of its parts (Persha et al., 2011). The general idea is that synergies steer away from trade-offs between social-economic development and nature protection, where the one is chosen over the other. A situation with an extreme focus on nature protection leads to exclusion of human activities, which can be considered as socially undesirable. An extreme focus on socio-economic development leads to environmental degradation, which is found to be ecologically undesirable. Synergetic interactions are about win-win situations, meaning that nature protection and socio-economic development are not conflicting, but can help strengthen each other (Heslinga et al., 2017). If the tourism-landscape interactions are balanced, it helps to build social-ecological resilience in an area.

The idea of synergies between tourism and landscape should be critically discussed. To explore whether the idea works, there is a need to examine if, and how, it works in practice and explore to what extent synergies are taken into consideration. The focus of this thesis is the exploration of those factors that constrain or enable synergies between tourism and landscape. This dissertation aims to address the following main research question:

What are the constraining and enabling factors that influence the role of tourism in building social-ecological resilience in coastal areas?

To answer the research question, this thesis specifically addresses the institutional context in which tourism and landscape are managed, because it is vital to understand how decisions are, and have been, made. Whether the idea of synergies works often relates to the way policy has changed over time, how the public discourse has been fluctuating, and partnerships in governance processes in which a wide range of different stakeholders with different interests and power relations are involved. Therefore, in this dissertation these three aspects of the institutional context (policy, public discourse and partnerships) are examined.

1.2 Research focus and design

Based on the three aspects of the institutional context described above, three research directions have been chosen to answers the main research question. In addition, subordinate research questions were added. The first direction is to explore the formal aspects of the historical institutional context. As institutions are often path-dependent and have historical legacies (Dredge, 2001), a contextual and long-term approach to institutional development is needed (Hall and Taylor, 1996; Mahoney and Thelen, 2007; Sorensen, 2015). For future decision-making, it is therefore essential to consider past policy and analyze how this has evolved over time. An analysis of these formal aspects of institutional context is the central idea here and is addressed in the following research question:

RQ1: How has institutional context (formal institutions / policy discourse) influenced tourism-landscape interactions in coastal areas?

The second research direction adds to the previous one, as it also explores the institutional context. However, now the emphasis lies on its informal aspects of the historical institutional context. To make future decisions, it is not sufficient to just understand policy aspects, but also to understand how the public opinion on the interactions between tourism and landscape has changed over time. This idea is reflected in the following research question:

RQ 2: How has the public discourse influenced tourism-landscape interactions in coastal areas?

The third research direction emphasizes governance processes that may constrain or enable synergetic tourism-landscape interactions. In these governance processes several stakeholders are involved with different positions, interests and values. This third direction aims to provide insights in who the important stakeholders are and how they interact with each other. To explore this, the following question is addressed:

RQ 3: How do stakeholders constrain or enable the role of tourism in governance processes for building social-ecological resilience in coastal areas?

1.3 Theoretical framework and key concepts

To deepen our understanding of the potential synergetic interactions between tourism and landscape, social-ecological systems (SES) thinking is used as the conceptual framework. SES presumes an integrated system of human society and ecosystems, with reciprocal feedback loops and interdependencies (Berkes, 2007). This thesis focuses on two important characteristics of SES thinking (Heslinga et al., 2017). First, social-ecological systems are coupled systems, meaning that there is an integration of the ecological and social parts of the system. For analyzing tourism and landscape this implies that they are not seen as separate social and ecological entities; they are part of a coupled social-ecological system. Second, a social-ecological system is a dynamic system, which means that the system is continuously adapting to changing circumstances. For studying tourism and landscape interactions, it means that these interactions are constantly in flux; the social-ecological context is constantly changing and therefore cannot be seen as something static.

Striving for synergies between tourism and landscape can help build the resilience of a social-ecological system. Resilience is a key concept in SES thinking and it implies that a system is able to cope with future social and ecological changes (Folke et al., 2010; Holling, 2008; Walker et al., 2004). Resilience is about the ability of a system to continuously adapt to social and ecological changes and their feedback mechanisms. In this thesis, a social-ecological (or evolutionary) perspective on resilience is taken (Davoudi, et al., 2013; Wilkinson, 2012), as this perspective takes into account that systems are coupled and dynamic. For a resilient tourism destination this requires a constant search for balance between the goals of nature protection and social-economic development. This means that interventions should be beneficial for both social and ecological parts of the entire system and not only one side of the system.

By adopting a SES perspective, this dissertation especially focuses on governance processes and institutions that influence decision-making for managing tourism-landscape interactions. It is important to understand how social-ecological systems are governed and to consider the roles institutions can, do and could play (Bramwell and Lane, 2011). This is because understanding the future directions of developments, requires an analysis of which decisions are taken, why they are taken and by whom they are taken. Despite the potential for synergetic tourism-landscape interactions in coastal areas, managing these interactions can be inherently complicated. Many actors are involved in decision-making process and these stakeholders usually have different and sometimes contradictory values, attitudes and interests.

Because of the multitude of stakeholders involved, identifying synergies lies in the governance arrangements in managing tourism and landscape (Lockwood, 2010). These governance arrangements

affect the processes by which synergies are activated or inhibited. Governance can be defined as "the complex system of regulation involving the interactions of a wide variety of actors, institutions, the environment and all types of socio-institutional arrangements at different territorial levels" (Parra, 2010, p.491). Governance is a helpful perspective, because it is a broader concept than 'the government', in that it also includes non-state actors, including business, community and the voluntary sector (Parra, 2010). In this dissertation three principles of governance are identified and analysed – inclusiveness, more flexible social arrangements, and multi-scalarity. Utilizing these governance principles contributes to SES theory, because it deepens the understanding of how tourism and landscape can be managed.

In SES theory, institutions play a central role in managing the social-ecological interactions within the system (Anderies et al., 2004; Brondizio et al., 2012; Ostrom and Cox, 2010; Ostrom, 2009). Institutions can be defined as "systems of established and prevalent social rules that structure social interactions" (Hodgson, 2006, p.2). To explore constraining and enabling factors that influence the role of tourism understanding the institutional context is highly influential (Dredge, 2017). An analysis of the institutional context in which decisions are made is helpful for policymakers and planners to understand the current situation better and to improve future policies and plans regarding tourism and landscape. The current institutional context is the product of its past; it is influenced by past decision-making processes. Exploring the historical relationship between society and the environment is an important aspect of understanding the institutional context. In this thesis an historical approach is taken, because this assists in identifying past trajectories and potential path-dependencies for current decision-making (Dredge, 2001).

Institutions consist of formal aspects (e.g. rules and regulations) and informal aspects (e.g. cultural values and norms) (Alexander, 2005; Cumming et al., 2006). Formal institutions are openly codified, in the sense that the social rules are established and communicated through channels that are widely accepted as official. Informal institutions are socially shared rules that are created, communicated, and enforced outside of the officially sanctioned channels (Helmke and Levitsky, 2004). In this dissertation both the formal and informal aspects of the historical institutional context are analysed.

1.4 Contribution of the research to theory

The contribution of the thesis is to enrich tourism studies with social-ecological systems theory and resilience thinking. Tourism is often perceived as an economic industry with limited connection to social and environmental issues. Therefore, both social (Higgins-Desbiolles, 2006) and ecological aspects (Buckley, 2011) are not always taken into account. In addition, tourism is can be seen as a static phenomenon, while in fact tourism is highly dynamic and constantly changing. A systems' perspective can help to see these coupled and dynamic interrelations and help identify synergies between tourism and landscape. In this thesis, the focus explicitly lies on the institutional context and governance processes that influence social-ecological systems. Conceptually, this focus could meet the critique on resilience and SES. Resilience thinking, for example, is often accused of being power blind and

depoliticizing the dynamics of change in social-ecological systems (Wilkinson, 2012). Therefore, matters of power, conflict, contradiction and culture need to be addressed. This thesis takes these elements relating to governance and institutions into account and can help bring the conceptual discussion on SES and resilience further.

Another contribution of this thesis relates to the application of SES theory to practice. While SES is the theoretical lens of this dissertation, there is also critique on resilience thinking and SES. The debate has been evolving conceptually, but the applicability of the concept has remained limited (Lew, 2014). Therefore, more empirical work is necessary and methods need to be explored to unravel, if and how those parts of the system regarding decision-making are working in practice. The contribution of the thesis is the development of a range of methods that can be applied to real life cases and, thereby, assist in unraveling the institutional context and improve the understanding of governance processes related to tourism and landscape.

1.5 Methodology and case study area

An overview of the methodologies used in this thesis to find answers on the research questions can be found in Table 1.1. The methodology can be characterized around three central research principles: case-study research, a multi-methods approach and methods that enforce a systematic analysis.

First, a case-study approach has been chosen. A case study is "an empirical inquiry that investigates contemporary phenomenon in depth and within its real-world context." (Yin, 2014, p.16). This is especially useful when the boundaries between phenomenon and context may not be clearly evident. Case-study research is a common method that can be used in many situations to improve the understanding of individual, group, organizational, social, political and related phenomena. These two arguments for using a case study approach are highly relevant for analyzing the interactions between tourism and landscape regarding the island of Terschelling in the Wadden Sea Region, which is briefly introduced in the next section.

Second, a multi-methods approach has been applied for analyzing the case study, which implies that a variety of different qualitative and quantitative methods were used. This mixture of methods helps to triangulate the results by checking whether there is convergence of the data collected from different sources. This process of triangulation is important for determining the consistency of findings (Yin, 2014). Examining the same case with different methods helps deepen the understanding of the case.

Third, an approach that enforces systematic analysis was pursued. A major part of this thesis is based on a longitudinal study, which is "a study design involving the collection of data at different points in time." (Babbie, 2010, p.107). This is helpful to study change regarding the same phenomenon over an extended period of time (Babbie, 2010; Yin, 2014). For understanding long term developments a systematic analysis helps overcome the problems with current observations of respondents about past

developments. In addition, a systematic analysis helps minimize the role of the researcher and thereby increase the reliability of the research (Yin, 2014).

Topic	Research questions	Methods and data
Conceptual discussion (Chapter 2)	How can a social-ecological system perspective help understand synergetic tourism-landscape interactions in coastal areas?	Literature review
Policy context (Chapter 3)	How has institutional design (formal institutions / policy discourse) influenced tourism-landscape interactions in coastal area?	Content analysis, policy- and planning documents, key informant interviews
Public discourse (Chapter 4)	How has public discourse influenced tourism- landscape interactions in coastal areas?	Content analysis, newspaper articles, key informant interviews
Partnerships in governance processes (Chapter 5)	How do stakeholders constrain or enable the role of tourism in governance processes for building social-ecological resilience in coastal areas?	Stakeholder analysis, key informant interviews, panel discussion

Table 1.1 | An overview of the topics, research questions, and methods and data

1.5.1 Introducing the case study area: Terschelling in the Dutch Wadden Sea Region

The central focus of the research lies on the Dutch Wadden. The Wadden is the largest contiguous natural area of Western Europe and is one of the largest tidal wetlands in the world (Kabat et al., 2012). Stretching from the northwest of the Netherlands, along the German coast, and the south-western part of Denmark, the Wadden includes an archipelago of more than 30 inhabited and many uninhabited islands that shield a tidal mudflat from the North Sea. The area is renowned for its outstanding ecological qualities and scenic landscapes, and was listed as a UNESCO Natural World Heritage Site in 2009 (Sijtsma et al., 2012). Because of the widespread recognition of its ecological qualities and scenic landscapes, the Wadden has become very attractive to tourists (Revier, 2013). From the 1950s on, the Wadden islands have become a popular holiday destination and tourism has become the dominant economic activity, especially during the last decades (Sijtsma et al., 2012). The Wadden is an area where the objectives of tourism development and landscape protection coincide and potentially clash, and therefore the region is a relevant case for researching tourism-landscape interactions.

The way the Wadden Sea region is and/or should be managed has been constantly under discussion (Van der Aa et al., 2004; Kabat et al., 2012). Managing the Wadden is complicated because the area is not a remote ecosystem that humans can be excluded from; in contrast, the area has been heavily influenced by human activity for a long time (Knottnerus, 2005). Nowadays, the area is used for socio-economic

activities such as agriculture, energy generation, fisheries, gas extraction, mining, manufacturing, shipping, and tourism (Kabat et al., 2012). Proper management that contributes to tourism and landscape protection is therefore necessary. The twin goals of protecting the island's nature and landscape, and enabling socio-economic development by means of tourism are heavily debated on the island. There are many stakeholders involved in the governance of tourism and landscape at different levels, many of whom have differing and potentially-conflicting interests, including tourism entrepreneurs, nature protection organizations, interests groups, governmental bodies and civil society.

The island of Terschelling (see Figure 1.1), one of the five inhabited Dutch Wadden islands is specifically discussed in this thesis. Terschelling is renowned for its biodiversity and highly-appreciated landscapes (Kabat et al., 2012). The island has an area of 8,616 hectares, with around 80 percent comprising dunes, forests and salt marshes, which are major attractions for tourists. Terschelling is an established tourist destination attracting over 400,000 visitors (Sijtsma et al., 2015) and around 1.8 million overnight stays annually. Historically, there have been strong interactions between tourism development and landscape protection on Terschelling. One the one hand, the island is among the most significant tourism destinations in the Wadden, and on the other hand Terschelling has many sensitive significant nature areas (Sijtsma et al., 2012). While tourism impacts on the landscape, the landscape is an asset that must remain attractive if tourists are to continue visit Terschelling into the future.



Figure 1.1 | Overview map of the Dutch Wadden Sea Region indicating the island of Terschelling

1.5.2 Content analysis

An important method used is content analysis. Content analysis is a research technique that allows replicable and valid interferences from texts and other meaningful material (Krippendorff, 2013). An important advantage of content analysis over interviewing is that it avoids the problem of memory reconstruction by research participants (Lowenthal, 2015). This is particularly important in research that seeks to go back over time. Thus, instead of asking people to try to recollect what happened in the distant past, content analysis uses material that was actually published in the past – in other words, that was published contemporaneously with the events described in those articles. A further advantage is that, although there is still room for varying interpretations, the source material remains constant (rather than the key informant telling a different story depending on how they feel each time they are interviewed). Content analysis therefore has high reliability.

The content analyses done for this thesis were based on two different sources of material which served different goals. The first was an analysis of policy documents to explore the development of the formal aspects of the institutional context. The second was an analysis of newspaper articles to identify how informal aspects of the institutional context changed over time.

Elaborating on the first part, policy and planning documents were used as a proxy to grasp the institutional context. Analyzing the dynamics in these plans, policy and strategies with regard to tourism and landscape shows the dynamics in the focus of policy and how this can influence the current situation. While policies from multiple levels steer developments in tourism and landscape, the analysis of policy documents mainly focused on the municipal level. This is because research is interested in the impact of policies from the higher scale on the lower scale. Policies on the provincial, national, and international levels were therefore used as context. The documents, in the period 1945-2015, were collected online and in the archives of the municipality of Terschelling. To systematically analyzing the data, a content analysis was performed using Atlas.ti software. Making use of a coding scheme, this analysis revealed the usage of words such as tourism, leisure, recreation, etc. and how they related to words such as landscape, nature, ecosystem, etc. The input for the coding scheme was based on theoretical reasoning, reflections on key informants interviews and preliminary skim-reading of documents.

The second part was an historical analysis of newspaper articles which served as a proxy for the informal aspects of the institutional context. It focused on the dynamics in the public discourse on tourism-landscape interactions. The data collected for this analysis were historical newspaper articles during the period 1945-2015, which were collected from an online database containing several newspapers of the North of the Netherlands, called: www.dekrantvantoen.nl. For analyzing the data in a systematic way, content analysis was performed using qualitative data analysis software Atlas.ti. The same coding scheme as the content analysis of policy documents was used. The results of the analysis show a timeline that presents how the public discourse changed in the period 1945-2015. It helps improve the understanding of the current way of thinking about tourism and landscape.

1.5.3 Stakeholder analysis

Stakeholder analysis can help to understand and strengthen governance processes. Stakeholder analysis was used because it helps to indicate who the stakeholders are, who has the power to influence what happens, how these stakeholder interact and, based on this information, how they might be able to work more effectively together. The three steps provided by Reed et al. (2009) were utilized: (1) Identifying stakeholders, (2) Categorizing stakeholders and (3) Investigating relationships between stakeholders. The results of the first and second step were used as an instrument to analyze step three.

1.5.4 Interviews

An essential part of the data for this thesis was collected through semi-structured key informant interviews. The interviews are supportive to the content analysis and stakeholder analysis explained above and were used for two reasons. First, exploratory key informant interviews helped to find the keystone moments of change to strengthen the results of the content analyses on dynamics in policy and public discourse. Second, this method was used to explore the current governance system regarding tourism and landscape. The interviews were held among a diversity of stakeholders (e.g. tourism entrepreneurs, representatives from the municipality and province, environmental groups, interest groups, and local inhabitants). The participants were recruited through the researcher's network, snowballing and online searching. For the qualitative data analysis Atlas.ti software was used.

1.5.5 Background data

To support the methods described above, some additional background data were used. First, land use data was used to describe ratio of different land uses the in the case study area. The dataset that was used is the BBG2010 (*Bestand Bodemgebruik*) and it was analyzed in ArcGIS software. This dataset set has many categories, which were simplified and re-categorized into: tourism, nature, residential and other land uses. Second, participation of the researcher during several stakeholder meetings organized by the municipality of Terschelling was used as exploratory data gathering. By attending these meetings, preliminary thoughts could be developed about the positions, interests and values of the different stakeholders that are involved in governance processes.

1.5.6 Ethical considerations

The principles of ethical research were followed (Vanclay et al., 2013). For the first contacts, participants for the interviews were contacted by email or telephone. If the participants were difficult to contact, an intermediate was used. The location for the interviews was chosen by the participants themselves. Before the interviews, participants were provided with a brief outline of the topics (not the specific questions) that were discussed, which were send beforehand to make sure the participant could do some preparation. The participants were also asked to complete an informed consent form which covered issues of anonymity, use of the research, and their rights during and after the interview (Vanclay et al., 2013). For confidentiality reasons, the participations were not named in the output of the research. However, in some case their position and/or affiliation was included. In the consent form the participant were asked whether such information could be included in the research and publications. If

the participants wished to remain anonymous, it was insured that the participants identity was not revealed in the data. Participants were asked whether they wanted to be informed about the results of the research, in which case they received copies of those publications based on the interviews. Participants had the right to stop the interview at any time, stop the recording of the interview and withdraw from the research project up to one month after the interview. With the permission of all respondents, the interviews were audio-recorded, and later transcribed verbatim. The participants were told that the data gathered from the interview is used for academic (and maybe popular) publications, academic (and popular) presentations and eventually the doctoral thesis at the end of the project. The research belongs to Jasper Hessel Heslinga and the Faculty of Spatial Sciences at the University of Groningen, the Netherlands.

1.6 Thesis outline

An overview of how the chapters of the thesis connect is provided in Figure 1.2.

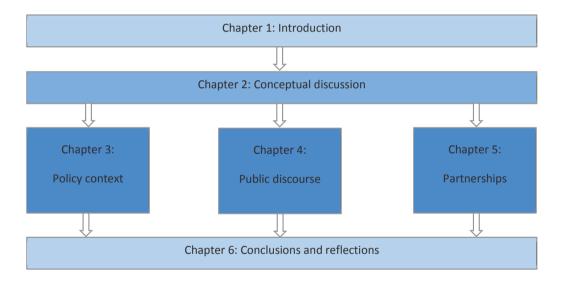


Figure 1.2 | An overview of the dissertation

Chapter 2 further elaborates on the theoretical concepts that are used in this research. It is the conceptual chapter that explores the potential of a SES perspective to understand tourism and landscape interactions. This chapter discusses implications this perspective has for the way tourism and landscape

are governed and illustrates the potential application of SES to the Dutch Wadden Sea Region. Chapters 3 and 4 help understand the institutional context in which decision-making regarding tourism and landscape is made and how this has changed over time. A distinction is made between formal and informal aspects of the institutional context. Chapter 3 provides insights in the formal institutional context by analyzing the changing dynamics of tourism and landscape interactions in policy documents over time. Chapter 4 identifies the informal institutional context by analyzing the changing dynamics of tourism and landscape interactions in the public discourse over time. Chapter 5 analyzes how the stakeholders involved in the governance process regarding tourism and landscape interact. This analysis helps to understand the governance arrangements pertaining to the management of tourism and landscape. Finally, in Chapter 6, the conclusions are drawn by answering the main research question. It provides a summary of the constraining and enabling factors for synergetic tourism-landscape interactions that were found during this research. Also, there is a reflection on the usage of SES theory to understand tourism and landscape interactions. In addition, there is a discussion on the methods that were explained and demonstrated in this thesis for the application of SES theory. In the last part of the conclusion recommendations for policymakers are provided.

References

- Alexander, E.R. (2005). Institutional transformation and planning: From institutionalization theory to institutional design. *Planning Theory*, *4*(3), 209–223.
- Anderies, J.M., Janssen, M.A., and Ostrom, E. (2004). A framework to analyze the robustness of social-ecological systems from an institutional perspective. *Ecology and Society*, *9*(1), 1–18.
- Babbie, E. (2010). The practice of social research (12th ed.). Boston: CENGAGE Learning.
- Berkes, F. (2007). Understanding uncertainty and reducing vulnerability: lessons from resilience thinking. *Natural Hazards*, 41(2), 283–295.
- Bramwell, B., and Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, 19(4-5), 411–421.
- Brondizio, E.S., Ostrom, E., and Young, O.R. (2012). Connectivity and the governance of multilevel socio-ecological systems: The role of social capital. *Annual Review of Environment and Resources*, 34(1), 253-278.
- Buckley, R. (2011). Tourism and Environment. *Annual Review of Environment and Resources*, 36(1), 397–416.
- Buckley, R. (2012). Sustainable tourism: Research and reality. *Annals of Tourism Research*, *39*(2), 528–546.
- Cumming, G.S., Cumming, D.H.M., and Redman, C.L. (2006). Scale mismatches in social-ecological systems: causes, consequences, and solutions. Ecology and Society, *11*(1), 14.
- Davoudi, S., Brooks, E., and Mehmood, A. (2013). Evolutionary resilience and strategies for climate adaptation. *Planning, practice and research*, 28(3), 307–322.
- Dredge, D. (2001). Local government tourism planning and policy-amaking in New South Wales: Institutional Legacies. Current Issues in Tourism, 4(2-4), 355-380.
- Dredge, D. (2017). Institutional and policy support for tourism social entrepreneurship. In P.J. Sheldon, and R. Danielle (Eds.), *Social Entrepreneurship and tourism: Philosophy and Practice* (pp. 35-55). New York: Springer.
- Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T., and Rockstrom, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4).
- Hall, A., and Taylor, C.R. (1996). Political science and the three new institutionalisms. *Political studies*, (1996), 936–957.
- Helmke, G., and Levitsky, S. (2004). Informal institutions and comparative politics: a research agenda. *Perspective on Politics*, 2(4), 725–740.

- Heslinga, J. H., Groote, P. D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism Futures*, *3*(1), 23–38.
- Higgins-Desbiolles, F. (2006). More than an "industry": The forgotten power of tourism as a social force. *Tourism Management*, 27(6), 1192–1208.
- Hodgson, G.M. (2006). What are institutions? *Journal of Economic Issues*, 40(1), 1–25.
- Holden, A. (2016). Environment and Tourism (3rd ed.). Abingdon: Routlegde.
- Holling, C.S. (2008). Theories for Sustainable Futures. Conservation Ecology, 4(2), 5–9.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P.M.J., van Oijen, T., Pejrup, M., ... Wolff, W.J. (2012). The Wadden Sea Region: Towards a science for sustainable development. *Ocean and Coastal Management*, *68*(1), 4–17.
- King, B., Pizam, A., and Milman, A. (1993). Social impacts of tourism. *Annals of Tourism Research*, 20(4), 650–665.
- Knottnerus, O.S. (2005). History of human settlement, cultural change and interference with the marine environment. *Helgoland Marine Research*, *59*(1), 2–8.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Thousand Oaks: Sage Publications.
- Lew, A.A. (2014). Scale, change and resilience in community tourism planning. *Tourism Geographies*, *16*(1), 14–22.
- Libosada, C.M. (2009). Business or leisure? Economic development and resource protection-Concepts and practices in sustainable ecotourism. *Ocean and Coastal Management*, *52*(7), 390–394.
- Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of Environmental Management*, 91(3), 754–766.
- Lowenthal, D. (2015). The past is a foreign country-revisited. Cambridge: Cambridge University Press.
- Mahoney, J., and Thelen, K. (2007). A Theory of Gradual Institutional Change. In J. Mahoney, and K. Thelen (Eds.), *Explaining Institutional Change: Ambiguity, Agency, and Power.* Cambridge: Cambridge University Press.
- McCombes, L., Vanclay, F., and Evers, Y. (2015). Putting social impact assessment to the test as a method for implementing responsible tourism practice. *Environmental Impact Assessment Review*, 55, 156–168.
- McCool, S. F., and Spenceley, A. (2014). Tourism and protected areas: A growing nexus of challenge and opportunity. *Koedoe*, *56*(2), 1–2.
- Newsome, D., Moore, S.A., and Dowling, R.K. (2013). *Natural area tourism: Ecology, Impacts and* Management (2nd ed.). Bristol: Channnel View Publications.

- OECD (2001). Tourism. *Glossary of statistical terms*. Paris: Organization for Economic Co-operation and Development.
- Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, 325(5939), 419–422.
- Ostrom, E., and Cox, M. (2010). Moving beyond panaceas: a multi-tiered diagnostic approach for social-ecological analysis. *Environmental Conservation*, *37*(4), 451–463.
- Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change*, *19*(3), 354–365.
- Parra, C. (2010). Sustainability and multi-level governance of territories classified as protected areas in France: the Morvan regional park case. *Journal of Environmental Planning and Management*, *53*(4), 491–509.
- Persha, L., Agrawal, A., and Chhatre, A. (2011). Social and ecological synergy. *Science*, *331*(6024), 1606-1608.
- Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., ... Stringer, L.C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, *90*(5), 1933–1949.
- Revier, H. (2013). Nature conservation and tourism development in the Dutch Wadden Sea region: a common future? In A. Postma, I. Yeoman, and J. Oskam (Eds.), *The Future of European Tourism*. Leeuwarden: European Tourism Futures Institute.
- Saarinen, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research*, 33(4), 1121–1140.
- Sijtsma, F.J., Broersma, L., Daams, M.N., Hoekstra, H., and Werner, G. (2015). Tourism development in the Dutch Wadden area: Spatial-temporal characteristics and monitoring needs. *Environmental Management and Sustainable Development*, 4(2), 217–241.
- Sijtsma, F. J., Daams, M. N., Farjon, H., and Buijs, A. E. (2012). Deep feelings around a shallow coast. A spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area. *Ocean and Coastal Management*, *68*, 138–148.
- Sorensen, A. (2015). Taking path dependence seriously: an historical institutionalist research agenda in planning history. *Planning Perspectives*, *30*(1), 17–38.
- Strickland-Munro, J.K., Allison, H.E., and Moore, S.A. (2010). Using resilience concepts to investigate the impacts of protected area tourism on communities. *Annals of Tourism Research*, *37*(2), 499–519
- Terkenli, T.S. (2004). Tourism and landscape. In Lew, A.A., Hall, C.M. and Williams, A.M. (Eds.), *A Companion to Tourism* (pp 339-348). Oxford: Blackwell.

- Vanclay, F., Baines, J. and Taylor, C.N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, 31(4), 243–253.
- Walker, B., Holling, C.S., Carpenter, S.R., and Kinzig, A. (2004). Resilience, Adaptability and Transformability in Social ecological Systems. *Ecology and Society*, *9*(2). Retrieved from http://www.ecologyandsociety.org/vol9/iss2/art5/
- Wesley, A., and Pforr, C. (2010). The governance of coastal tourism: unravelling the layers of complexity at Smiths Beach, Western Australia. *Journal of Sustainable Tourism*, 18(6), 773-792.
- Wilkinson, C. (2012). Social-ecological resilience: Insights and issues for planning theory. *Planning Theory*, *11*(2), 148–169.
- UNTWO (2010) Tourism 2020 Vision. Madrid: UNESCO, World Tourism Organization.
- Yin, R. K. (2014). Case study research: design and methods (5th ed.). Thousand Oaks: Sage Publications.

USING A SOCIAL-ECOLOGICAL SYSTEMS PERSPECTIVE TO UNDERSTAND TOURISM AND LANDSCAPE INTERACTIONS IN COASTAL AREAS

Reprint of **Heslinga, J.H.**, Groote, P.D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism* Futures, 3(1), 23-38.

Abstract

Purpose

The purpose of this paper is to look at the potential synergies between tourism and landscapes and examine the potential contribution of tourism to build social-ecological resilience in the Dutch Wadden.

Design/methodology/approach

The authors reveal how a social-ecological systems perspective can be used to conceptualize the Wadden as a coupled and dynamic system. This paper is a conceptual analysis that applies this approach to the Dutch Wadden. The data used for the inquiry primarily comes from a literature review.

Findings

The authors argue that the social-ecological systems perspective is a useful approach and could be used to improve the governance of multi-functional socio-ecological systems in coastal areas. Opportunities for synergies between tourism and landscapes have been overlooked. The authors consider that tourism and nature protection are potentially compatible and that the synergies should be identified.

Research limitations/implications

This paper is only a conceptual application rather than an empirical case study. Further research to actually apply the methodology is needed.

Practical implications

Managers of protected areas should consider applying a social-ecological systems approach.

Social implications

The views of a wide variety of stakeholders should be considered in landscape planning.

Originality/value

The value of this paper lies in the articulation of the social-ecological systems perspective as a way to identify and understand the complex interactions between tourism and landscape, and the potential synergies between them.

Keywords

Resilience, Ecosystem services, Integrated coastal zone management, Landscape management, Multi-functionality, Tourism studies

2.1 Introduction

As in many coastal areas worldwide, the Dutch Wadden is experiencing an increase in socio-economic pressures on its ecosystems as a result of human activities such as agriculture, fishing, human settlement, manufacturing, resource extraction, shipping and tourism (Kabat et al., 2012). All these activities have impacts on the natural environment, albeit in various ways. Tourism has mutual relationships and interdependencies with the landscape (Terkenli, 2004). It is an example of a socioeconomic activity that is normally considered to have negative impacts on the landscape (Buckley, 2012; Saarinen, 2006) and on host communities (King et al., 1993; McCombes et al., 2015). Conversely, tourism benefits from an attractive landscape and natural environment and a welcoming host community (Buckley, 2011). Tourism is often seen as a means to provide income and jobs to the local community (Libosada, 2009). However, tourism is more than just an economic industry (Higgins-Desbiolles, 2006) since it can also be an opportunity for improving the understanding of natural heritage, for gaining public support, and to achieve the funding needed for conservation (Libosada, 2009; McCool and Spenceley, 2014). Therefore, tourism is highly dependent on the qualities of the landscape to remain attractive to tourists (Liu et al., 2007). Because of tourism's mutual relationship with the landscape, tourism can be seen as an opportunity to increase an area's social-ecological resilience, as it could provide a balance between the sometimes competing goals of maintaining the natural qualities of the area and attaining socio-economic benefits. To achieve both goals, it is important that the synergistic interactions between tourism and landscape are recognized and stimulated. In this paper, synergies are defined as being potentialities to achieve greater combined outcomes across the range of social and ecological dimensions (Persha et al., 2011).

With increasing rates of tourism, the impact of tourism is expected to increase in the future (UNWTO, 2010). Therefore, finding synergies between tourism and landscape becomes particularly important. Worldwide, tourism has been undergoing expansion and diversification over the last six decades and is one of the largest and fastest growing economic sectors in the world (UNWTO, 2010). There are many types of tourism that interact differently with nature and landscape (Williams, 2009). The impacts on the landscape and on communities and the way interactions are managed may vary significantly. In this paper, we focus on those forms of tourism which require landscape qualities, e.g., nature tourism, ecotourism and sustainable tourism. As these have grown relatively fast, the pressure of tourism on the natural environment is increasing and this has consequences which may change both the landscape and the way tourism interacts with it (Newsome et al., 2013). This implies that when an increase in tourism negatively impacts the landscape, this may also have negative consequences for tourism. The combination of the increase in human impacts on the natural environment due to socio-economic activities and the expansion of tourism as a growing economic sector inevitably leads to conflicting interests. To serve the needs of both protection of nature and socio-economic development, it is important to find synergies between tourism and landscapes.

Establishing synergies between tourism and the landscape is difficult because opportunities for synergies are often overlooked. It is commonly known that, despite huge social impact on the community, tourism could provide economic opportunities and may enhance the quality of life for both residents and tourists

(Goodwin, 2011; McCool and Spenceley, 2014; McCombes et al., 2015). However, an emphasis solely on the socio-economic benefits of tourism may be ecologically undesirable, as ecological qualities are under stress due to overexploitation of the natural resources by tourism. Conversely, a coastal area that is strongly protected and viewed as an ecological island without human influence could be socially undesirable (Adger, 2000). The challenge is to find the right balance between nature protection and socio-economic development.

To find this balance, it is important to look at the interactions between society and nature (Cumming, 2011a). However, there is a lack of research focusing specifically on understanding the interactions between tourism and landscapes (Gkoltsiou and Terkenli, 2012). To understand these interactions better, this paper argues that a social-ecological systems perspective would be useful. Such a perspective sees tourism and landscapes as being part of an integrated system, rather than as being separate entities (Farrell and Twining-Ward, 2004; Kirchhoff et al., 2010; Levin et al., 2012). This perspective could be used to critically examine past and contemporary planning institutions, policies and processes, which have typically seen nature and human activities as being functionally distinct. In the past, tourism was mainly seen as an engine for regional economic growth (Higgins-Desbiolles, 2006), and the natural environment was set aside as an "ecological island" to maintain a natural state with minimal human interference (Cumming et al., 2015).

A social-ecological systems perspective provides a dynamic approach. Tourism and landscape cannot be understood by only thinking in terms of stability and certainty. Instead, social-ecological systems thinking can contribute to tourism in nature areas as a way of dealing with change and uncertainty. Thus, using a social-ecological systems perspective has implications for the way "tourism and landscape" is managed. Therefore, this paper explains what this perspective means for the governance of tourism and landscape, and the role that institutions play. This paper is structured around three arguments. First, a social-ecological systems perspective is presented to understand the interactions between tourism and landscape in coastal areas better. This perspective can be helpful in seeing tourism and coastal areas not as separate entities, but as a coupled and integrated whole. Second, a social-ecological systems perspective is also characterized as a dynamic perspective, which may help to understand changes in tourism and landscape better. Third, this paper explores the implications for the planning and governance of tourism and landscape from a social-ecological systems perspective. It is a conceptual paper that uses the Dutch Wadden as an illustrative example to demonstrate the effectiveness of the social-ecological systems perspective.

2.2 Tourism and coastal areas as components of social-ecological systems

This paper explores the potential use of the social-ecological systems perspective to consider tourism in natural coastal areas. This perspective has only recently gained importance in tourism planning, and definitions are continuing to evolve (Binder et al., 2013). We follow the general definition given by

Berkes (2007) and Folke et al. (2010) who consider that a social-ecological system is an integrated system of ecosystems and human societies with interdependencies and reciprocal feedback loops. By highlighting the two basic characteristics of social-ecological systems (discussed below), this paper assists in bringing about a greater understanding of tourism and landscapes. The first characteristic is that tourism and landscape are part of a coupled system. The second is that resilience is a fundamental part of social-ecological systems. Resilience incorporates dynamics and change, and allows for that fact that both tourism and landscape are constantly changing.

2.2.1 Components of a coupled system

Several researchers have been asking for a systems perspective that enables the integration of social and natural systems in tourism (Parra, 2010; Halliday and Glaser, 2011; Ruiz-Ballesteros, 2011). They emphasize that social and natural systems mutually influence each other and a focus on the complex interrelations between tourism and landscape can provide a better understanding of the whole system. Terkenli (2004) argues that the understanding of these complex interrelationships is largely unexplored. Tourism and landscapes have often been seen as separated from each other (Stoffelen and Vanneste, 2015). As an alternative to the traditional, reductionist perspective that sees society and nature as separate entities that are predictable and controllable (Armitage et al., 2009; Plummer and Fennell, 2009), the social-ecological systems perspective does not see nature and society as separate, but rather as an integrated whole (Amérigo et al., 2007; Cumming, 2011b; Levin et al., 2012). Instead of predictability and controllability, the social-ecological systems perspective accepts that nature is inherently unpredictable, and that systems are complex and dynamic (Berkes et al., 2003).

Managing tourism and landscape in a more integrated way is not an entirely new idea. Earlier attempts such as integrated coastal zone management (ICZM) also argued for integration, but Shipman and Stojanovic (2007) criticized ICZM for its "democratic deficit", as it failed to include community engagement sufficiently. Ecosystem services also entails human-nature relations (Costanza and Farley, 2007) by focussing on the benefits of ecosystems to humans (Millennium Ecosystems Assessment, 2005). However, the concept of ecosystem services is accused of being too anthropocentric and of promoting the exploitation and commodification of nature (Schroter et al., 2014; Robertson, 2012).

The social-ecological systems perspective considers that the distinction between the social and natural systems is artificial and therefore both ecological and social research have to consider human and ecological components (Liu et al., 2007). Traditionally, ecological research often excluded humans from the system, while social research tended to ignore the ecological consequences of human action (Berkes, 2007; Folke et al., 2005). This blinkered vision was also evident in traditional research on tourism in coastal areas. On the one hand, tourism was seen from an economic perspective, i.e., as a driver of regional economic growth and as an industry, which, through visitor spending, increased job opportunities and tax revenues and enhanced a community's overall economic base (Hall and Page, 2006). This research failed to consider the environmental impacts of tourism and consequently failed to understand the landscape-tourism nexus (Hall and Page, 2006; Buckley, 2011). On the other hand, the natural environment where tourism takes place was often seen as an ecological island where nature was kept aside in a frozen steady state from which humans should be excluded (Shultis and Way, 2006;

Cumming et al., 2015). The consequence of this non-anthropocentric view of protection is that nature and non-nature areas are spatially and functionally separated from each other.

Due to the separation between nature protection and socio-economic development, opportunities for synergies between tourism and landscapes have been overlooked. This is because tourism does not fit a mono-functional model with a focus on only one type of land use. Instead, tourism should be seen from a multi-functional position where tourism is embedded with other functions in an area (Hartman and de Roo, 2009). Figure 2.1 visually represents this idea of the separation or integration of functions. The traditional mono-functional positionings are in the upper left and lower right quadrants and represent a focus exclusively on either nature protection or socio-economic development. For a more multifunctional positioning, it can be interesting to explore the other two quadrants. These are the quadrants where tourism has the potential to connect to both nature protection and socio-economic development. The arrows in Figure 2.1 indicate the desirable shifts towards either protection by grasping use opportunities that are compatible with nature; or towards socio-economic development that takes appropriate risk-avoidance. Using a social-ecological systems perspective is likely to reveal the factors that link the natural and human components of the system. Such a perspective can help strive for a balance between nature protection and socio-economic development and improve policies that promote synergies between them.

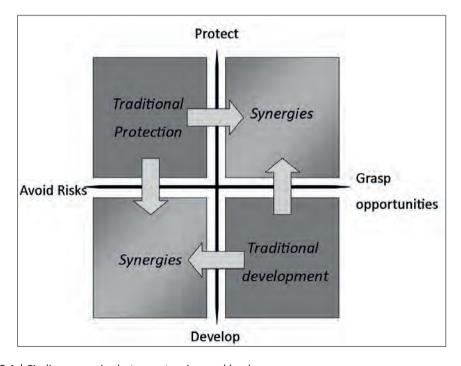


Figure 2.1 | Finding synergies between tourism and landscape

2.2.2 Resilience as a dynamic characteristic of a social-ecological system

Next to a coupled system, the social-ecological systems perspective is also characterized as a dynamic perspective on tourism and landscapes that can deal with change and uncertainty. To understand tourism and landscapes as complex social-ecological systems that are continually adapting to changing circumstances (Strickland-Munro et al., 2010), the concept of resilience needs to be discussed. Resilience thinking has emerged as a conceptual framework that can help to understand change and the multiple, cross-scale interactions in social-ecological systems (Plummer and Armitage, 2007). Although resilience is potentially a property of all systems, according to Plieninger and Bieling (2012), the concept of resilience is particularly appropriate to social-ecological systems because both concepts are on the interface of human and natural processes in time and space, and share an interest in the protection, management and planning of areas. Walker et al. (2004) state that resilience is an attribute of a social-ecological system and it determines the ability of a social-ecological system to adapt to and benefit from change. In that sense, resilience is at the core of what drives social-ecological systems (Folke et al., 2010).

The use of the concept of resilience to study the complex interactions between tourism and landscapes is relatively new (Becken, 2013). However, resilience has gained importance in the field of ecology (Holling, 2000), and the term has been used in a wide variety of works regarding interactions between people and nature (Carpenter et al., 2001). Many scholars use resilience in issues related to ecosystems (Gunderson et al., 2006), flooding (Adger et al., 2005), climate change (Davoudi, 2012), or risk and disaster management (Cox and Perry, 2011). Despite the dynamic nature and relative unpredictability of tourism (Schianetz and Kavanagh, 2008), and thus the potential value of resilience to tourism, little research has been done to adapt tourism management tools to take uncertainty and unexpected changes into account (Luthe and Wyss, 2014).

In this paper, resilience can help to understand the dynamics between tourism and landscapes. Understanding changes between them can help policy makers respond better to these changes. This is important for finding synergies between tourism and landscape as this requires balance between nature conservation and socio-economic development. Plieninger and Bieling (2012) argue that linking resilience thinking to landscapes can contribute to this balance since this linkage may help in creating a deeper understanding of the causes and consequences of landscape changes and the strategies that exist for managing these changes. Nevertheless, using resilience to understand the dynamics in the interactions between tourism and landscape is still relatively uncommon.

The literature on resilience contains a multitude of viewpoints, and an overview is presented in Table 2.1. We adhere to the social-ecological (or evolutionary) view of resilience, which rejects the idea of steady states (Davoudi et al., 2013). Instead of seeing the world as something that is ordered, mechanical and reasonably predictable, this view sees the world as chaotic, complex, uncertain and unpredictable. Folke (2006) says that resilience is not just about being persistent or resistant to disturbance; rather it is also about the opportunities that disturbance opens up in terms of recombination of evolved structures and processes, renewal of the systems, and emergence of new trajectories. Carpenter et al. (2005) do not conceive of resilience as a return to a normal or stable

situation, but as the ability of complex social-ecological systems to continuously change, adapt and transform in response to stresses and tensions.

Туре	Understanding of equilibrium within type	Characteristics of the type	Key references
Engineering resilience	One stable equilibrium	Bouncing back	Holling (1973, 1986)
Ecological resilience	Multiple equilibria	Bouncing forth	Adger et al. (2003)
Evolutionary resilience	Towards equilibrium	Adapt & Transform	Davoudi et al. (2012)
(Social-Ecological resilience)			Folke et al. (2010)

Table 2.1 | An overview of perspective on resilience

The evolutionary view contrasts with earlier views on resilience. Resilience was once defined by Holling (1973) as the ability of a system to return to an equilibrium or steady state after a disturbance. The recovery time of the system to return to equilibrium was the measure of resilience, meaning that the faster the system would recover, the more resilient the system. This so-called engineering perspective on resilience focussed on the maintenance of the system's efficiency, its stability and assumes a predictable world (Folke, 2006).

It is not only the recovery time of a system that matters, but also the amount of disturbance that a system can withstand in order to stay within its thresholds. This is the basis for the ecological resilience approach, which focusses on the system's ability to persist and the ability to adapt (Adger et al., 2003). Both the engineering and ecological approaches to resilience start from the idea of the existence of equilibrium in systems. The main difference is that engineering resilience is based on a belief in a single and stable equilibrium, whereas ecological resilience rejects this and acknowledges the existence of multiple equilibria and the possibility the ability of a system to flip to alternate states.

Resilience thinking provides a way to understand human and natural systems as complex social-ecological systems that are continuously adapting (Strickland-Munro et al., 2010). Instead of being in equilibrium, the subsystems within the social-ecological system are constantly interacting with and responding to each other, but the system is also influenced by the external context. Figure 2. 2 shows that the tourism-landscape system is impacted by external influences, and that each subsystem responds to this and to the impact on the other subsystem in an iterative way. This continuous process of impact and response between tourism and landscape is called co-evolutionary behaviour and leads to new behaviour of the entire system.

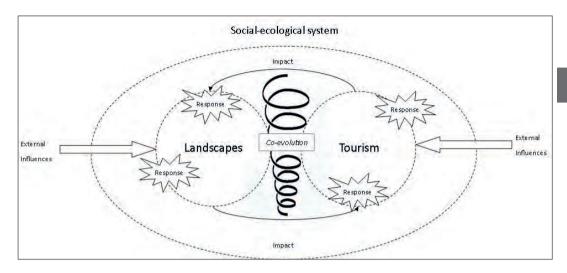


Figure 2.2 | Co-evolutionary behavior of the integrated tourism-landscape system

2.2.3 A critical reflection on resilience

Although the term resilience is widely used (Adger, 2000), there are many criticisms (Plieninger and Bieling, 2012; Fabinyi et al., 2014). First, when translating the concept into the social sciences there are issues with the normativeness of the concept. Resilience implies a desired outcome, but some outcomes may be perceived as desirable for some, but not for others (Davoudi, 2012). Systems may be ecologically resilient, but socially undesirable, or the other way round. Second, resilience thinking can be improved by giving more attention to social diversity. Fabinyi et al. (2014) state that diverse and contested interests in social-ecological systems have received little attention. To understand how systems change and affect different people in different ways, it may help to consider resilience at different spatial and temporal scales. Third, resilience has been criticized for being one-sided, from multiple sides! Some argue that resilience is a socially constructed idea of landscape management to the detriment of biophysical perspectives, while others consider that resilience is too much in the hands of biophysicalecology people (Kirchhoff et al., 2010). Fourth, Fabinyi et al. (2014) emphasize that resilience lacks attention to values and power. Within social-ecological systems, the understanding of different perspectives of different interest groups is important, but the notion of power relations can be improved. Power relations deal with the fact that some voices are heard, whilst others are marginalized or even silenced. A better understanding of the question "resilience for whom" (Lebel et al., 2006) could be achieved by not only looking at the outcomes, but also looking at the discursive dimension of power in social-ecological systems (Fabinyi et al., 2014). The critique that resilience is power blind and that it depoliticizes the dynamics of change in social-ecological systems (Wilkinson, 2012) means that socialecological resilience needs to further develop its theoretical sophistication and its capacity to address matters of power, conflict, contradiction and culture (Wilkinson, 2012). Fifth, planning and governance issues are context dependent and therefore resilience thinking does not offer a one-size-fits-all solution. Therefore, this paper strongly emphasizes that resilience thinking should not be seen as panacea (Ostrom and Cox, 2010; Walker et al., 2004). To address this panacea problem, comparative research is important because it can illuminate differences in the way tourism and landscape in coastal areas is managed. Looking at empirical cases from different international contexts could show best (and worst) practice on the management of tourism and landscape.

2.3 Governing tourism and landscape in coastal areas

Davidson (2010) states that people consciously act, both individually and collectively, and that this human agency is what distinguishes social systems from ecological systems. For the management of tourism destinations to serve the goals of both nature conservation and socio-economic regional development, it is important to understand the way social-ecological systems are governed and the role institutions play (Bramwell and Lane, 2011). An implication of a social-ecological systems perspective for governance processes is that decision makers are encouraged to become less concerned with prediction and control, and to move towards more organic, flexible and adaptive management styles (Lister, 2008). This is because the governing and managing of a combined social and ecological system is a difficult task. Social and ecological systems have become increasingly interlinked, especially because of the increasing size of human populations, the increasing level of economic development, and the increasing interest in natural areas especially in coastal zones (Vanclay, 2012). This means that human influences on the environment are increasing.

A challenge for central government is that it is often limited in its ability to respond to rapid social-ecological changes and to cope with uncertainty (Armitage et al., 2009). Governance, however, is a concept (and a system) that includes more actors than only government. It is defined as "the complex system of regulation involving the interactions of a wide variety of actors, institutions, the environment and all types of socio-institutional arrangements at different territorial levels" (Parra, 2010, p. 491). Governance provides for a range of flexible social arrangements that are necessary to develop the rules, institutions and incentives to influence the management of tourism and landscapes in a complex and uncertain world (Armitage et al., 2009).

Another implication of a social-ecological systems perspective is an inclusive type of governance process, in which a multitude of stakeholders can be represented. Conflict may arise because stakeholders can have diverse interests for the use of nature areas (Mose, 2007). The social sciences have a specific responsibility to inform decision makers about the different roles people can have (Shultis and Way, 2006). The challenge is to make the integration of different interests possible (Mose, 2007).

Social-ecological systems imply a multi-scalar system (Adger et al., 2003; Brondizio et al., 2009; Folke et al., 2005). Insights into governance processes can help to show multi-scalar tensions between nature and society, because the dynamics of human-nature systems are influenced by many factors, including government policies and contextual factors. This means that local processes are shaped by larger-scale processes (Liu et al., 2007). Therefore, the effective management of nature areas is impossible without also having management strategies for the areas adjacent to the nature areas. In that sense, a multi-scalar approach highlights that institutional linkages are important.

Institutions are important in overcoming the traditional divide between social and natural systems, since they are the central component linking social and ecological resilience (Adger, 2000). To understand how planning issues regarding tourism and landscapes are managed, analysing the institutional arrangements regarding tourism in landscapes can be useful. Society's capacity to build resilience resides in the interactions among actors, social networks and institutions (Lebel et al., 2006). Institutions are defined here in the broadest sense to include informal behaviour and the rules and norms that govern society, as well as the formal institutions with memberships, constituencies and stakeholders (Adger, 2000). Institutions often form nested systems in which higher level institutions set limits to the procedures and alternatives that are available at lower levels (Adger et al., 2003).

2.4 An application of the social-ecological systems perspective to the Dutch Wadden

2.4.1 Introduction to the Dutch Wadden

To show the applicability of the social-ecological systems perspective to tourism and landscape, we demonstrate its application in the context of the Dutch Wadden. The greater Wadden region (or trilateral Wadden) stretches from the northwest of the Netherlands, along the German coast, and up the western part of Denmark. This paper only focusses on the Dutch part of the Wadden, which is shown in Figure 2.3. The area consists of three parts; the Wadden Sea itself, the coastal mainland area and the Wadden islands. The Wadden Sea is the largest unbroken system of intertidal sand and mudflats in the world and is of great ecological importance (UNESCO, 2009). The coastal mainland is that area adjacent to the Wadden Sea, where agriculture is traditionally the dominant function. However, tourism still plays a minor, although increasing role. In contrast, tourism plays a major role on the Wadden islands, as it is the primary source of employment (Kabat et al., 2009). In all these parts of the Wadden there are interactions between tourism and landscape, but in different ways and this requires different forms of management.



Figure 2.3 | The Dutch Wadden

The Wadden sea is renowned for its outstanding ecological qualities and scenic landscape. Because of this, it was enlisted as natural heritage on the UNESCO World Heritage list in 2009. Figure 2.4 and 2.5 give an impression of the Wadden landscape. In these pictures, it is evident that despite the natural qualities of the area, the Wadden sea is not a remote ecosystem that has minimal human influence. Humans have been present in the area for around 10,000 years, since the last ice-age (Bazelmans et al., 2012; Knottnerus, 2005). Apart from being a nature area, the Wadden area is used for various socioeconomic activities such as agriculture, fishing, human settlement, manufacturing, resource extraction, shipping and tourism (Kabat et al., 2012).





Figure 2.4 | Dune landscape and the main village

Figure 2.5 | Tidal flat area seen from ferry boat

Tourism developed more recently than the other socio-economic activities in the Wadden, starting on the islands in a minor way about 100 years ago. After second world war, tourism steadily increased, becoming an important economic activity on the islands (Sijtsma et al., 2015; Postma, 2013). Its natural qualities made the Wadden very attractive to tourists (Revier, 2013; Sijtsma et al., 2012). Although the Dutch Wadden is only about one third of the total area of the Trilateral Wadden, its economic importance is much greater. For example, 6.5 million tourist nights are spent in the Dutch Wadden each year. Specifically, some 5.1 million nights are spent on the Dutch islands by 1.2 million people (Sijtsma et al., 2012).

Tourism opportunities in the area and its UNESCO recognition contribute to the increasing amount of tourism activities, but also emphasizes the responsibility to take care of the outstanding natural and cultural values which attract these tourists. Proper management of this area is necessary. This means it is important to have clear rules and regulations to mitigate the human impacts in the area, and also that opportunities for socio-economic development be provided. Since the 1970s the Wadden area has been managed with many rules and regulations along multiple scales and "Hands off the Wadden sea" became the dominant discourse (Runhaar, 2009). However, a strong emphasis on nature protection may hinder socio-economic opportunities that allow for synergies with the landscape. Finding the proper balance between nature protection and allowing opportunities for socio-economic development is difficult and is under constant discussion.

2.4.2 The Wadden as a coupled social-ecological system

If the Wadden area is to be examined from a social-ecological systems perspective, this requires that this area be framed as an integrated and coupled system. This would allow previously ignored synergies between tourism and landscape to be identified and understood. For example, past and contemporary planning strategies for rural areas in the Netherlands have mainly focussed on two dominant forms of land use: agriculture and nature (Hartman and de Roo, 2009). Tourism and leisure fell outside these traditional land use functions, and this limited (and continues to limit) the possibilities for synergies between tourism and landscape (Hartman and de Roo, 2009). This is especially the situation for the mainland part of the Wadden. Being adjacent to the UNESCO World Heritage site, this area has enormous potential for synergies between tourism and landscape, because here synergies are relatively unexploited, as tourism is still in its infancy and agriculture remains the dominant type of land use. In contrast, the Wadden islands show a different story – due to the attractive landscape, tourism has already developed into an established industry and tourism has a large impact on the landscape and the community. The challenge to find synergies on the islands is to look for development paths in such a way that tourism may serve the needs of both nature protection and socio-economic development. Together, the Wadden shows that, in both situations (underdevelopment on the mainland, and overpressure on the islands), a social-ecological systems perspective is useful. It frames tourism and landscape in coastal areas as part of an integrated and coupled system and therefore this perspective can help to understand the complex interactions between tourism and landscape.

2.4.3 Resilience as a dynamic perspective to overcome the challenges for the Wadden

Resilience thinking is a dynamic perspective that takes change and uncertainty into account and can be helpful in understanding how to cope with ecological, social and economic changes. According to Folke (2003), change has the potential to create opportunity for development, novelty and innovation, and to keep the system resilient. During the coming decades, the Wadden area will be increasingly challenged as it faces increasing ecological, social and economic changes. Kabat et al. (2012) consider the ecological state of the Wadden to be fragile and vulnerable to external and internal disturbance (e.g. global warming, sea-level rise, globalization of biota, diseases, economic exploitation). The socio-economic situation of the area is also fragile. Although, the area is highly attractive to visitors, the region is facing population decline, a reduction in economic activity, and consequential loss of social cohesion (van Dijk et al., 2009). Because of its fragile economic structure, utilizing opportunities for tourism and recreation development is of great importance for the economic development of the region, and also to strengthen the region's liveability (van Dijk et al., 2009). Given these challenges, it can be said that the Wadden is an area which is dynamic in both social and ecological terms, and the situation in the Wadden is not stable or completely predictable. This means that, for example, the strict regulation of nature protection on the Wadden islands can lead to problems in adapting to these constantly changing circumstances. Managing the Wadden in a static way with a strong focus on nature protection reflects the criticism on resilience explained in this paper. Although this paper argues that resilience is a useful concept as it helps to constantly seek a balance between the needs for nature protection and socio-economic development, resilience thinking needs to take social components into account such as cultural values, diversity, inclusiveness and power.

2.4.4 Governing for social-ecological resilience in the Wadden

Resilience thinking about multi-functional social-ecological systems has implications for governance processes, which need to be more flexible, inclusive and multilevel. However, these theoretical implications can be difficult to implement in practice, because the way the Wadden is managed has become difficult. The governance of the Wadden can be characterized as a complex, layered, varied and – in the eyes of many – highly fragmented administrative and managerial organization (Toonen, 2009; Giebels et al., 2013). The complexity of the governance of such multi-functional areas is apparent (Toonen, 2009), because many organizations with sometimes conflicting interests are involved in the management of the area (van Dijk et al., 2009). Conflicts between stakeholders may hinder opportunities for finding synergies between tourism and landscape. For example, conflicts among tourism entrepreneurs and nature protection interest groups may create suboptimal outcomes for both the social and ecological systems. This raises questions about how these difficulties can be overcome. Questions regarding who are involved in the process, who are excluded, what are the varying interests, and to what extent can the governance process be improved, will help increase the understanding of tourism in coastal areas.

2.5 Conclusion

This paper argued for the use of a social-ecological systems perspective to understand the complex interactions between tourism and landscape in coastal areas. This perspective can help reveal the potential of tourism to build social-ecological resilience. The social-ecological systems perspective is likely to illuminate missed opportunities for synergies between tourism and landscapes. By means of the example of the Dutch Wadden, we illustrated that, although coastal areas are facing several ecological, social and economic challenges, tourism can help to protect nature areas, while at the same time allowing for socio-economic regional development. This paper proposed a different understanding of tourism by approaching both tourism and nature areas in a more integrated and multi-functional way. The social-ecological systems approach argues that the social system and the natural system form an integrated whole. How the subsystems co-evolve can be understood by looking at their interactions and feedbacks. For understanding the current situation and possible future directions, it is important to know the evolution of tourism and landscapes. Whether synergies between tourism and landscapes are found in the current situation or not is partly a result of historical events, however, a new way of looking at the issue - i.e. from a social-ecological systems perspective - is likely to reveal possibilities that were previously hidden. A social-ecological systems perspective deals with change and uncertainty in a more sophisticated way than thinking about a system only in terms of stability and certainty. This paper suggests that resilience thinking improves how systems are managed. This has implications for the governance of tourism in coastal areas. Essentially, governance needs to be more flexible, more inclusive, and multilevel. We advocate that landscape managers should adopt a social-ecological systems perspective to help them identify new opportunities for meeting the varied objectives of the multiple components of their landscape system.

References

- Adger, W.N. (2000), "Social and ecological resilience: are they related?", *Progress in Human Geography*, Vol. 24 No. 3, pp. 347-64.
- Adger, W.N., Hughes, T.P., Folke, C., Carpenter, S.R. and Rockström, J. (2005), "Social-ecological resilience to coastal disasters", *Science*, Vol. 309 No. 5737, pp. 1036-9.
- Adger, W.N., Brown, K., Fairbrass, J., Jordan, A., Paavola, J., Rosendo, S. and Seyfang, G. (2003), "Governance for sustainability: towards a 'thick' analysis of environmental decisionmaking", Environment and Planning A, Vol. 35 No. 6, pp. 1095-110.
- Amérigo, M., Aragonés, J.I., de Frutos, B., Sevillano, V. and Cortés, B. (2007), "Underlying dimensions of ecocentric and anthropocentric environmental beliefs", *The Spanish Journal of Psychology*, Vol. 10 No. 1, pp. 97-103.
- Armitage, D.R., Plummer, R., Berkes, F., Arthur, R.I., Charles, A.T., Davidson-Hunt, I.J., Diduck, A.P., Doubleday, N.C., Johnson, D.S., Marschke, M., McConney, P., Pinkerton, E.W. and Wollenberg, E.K. (2009), "Adaptive co-management for social-ecological complexity", *Frontiers in Ecology and the Environment*, Vol. 7 No. 2, pp. 95-102.
- Bazelmans, J., Meier, D., Nieuwhof, A., Spek, T. and Vos, P. (2012), "Understanding the cultural historical value of the Wadden Sea region. The co-evolution of environment and society in the Wadden Sea area in the Holocene up until early modern times (11,700 BC-1800 AD): an outline", *Ocean and Coastal Management*, Vol. 68 No. 2012, pp. 114-26.
- BBG (2010), "CBS Bestand Bodemgebruik 2010", available at: https://geodata.nationaalgeoregister.nl/bestandbodemgebruik2010/wms?request=GetCapabilities
- Becken, S. (2013), "Developing a framework for assessing resilience of tourism sub-systems to climatic factors", *Annals of Tourism Research*, Vol. 43 No. 2013, pp. 506-28.
- Berkes, F. (2007), "Understanding uncertainty and reducing vulnerability: lessons from resilience thinking", *Natural Hazards*, Vol. 41 No. 2, pp. 283-95.
- Berkes, F., Colding, J. and Folke, C. (2003), "Introduction", in Berkes, F., Colding, J. and Folke, C. (Eds.), Navigating Social-Ecological Systems: Building Resilience for Complexity and Change, Cambridge University Press, Cambridge, pp. 1-29.
- Binder, C.C.R., Hinkel, J., Bots, P.W.G. and Pahl-Wostl, C. (2013), "Comparison of frameworks for analysing social-ecological systems", *Ecology and Society*, Vol. 18 No. 4, available at: http://dx.doi.org/10.5751/ES-05551-180426Research
- Bramwell, B. and Lane, B. (2011), "Critical research on the governance of tourism and sustainability", Journal of Sustainable Tourism, Vol. 19 Nos 4-5, pp. 411-21.
- Brondizio, E.S., Ostrom, E. and Young, O.R. (2009), "Connectivity and the governance of multilevel social-

- ecological systems: the role of social capital", *Annual Review of Environment and Resources*, Vol. 34 No. 1, pp. 253-78.
- Buckley, R. (2011), "Tourism and environment", *Annual Review of Environment and Resources*, Vol. 36 No. 1, pp. 397-416.
- Buckley, R. (2012), "Sustainable tourism: research and reality", *Annals of Tourism Research*, Vol. 39 No. 2, pp. 528-46.
- Carpenter, S., Walker, B., Anderies, J.M. and Abel, N. (2001), "From metaphor to measurement: resilience of what to what?", *Ecosystems*, Vol. 4 No. 8, pp. 765-81.
- Carpenter, S.R., Westley, F. and Turner, G. (2005), "Surrogates for resilience of social-ecological systems", *Ecosystems*, Vol. 8 No. 8, pp. 941-4.
- Costanza, R. and Farley, J. (2007), "Ecological economics of coastal disasters: introduction to the special issue", *Ecological Economics*, Vol. 63 Nos 2-3, pp. 249-53.
- Cox, R.S. and Perry, K.M. (2011), "Like a fish out of water: reconsidering disaster recovery and the role of place and social capital in community disaster resilience", *American Journal of Community Psychology*, Vol. 48 Nos 3-4, pp. 395-411.
- Cumming, G., Allen, C. and Ban, N. (2015), "Understanding protected area resilience: a multi-scale, social-ecological approach", *Ecological Applications*, Vol. 25 No. 2, pp. 299-319.
- Cumming, G.S. (2011a), Spatial Resilience in Social-Ecological Systems, Springer, Dordrecht.
- Cumming, G.S. (2011b), "Spatial resilience: integrating landscape ecology, resilience, and sustainability", Landscape Ecology, Vol. 26 No. 7, pp. 899-909.
- Davidson, D.J. (2010), "The applicability of the concept of resilience to social systems: some sources of optimism and nagging doubts", *Society & Natural Resources*, Vol. 23 No. 12, pp. 1135-49.
- Davoudi, S. (2012), "Resilience: a bridging concept or a dead end?", *Planning Theory & Practice*, Vol. 13 No. 2, pp. 299-307.
- Davoudi, S., Brooks, E. and Mehmood, A. (2013), "Evolutionary resilience and strategies for climate adaptation", *Planning Practice & Research*, Vol. 28 No. 3, pp. 307-22.
- Davoudi, S., Shaw, K., Haider, L.J., Quinlan, A.E., Peterson, G.D., Wilkinson, C. and Porter, L. (2012), "Resilience: a bridging concept or a dead end? 'reframing' resilience: challenges for planning theory and practice interacting traps: resilience assessment of a pasture management system in northern Afghanistan urban resilience: what does it mean in planning", *Planning Theory & Practice*, Vol. 13 No. 2, pp. 299-333.
- Fabinyi, M., Evans, L. and Foale, S. (2014), "Social-ecological systems, social diversity, and power: insights from anthropology and political ecology", *Ecology and Society*, Vol. 19 No. 4, available at: http://dx.doi.org/10.5751/ES-07029-190428

- Farrell, B.H. and Twining-Ward, L. (2004), "Reconceptualizing tourism", *Annals of Tourism Research*, Vol. 31 No. 2, pp. 274-95.
- Folke, C. (2003), "Social-ecological resilience and behavioural responses", in Biel, A., Hansson, B. and Martensson, M. (Eds.), *Individual and Structural Determinants of Environmental Practice*, Ashgate Publishers, London, pp. 226-87.
- Folke, C. (2006), "Resilience: the emergence of a perspective for social-ecological systems analyses", *Global Environmental Change*, Vol. 16 No. 3, pp. 253-67.
- Folke, C., Hahn, T., Olsson, P. and Norberg, J. (2005), "Adaptive governance of social-ecological systems", *Annual Review of Environment and Resources*, Vol. 30 No. 1, pp. 441-73.
- Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T. and Rockstrom, J. (2010), "Resilience thinking: integrating resilience, adaptability and transformability", *Ecology and Society*, Vol. 15 No. 4, available at: www.ecologyandsociety.org/vol15/iss4/art20/
- Giebels, D., van Buuren, A. and Edelenbos, J. (2013), "Ecosystem-based management in the Wadden Sea: principles for the governance of knowledge", *Journal of Sea Research*, Vol. 82 No. 2013, pp. 176-87.
- Gkoltsiou, A. and Terkenli, T.S. (2012), "An interdisciplinary analysis of tourist landscape structure", *Tourismos*, Vol. 7 No. 2, pp. 145-64.
- Goodwin, H. (2011), Taking Responsibility for Tourism, Goodfellow, Oxford.
- Gunderson, L.H., Carpenter, S.R., Folke, C., Olsson, P. and Peterson, G. (2006), "Water RATs (resilience, adaptability, and transformability) in Lake and Wetland social-ecological systems", *Ecology and Society*, Vol. 11 No. 1, available at: www.ecologyandsociety.org /vol11/iss1/art16/
- Hall, C.M. and Page, S. (2006), *The Geography of Tourism and Recreation: Environment, Place and Space*, Psychology Press, Oxford.
- Halliday, A. and Glaser, M. (2011), "A management perspective on social ecological systems: a generic system model and its application to a case study from Peru", *Human Ecology*, Vol. 18 No. 1, pp. 1-18.
- Hartman, S. and de Roo, G. (2009), *Op het snijvlak van risico en kansen*, KNAW-Waddenacademie, Leeuwarden.
- Hartman, S., Rauws, W.S., Beeftink, M.J., De Roo, G., Zandbelt, D., Frijters, E. and Klijn, O. (2011), "De ontwikkeling van regioconcepten-developing regional spatial concepts", in Ovink, H. and Wierenga, E. (Eds), Regio's in verandering; ontwerpen voor adaptiviteit-regions in transition; designing for adaptivity, 010 Publishers, Rotterdam, pp. 36-61.
- Higgins-Desbiolles, F. (2006), "'More than an industry': the forgotten power of tourism as a social force", Tourism Management, Vol. 27 No. 6, pp. 1192-208.
- Holling, C.S. (1973), "Resilience and stability of ecological systems", Annual Review of Ecological Systems,

- Vol. 4 No. 1973, pp. 1-23.
- Holling, C.S. (1986), "Resilience of ecosystems; local surprise global change", in Clark, W.C. and Munn, R.E. (Eds.), *Sustainable Development of the Biosphere*, Cambridge University Press, Cambridge, pp. 292-317.
- Holling, C.S. (2000), "Understanding the complexity of economic, ecological, and social systems", *Ecosystems*, Vol. 4 No. 5, pp. 390-405.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P.M.J., Speelman, H., Deen, N.R.J. and Hutjes, R.W.A. (2009), *Kennis Voor Een Duurzame Toekomst van de Wadden,* KNAW-Waddenacademie, Leeuwarden.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P.M.J., van Oijen, T., Pejrup, M., Reise, K. et al. (2012), "The Wadden Sea Region: towards a science for sustainable development", *Ocean & Coastal Management*, Vol. 68 No. 2012, pp. 4-17.
- King, B., Pizam, A. and Milman, A. (1993), "Social impacts of tourism: host perceptions", *Annals of Tourism Research*, Vol. 20 No. 1993, pp. 650-65.
- Kirchhoff, T., Brand, F.S., Hoheisel, D. and Grimm, V. (2010), "The one-sidedness and cultural bias of the resilience approach", *Gaia*, Vol. 19 No. 1, pp. 25-31.
- Knottnerus, O.S. (2005), "History of human settlement, cultural change and interference with the marine environment", *Helgoland Marine Research*, Vol. 59 No. 1, pp. 2-8.
- Lebel, L., Anderies, J.M., Campbell, B., Folke, C., Hatfield-Dodds, S., Hughes, T.P. and Wilson, J. (2006), "Governance and the capacity to manage resilience in regional social-ecological systems", *Ecology and Society*, Vol. 11 No. 1, available at: www.ecologyandsociety.org/vol11/iss1/art19/Insight
- Levin, S., Xepapadeas, T., Crépin, A.-S., Norberg, J., de Zeeuw, A., Folke, C., Hughes, T., Arrow, K., Barrett, S., Daily, G., Ehrlich, P., Kautsky, N., Mäler, K.-G., Polasky, S., Troell, M., Vincent, J.R. and Walker, B. (2012), "Social-ecological systems as complex adaptive systems: modeling and policy implications", *Environment and Development Economics*, Vol. 18 No. 2, pp. 111-32.
- Libosada, C.M. (2009), "Business or leisure? Economic development and resource protection-concepts and practices in sustainable ecotourism", *Ocean and Coastal Management*, Vol. 52 No. 7, pp. 390-4.
- Lister, N.-M.E. (2008), "Bridging science and values: the challenge of biodiversity conservation", in Waltner-Toews, D., Kay, J. and Lister, N.-M.E. (Eds.), *The Ecosystem Approach: Complexity, Uncertainty, and Managing for Sustainability*, Columbia University Press, New York, NY, pp. 83-108.
- Liu, J., Dietz, T., Carpenter, S.R., Alberti, M., Folke, C., Moran, E., Pell, A.N., Deadman, P., Kratz, T., Lubchenco, J., Ostrom, E., Ouyang, Z., Provencher, W., Redman, C.L., Schneider, S.H. and Taylor, W.W. (2007), "Complexity of coupled human and natural systems", *Science*, Vol. 317 No. 5844, pp. 1513-6.

- Luthe, T. and Wyss, R. (2014), "Assessing and planning resilience in tourism", *Tourism Management*, Vol. 44, pp. 161-3.
- McCombes, L., Vanclay, F. and Evers, Y. (2015), "Putting social impact assessment to the test as a method for implementing responsible tourism practice", *Environmental Impact Assessment Review*, Vol. 55 No. 2015, pp. 156-68.
- McCool, S.F. and Spenceley, A. (2014), "Tourism and protected areas: a growing nexus of challenge and opportunity", *Koedoe*, Vol. 56 No. 2, pp. 1-2.
- Millennium Ecosystems Assessment (2005), *Ecosystems and Human Well-Being: Scenarios,* Island Press, Washington, DC.
- Mose, I. (Ed.) (2007), Protected Areas and Regional Development in Europe: Towards a New Model for the 21th Century, Ashgate, Aldershot.
- Newsome, D., Moore, S.A. and Dowling, R.K. (2013), *Natural Area Tourism: Ecology, Impacts and Management*, 2nd ed., Channel View Publications, Bristol.
- Ostrom, E. and Cox, M. (2010), "Moving beyond panaceas: a multi-tiered diagnostic approach for social-ecological analysis", *Environmental Conservation*, Vol. 37 No. 4, pp. 451-63.
- Parra, C. (2010), "Sustainability and multi-level governance of territories classified as protected areas in France: the Morvan regional park case", *Journal of Environmental Planning and Management*, Vol. 53 No. 4, pp. 491-509.
- Persha, L., Agrawal, A. and Chhatre, A. (2011), "Social and ecological synergy", *Science*, Vol. 331 No. 6024, pp. 1606-8.
- Plieninger, T. and Bieling, C. (2012), Resilience and the Cultural Landscape Understanding and Managing Change in Human-Shaped Environments, Cambridge University Press, Cambridge.
- Plummer, R. and Armitage, D. (2007), "A resilience-based framework for evaluating adaptive comanagement: linking ecology, economics and society in a complex world", *Ecological Economics*, Vol. 61 No. 1, pp. 62-74.
- Plummer, R. and Fennell, D.A. (2009), "Managing protected areas for sustainable tourism: prospects for adaptive co-management", *Journal of Sustainable Tourism*, Vol. 17 No. 2, pp. 149-68.
- Postma, A. (2013), When the Tourists Flew in: Critical Encounters in the Development of Tourism, University of Groningen, Groningen.
- Revier, H. (2013), "Nature conservation and tourism development in the Dutch Wadden Sea region: a common future?", in Postma, A., Yeoman, I. and Oskam, J. (Eds.), *The Future of European Tourism*, European Tourism Futures Institute, Leeuwarden, pp. 177-93.
- Robertson, M. (2012), "Measurement and alienation: making a world of ecosystem services", *Transactions of the Institute of British Geographers*, Vol. 37 No. 3, pp. 386-401.

- Ruiz-Ballesteros, E. (2011), "Social-ecological resilience and community-based tourism: an approach from Agua Blanca, Ecuador", *Tourism Management*, Vol. 32 No. 3, pp. 655-66.
- Runhaar, H. (2009), "Putting SEA in context: a discourse perspective on how SEA contributes to decision-making", *Environmental Impact Assessment Review*, Vol. 29 No. 3, pp. 200-9.
- Saarinen, J. (2006), "Traditions of sustainability in tourism studies", *Annals of Tourism Research*, Vol. 33 No. 4, pp. 1121-40.
- Schianetz, K. and Kavanagh, L. (2008), "Sustainability indicators for tourism destinations: a complex adaptive systems approach using systemic indicator systems", *Journal of Sustainable Tourism*, Vol. 16 No. 6, pp. 601-28.
- Schroter, M., van der Zanden, E.H., van Oudenhoven, A.P.E., Remme, R.P., Serna-Chavez, H.M., de Groot, R.S. and Opdam, P. (2014), "Ecosystem services as a contested concept: a synthesis of critique and counter-arguments", *Conservation Letters*, Vol. 7 No. 6, pp. 514-23.
- Shipman, B. and Stojanovic, T. (2007), "Facts, fictions, and failures of integrated coastal zone management in Europe", *Coastal Management*, Vol. 35 Nos 2-3, pp. 375-98.
- Shultis, J.D. and Way, P.A. (2006), "Changing conceptions of protected areas and conservation: linking conservation, ecological integrity and tourism management", *Journal of Sustainable Tourism*, Vol. 14 No. 3, pp. 37-41.
- Sijtsma, F.J., Daams, M.N., Farjon, H. and Buijs, A.E. (2012), "Deep feelings around a shallow coast: a spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area", *Ocean & Coastal Management*, Vol. 68 No. 2012, pp. 138-48.
- Sijtsma, F.J., Broersma, L., Daams, M.N., Hoekstra, H. and Werner, G. (2015), "Tourism development in the Dutch Wadden area: spatial-temporal characteristics and monitoring needs", *Environmental Management and Sustainable Development*, Vol. 4 No. 2, pp. 217-41.
- Stoffelen, A. and Vanneste, D. (2015), "An integrative geotourism approach: bridging conflicts in tourism landscape research", *Tourism Geographies*, Vol. 17 No. 4, pp. 1-17.
- Strickland-Munro, J.K., Allison, H.E. and Moore, S.A. (2010), "Using resilience concepts to investigate the impacts of protected area tourism on communities", *Annals of Tourism Research*, Vol. 37 No. 2, pp. 499-519.
- Terkenli, T.S. (2004), "Tourism and landscape", in Lew, A.A., Hall, C.M. and Williams, A.M. (Eds.), *A Companion to Tourism*, Blackwell, Oxford, pp. 339-48.
- Toonen, T.A.J. (2009), "Good governance for the Wadden: the organisation of decision-making for sustainability", paper for presentation at Workshop 4 (WOW4), Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, IN.

- UNESCO (2009), *Wadden Sea*, UNESCO, Seville, available at: http://whc.unesco.org/en/decisions/1946 (accessed 25 March 2016).
- UNWTO (2010), *Tourism 2020 Vision*, UNESCO, World Tourism Organization, Madrid, available at: http://cf.cdn.unwto.org/sites/all/files/pdf/final_annual_report_pdf_3.pdf (accessed 25 March 2016).
- van Dijk, J., Folmer, H., Broersma, L., van der Heide, M., Heijman, W., Horlings, I., Ivanova, O., Jonkhoff, W., Koops, O., Sijtsma, F. and van der Veen, A. (2009), *Analyse van Problemen in Het Waddengebied*, KNAW-Waddenacademie, Leeuwarden.
- Vanclay, F. (2012), "The potential application of social impact assessment in integrated coastal zone management", Ocean & Coastal Management, Vol. 68 No. 2012, pp. 149-56.
- Walker, B., Holling, C.S., Carpenter, S.R. and Kinzig, A. (2004), "Resilience, adaptability and transformability in social-ecological systems", *Ecology and Society*, Vol. 9 No. 2, available at: www.ecologyandsociety.org/vol9/iss2/art5
- Wilkinson, C. (2012), "Social-ecological resilience: insights and issues for planning theory", *Planning Theory*, Vol. 11 No. 2, pp. 148-69.
- Williams, S. (2009), *Tourism Geography*: A New Synthesis, Routledge, Abingdon.

Further reading

- Derissen, S., Quaas, M.F. and Baumgartner, S. (2011), "The relationship between resilience and sustainability of ecological-economic systems", *Ecological Economics*, Vol. 70 No. 6, pp. 1121-8.
- Holling, C.S. (2008), "Theories for sustainable futures", Conservation Ecology, Vol. 4 No. 2, pp. 5-9.
- Ostrom, E. (2011), "Background on the institutional analysis and development", *Policy Studies Journal*, Vol. 39 No. 1, pp. 7-27.

UNDERSTANDING THE HISTORICAL INSTITUTIONAL CONTEXT BY USING CONTENT ANALYSIS OF LOCAL POLICY AND PLANNING DOCUMENTS

Reprint of **Heslinga**, **J.H.**, Groote, P.D. and F. Vanclay (2017). Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region. *Tourism Management* (in press).

Abstract

Content analysis is a valuable tool to identify changes in policy over time. Taking a closer look at past policies helps policymakers and planners improve their understanding of the institutional context in which decisions are made. Using the Wadden region of the northern Netherlands as our example, fluctuations in orientation between socio-economic development and nature protection were evident in policy and planning documents. There has been an increasing awareness of synergy. Synergies between tourism and landscape are crucial to balance nature protection with socio-economic development and to increase the social-ecological resilience of regions. We conducted a content analysis of policy and planning documents that related to the island of Terschelling in the UNESCO World Heritage-listed Wadden Sea region for the period 1945 to 2015. This historical document analysis was supported by semi-structured interviews with experts and other stakeholders.

Keywords

tourism policy; historical analysis; social-ecological systems; nature-based tourism; island studies; protected area management; natural heritage management; leisure and recreation

3.1 Introduction

For policymakers and planners to understand the current situation better and to improve future policies and plans about tourism and landscape, more knowledge about the institutional context, past and present, is necessary. The institutional context is where planning and policy making occurs, but it has received little attention in the tourism literature (Hall and Page, 2006). This institutional context is influenced by past decision-making processes and therefore exploring the historical relationship between society and the environment is an essential part of understanding this context (Dredge, 2001; González et al., 2008; Parra and Moulaert, 2016). Walker et al. (2002) showed that an analysis of the historical context can reveal a great deal about the present situation and how it might respond to future changes. A methodological problem is that it is often hard to establish the historical institutional context. The specific focus of this paper, therefore, is on understanding the institutional context and how this has changed over time.

We use content analysis of local documents to understand the historical-institutional context. Understanding the past can be achieved by analysing how tourism-landscape interactions are represented in policy and planning documents and how they change over time. These local documents are therefore used as a proxy for the institutional context. We use content analysis to analyse these documents to consider the changing dynamics of tourism-landscape interactions in policy. This analysis is supported by semi-structured interviews with local experts and other stakeholders. We specifically consider the Island of Terschelling in the northern Netherlands for the period 1945 to 2015.

This paper helps assess changes in the interactions between tourism and landscape over time. Tourism and landscape interact in many ways (Terkenli, 2004; Liburd and Becken, 2017). Nature-based tourism, for example, is not just a socio-economic activity that provides income and other benefits to local communities, it also plays an important role in facilitating the understanding of natural heritage, and gaining public support and raising funding for conservation (Libosada, 2009; McCool and Spenceley, 2014). However, tourism (in general, and including nature-based tourism) has often had negative impacts on the landscape (Saarinen, 2006; Buckley, 2011) and on host communities (King et al., 1993; McCombes et al., 2015). Tourism tends to be highly dependent on aesthetic landscapes as it benefits from this to remain attractive to tourists (Liu et al., 2007). The finding of synergies between tourism and landscape is therefore essential for dealing with future social and ecological change. Synergies can be described as situations in which the interactions between elements of a system catalytically combine in ways that result in a greater sum-total outcome than would have been achieved otherwise, with benefits across the full range of social, economic and ecological dimensions (Persha et al., 2011).

Policymakers and planners often struggle to find synergies in their attempts to balance socio-economic development and nature protection. The inadequate preparation of policies and plans and/or a one-sided approach that is exclusively focused on either nature protection or socio-economic development will hinder the development of synergies between tourism and landscape. For example, in locations where the focus lies only on socio-economic development, degradation of nature will likely occur. Conversely, a focus only on nature protection may lead to suboptimal economic development. In most

rural areas, there usually is a focus on either nature protection or socio-economic development – tourism, however, mainly takes place at the intersection of these trajectories (Hartman and de Roo, 2013). This means that tourism does not always fit the ways institutions and landscape are traditionally structured (Hartman and de Roo, 2013). Because of this, opportunities for synergies between landscapes and tourism are underexplored (Cumming et al., 2015; Hartman, 2015; Heslinga et al., 2017).

The interactivity between tourism and landscape, and the potential synergies between them, can be understood in terms of socio-ecological systems (SES) thinking. A SES perspective presumes an integrated system including human society and ecosystems, with reciprocal feedback loops and interdependencies (Berkes, 2007). Traditional ecology, however, has typically excluded humans from the system, while traditional social science has typically under-prioritised the ecological consequences of human action (Berkes, 2007; Folke et al., 2005). The advantage of using the SES approach is that both ecological and social research have to consider human and ecological components (Liu et al., 2007). In such a way of thinking, the distinction between social and natural systems is considered to be minimal. In SES thinking, institutions provide a linking mechanism between social and ecological systems, and are therefore important in managing social-ecological interactions.

If the potential synergies between tourism and landscape are recognised and regional development options that find a balance between tourism and landscape are selected, then tourism could be an opportunity to increase the social-ecological resilience of a region (Buckley, 2011; Heslinga et al., 2017). Resilience is a characteristic of a social-ecological system and can be considered as the ability to continuously change, adapt and transform in response to present and future stresses and tensions (Carpenter et al. 2005; Imperiale and Vanclay, 2016). Resilience is a key concept in SES thinking (Anderies et al., 2006; Folke et al., 2010). In the tourism literature, resilience has mainly been discussed as a theoretical concept with little application to the real world (Lew, 2014). To stimulate the identification of synergies and to increase resilience, we analyse the institutional context in which social-ecological systems operate. To understand the changing dynamics of the tourism-landscape interactions in policy, there is need for a historical and contextual approach (González et al., 2008; Parra and Moulaert, 2016).

3.2 Data and methods

The main contribution of this paper is to understand the historical institutional context. We used a mixture of qualitative and quantitative research methods. We applied content analysis to local documents from 1945 to 2015 in order to identify fluctuations and shifts in the focus of these documents. This content analysis was augmented with semi-structured interviews with local experts and other stakeholders.

We consider that all coding of raw data is qualitative, because all reading of texts is in essence qualitative, even when they are converted into numbers which can be counted (Drisko and Maschi,

2015). However, quantitative techniques can be used to analyse the frequencies of coded data. Such a hybrid approach is in line with what Drisko and Maschi (2015) call 'basic content analysis'.

3.2.1 Content analysis

To identify the changing foci of local policies, plans and strategies over time and how this has influenced the current situation, a content analysis of 12 key documents from 1945 to 2015 was undertaken (listed in Appendix A). Our research sought to identify the changes in the interactions between tourism and landscape over time. Krippendorff (2013) defined content analysis as a research technique for making replicable and valid inferences from texts and other materials to understand the institutional and other contexts in which those media are used. In the field of tourism studies, content analysis is widely used, especially in relation to destination image representations (Choi et al., 2007). However, based on the literature review we conducted, it would appear that content analysis has not yet been applied to the study of tourism-landscape policy interactions. Using content analysis to analyse historical documents to consider changes in policy and planning makes sense because the analysis can be done for any time period, well beyond the availability of live people to interview, or any change in the perceptions of these key informants over the course of their lifetime. Therefore, content analysis can be argued as having high reliability and validity (Krippendorff, 2013).

In this paper, the focus of the analysis is at the municipal level (Terschelling). Although developments in tourism and landscape are steered by policies at multiple levels, this research was interested in the impact of policies at the higher levels on the local level. However, in a nested multilevel system, local policy and planning is not detached from higher levels. Therefore, policies at the provincial, national, and international levels were used to support, understand and interpret the content analysis of the local documents. The 12 local documents included in the content analysis were identified from a thorough search of the academic (e.g. Sijtsma et al., 2008) and popular literature (e.g. Hoekstra et al., 2009; Oosterveld, 2011) and from interviews with key informants. Three of these were available online, the others were accessed from the archives of the Municipality of Terschelling. The documents collected from the archives were not available in digital form, but were scanned (or rather photographed with a high quality digital camera) and later converted into editable text using the optical character recognition software (Adobe Professional 10) so that they could be coded and analysed with qualitative data analysis software.

Coding is the heart and soul of content analysis (Krippendorff, 2004; Glaser and Laudel, 2013). Codes can be derived from theory beforehand (i.e. *a priori* coding), they can be derived from the text itself (i.e. emergent coding), or a mix of both can be applied (Drisko and Maschi, 2015). In our case, the three main or higher-level codes were derived from theory: nature protection; socio-economic development; and the synergies between them. These codes represent the different ways tourism and landscape can interact. 'Nature protection' means that the emphasis is on protection, with tourism being considered as having a negative impact on landscape and nature. It was revealed by wordings such as: landscape, conservation, or salt marsh. 'Socio-economic development' indicates an emphasis on the utility of nature; it is seen as a resource that is beneficial to the growth of tourism and was revealed by words

such as recreation, entrepreneur, or hotel. The code 'synergy' implies that tourism and landscape should be in balance and can create win-win situations. It is revealed by words such as balance, integrated, or collaboration. The full list of subcodes is provided in Appendix B. The subcodes were derived by theoretical reasoning, reflection on the interviews, a general understanding of policy at the higher levels, and from a preliminary skim-reading of the local documents (see Appendix B). The content analysis was performed using the qualitative data analysis software, ATLAS.ti (version 7.5.12). By using its 'Word Cruncher' function, the frequencies of the subcodes were calculated, and the relative proportions of the main codes were determined.

3.2.2 Semi-structured interviews

Complementing the content analysis, interviews with experts and stakeholders were conducted for three reasons. First, the interviews were used to nominate some of the major shifts in policy orientation. The interviews especially helped to understand the influence of early developments (before 1945) that were not covered by the content analysis. Second, the words used in the interviews were helpful to nominate some of the subcodes for the content analysis. Third, the interview data provided background that helped in interpreting the patterns emerging from the content analyses and to help understand the role of policy and its influences on tourism development on Terschelling.

The people interviewed were recruited through the researcher's network, snowballing and by online searching. A total of 8 interviews were held ranging from 1 to 2 hours in length. They included representatives of *Staatsbosbeheer* (the national forestry management agency), various interest groups, a civil servant, a former mayor, a historian, and a local tourism expert. The interviews addressed issues such as the changes in the physical, institutional and socio-cultural domains on Terschelling, and how these changes affected the way tourism and landscape interacted over time. The actual and potential conflicts between stakeholders in relation to the development of tourism on the island were also discussed. Prior to the interviews, the respondents were provided with a research information sheet and were asked to complete a consent form which covered issues of anonymity, use of the research, and their rights during and after the interview (Vanclay et al., 2013). With the permission of all respondents, the interviews were audio-recorded, and later transcribed. For the analysis of the interviews, a qualitative approach was chosen using ATLAS.ti.

3.3 Background information about Terschelling and the Wadden Region

Our research focused on the island of Terschelling in the Dutch Wadden area. The Wadden is the largest natural area in Western Europe and is one of the largest tidal wetlands in the world (Kabat et al., 2012). It stretches from the northwest of the Netherlands, along the German coast, and up the western part of Denmark. The Wadden is renowned for its biodiversity and as a highly valued landscape, which led to its

designation as a UNESCO World Heritage region in 2009. These natural qualities and international recognition have made the Wadden very attractive for tourists (Revier, 2013). During the last decades, tourism has become a well-developed socio-economic activity (Sijtsma et al., 2012).

The World Heritage listing of the Wadden in 2009 is likely to have contributed to an increase in the range and extent of tourism activities (Buckley, 2004; Sijtsma et al., 2012), but also creates a responsibility to take care of the outstanding natural and cultural values which attract the tourists. Proper management of this area is therefore necessary, but finding an appropriate balance between nature protection and socio-economic development is difficult and under constant discussion (van der Aa et al., 2004; Kabat et al., 2012). Managing the area is particularly complicated because the Wadden is not a remote ecosystem with minimal human influence, from which human impacts can be excluded. Instead, the Wadden experiences contestation over land use and conflicting interests. Although considered 'rural' by Dutch standards, the Wadden adjoins an urbanized coastal area, which is used for a variety of socio-economic activities such as farming, fishing, shipping, mining, gas extraction, manufacturing, electricity generation, and tourism (Kabat et al., 2012).

Terschelling is an island of 8,616 hectares with around 80 percent of surface area comprised of dunes and salt marshes (Hoekstra et al., 2009) (see Figure 3.1). It is renowned for its biodiversity and highly-appreciated landscapes (Kabat et al., 2012). Terschelling is an established tourist destination attracting over 400,000 visitors annually (Sijtsma, et al., 2015; Municipality of Terschelling, 2016) with around 1.8 million overnight stays (Municipality of Terschelling, 2014). While tourism impacts on the landscape, the landscape is also an asset that must remain attractive if tourists are to visit Terschelling into the future. Unfortunately, synergies between tourism development and nature protection do not always occur.

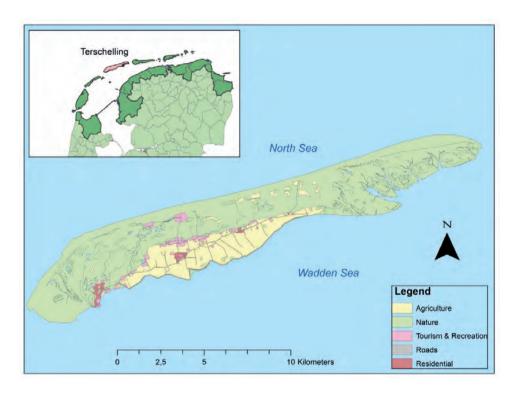


Figure 3.1 | Land use on Terschelling

Source: Created by author based on the Basis Bodem Gebruik land use dataset (2010 data).

Note: The insert map shows the position of Terschelling in the Northern Netherlands and the Dutch Wadden Region.

To clarify what is meant by a lack of synergy between tourism and landscape, we use the local business park as an illustrative example of the many major issues on the island. A former mayor of Terschelling (Interview 4) said that a difference of opinion about the intended location of the park arose in the 1980s. There arguably was a strong need for a business park with suppliers to the tourism sector because the tourism industry is very dependent on suppliers of good and services, but due to various restrictions, service providers were unable to adequately conduct their operations in the villages and needed additional space. Eventually, between 1991 and 1996 the business park was built in the polder just outside of the village of West-Terschelling (see Figure 3.2). While generally approved of by the local entrepreneurs, the location was regarded as undesirable by other islanders because it was highly visible and considered to be unattractive (Interview 1). A local tourism expert (Interview 4) argued that the business park should have been located elsewhere, for example in the forest out of view. A civil servant of the municipality of Terschelling (Interview 2) shared this view, but added that, at that time, the construction of the park was deemed necessary for the development of the tourism sector. He suggested that, in retrospect, the location might not be the right place, but this has to be judged in its historical

context. This example shows that opportunities for synergies between landscape and tourism were overlooked when the business park was built.

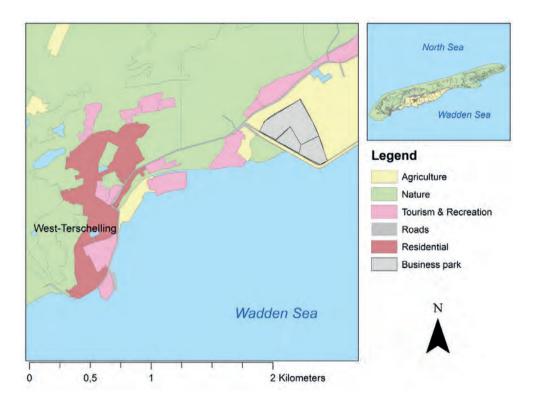


Figure 3.2 | Business park West-Terschelling

Source: based on the Basis Bodem Gebruik land use dataset (2010 data) edited by author

The interviews, especially the one with the local historian, suggested that there were three important issues in understanding developments in tourism and landscape policies on Terschelling. First, the island landscape changed due to afforestation, which started in1915 when the national government implemented a plan to provide coastal protection and improve the economic situation of the islanders. The national forestry management agency (*Staatsbosbeheer*) started planting pine trees as a job creation (social welfare) scheme, as well as to provide wood for the mining industry in the southern Netherlands (Interviews 1 and 6). These forests are now one of the reasons why tourists visit the island and are seen as a key characteristic of the island landscape. At the beginning of the twentieth century, the landscape mainly consisted of sandy dunes (Interview 1). Terschelling was relatively poor and the inhabitants made a living out of fishing, agriculture and beachcombing.

"Income was low and the national government argued something needed to be done for the island. Therefore they took the initiative to plant the sandy dune areas with trees." (Interview 1)

The second issue was that the accessibility of the island increased over time. In 1923, the shipping company Doeksen started a regular ferry connection between Terschelling and the mainland (Hoekstra et al., 2009). Also, largely because of the afforestation project, the road network on the island was upgraded and expanded between 1915 to 1929 (Hoekstra et al., 2009). This road network that was once used for the development of forest plantations is nowadays the main infrastructure for tourism and recreation (Interview 8).

"While creating the forest, Staatsbosbeheer laid out roads and paths for commercial forest management purposes. In areas where there were never paths in the past, there were suddenly many. At that time, a road infrastructure developed to support this forestry business, and nowadays this same infrastructure is used for tourism and recreation purposes." (Interview 8)

The third issue is that tourism-related real estate development, such as holiday homes, beach resorts and hotels, starting in the 1920s, was used as an attempt to stimulate tourism. According to one respondent (Interview 1), the national government ensured that Terschelling would have opportunities for socio-economic development. Under pressure from the national government, *Staatsbosbeheer* offered prime allotments along the North Sea coast where rich people could build relatively-cheap holiday homes (Interview 1). In 1927, the first holiday houses were constructed (Hoekstra et al., 2009). Moreover, about the same time, there were plans to build a large seaside resort complex, as illustrated by the following quote from the interview with an employee of *Staatsbosbeheer*:

"There were plans to develop a large seaside resort of 140 hectares in the dunes with houses, roads, hotels, a boulevard, etcetera between 'West aan Zee' and 'Midsland aan Zee'. This was under pressure of the Ministry of Economic Affairs that stated that Terschelling should be included in social development and that a large seaside resort was necessary." (Interview 8)

Despite these initiatives to stimulate tourism on the island, there were constraints to the early tourism development. The Great Depression of the 1930s led to the stagnation of tourism development. The construction for the resort complex was cancelled and the construction of holiday houses stopped (Interview 4). Also, there was increasing competition for tourism from the other islands in the Wadden Sea (Interview 3). While the other islands have similar qualities, Terschelling and Vlieland were the last islands where tourism developed in the Wadden area. The main reason for this is their relatively long distance from the mainland. For example, it now takes 120 minutes to go Terschelling, while the islands of Ameland and Schiermonnikoog are only 45 minutes away. Furthermore, the islands of Texel, Ameland and Schiermonnikoog were easier to access from the mainland, and consequently tourism started there earlier. The Second World War constrained tourism on the islands, since non-residents were officially banned from the island, and many holiday homes and beach pavilions were demolished or destroyed by order of the German occupiers (Interview 1).

3.4 Tourism-landscape interactions in policy about Terschelling since the Second World War

Our content analysis covers the period after the Second Word War. From 1945 on, the importance of tourism as a source of income on Terschelling has grown steadily. The development of tourism followed a similar pattern as it did in the rest of the Netherlands. After the Second Word War, people had greater wealth and more leisure time to spend (Williams, 2009). This growth is reflected in our analysis of the local policy and planning documents (see Figure 3.3). After the war, the tourism sector grew exponentially on Terschelling, starting with relatively small-scale and camping sites (Interview 2, Interview 4). To meet the demands of the tourists, local residents would rent out their backyards or houses to gain additional income.

"At first, tourism was quite limited, but after the Second World War, tourism began to develop under the influence of social change. The history of tourism on the islands is not very long." (Interview 4)

The period of the 1960s and early 1970s is often characterized as having a shift away from socio-economic development towards a stronger focus on nature protection – for example, the United Nations Conference on the Human Environment was held in Stockholm in 1972. This shift is evident in the local documents for the year 1972 (see Figure 3.3). However, the documents from 1974, 1977 and 1986 all have a higher share of social-economic development. An explanation for this anomaly could be that there was already a shift to nature protection on Terschelling as early as 1952. The municipality realized at an early stage that something needed to be done to maintain the island's character.

"It was found that there was a need to stabilize and make sure the tourism demand could be guided properly. The island is now still beautiful and relatively intact. It is a reason tourists visit the island and is something that should be preserved. At that time, more cautious and conservative policy was implemented, which was eventually written down in the First Structure Plan of the municipality from 1974." (Interview 2)

Measures implemented included a fixed maximum number of tourist beds (20,000), whereas before there was no maximum set. Additional measures include attempts to extend the tourist season by the hosting of events, quality improvement, restricting the number of motor vehicles, and land use zoning restrictions. These 'Stabilization Policy' measures (as the *First Structure Plan* became known as) are considered as having had a great influence in steering the development of tourism and are still valid now (Interview 2).

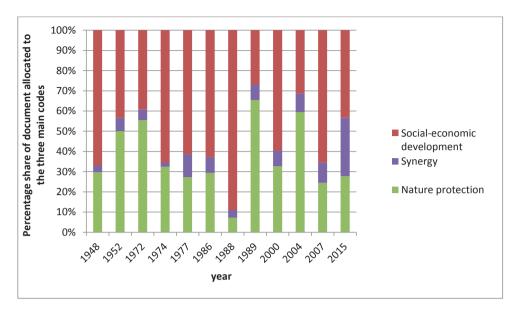


Figure 3.3 | Change in the relative proportions of three main topics in planning documents by year

From the 1980s on, the development of tourism-landscape interactions in policy can be characterized by fluctuations and inconsistencies. The documents from 1988, 2000, and 2007 have a strong orientation towards socio-economic development, while in the documents from 1989 and 2004, the emphasis lies more on nature protection. The results appear to show a pattern in which the different documents seems to be responses to each other.

The documents analysed differ in character partly because we selected documents that address tourism, landscape and spatial dimensions. In the documents that were predominately landscape oriented (1972, 1989, 2004), more emphasis was placed on nature protection. In contrast, the documents predominately focussed on tourism (1948, 1952, 1986, 1988) had an emphasis on socio-economic development (Figure 3.4). In all documents, but especially the tourism documents, discussion of synergies only played a minor role.

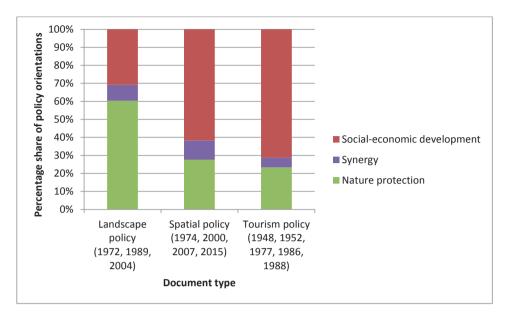


Figure 3.4 | Policy orientations per document type

If we focus on the discussion of synergies between tourism and landscape, it seems that this is a relatively recent idea. Figure 3.5 shows that the importance of synergies in the documents has remained limited from the turn of the century. However, in the most recent decade, the importance of synergies has increased, although it still remains limited compared to nature protection and socio-economic development. The most recent document (2015) shows an even distribution between nature protection, socio-economic development, and synergies. Thinking in terms of synergies remains a challenge for the municipality (Interview 2)

"For the municipality, it is important to keep a good balance between what is acceptable for the inhabitants and how entrepreneurs can get enough space to do business." (Interview 2).

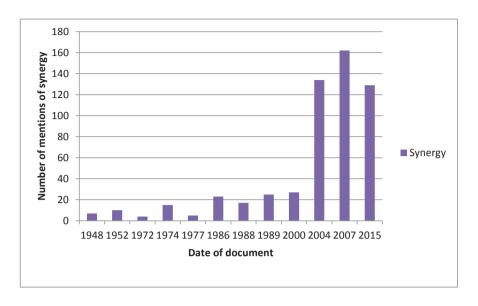


Figure 3.5 | The development of 'synergy' on Terschelling

Looking at the usage of synergy at the level of the subcodes (Appendix A), we see that the increase in the amount of synergy in documents can be explained by an increase of terms such as: sustainability, collaboration, together, responsibility, integrated and involvement. Figure 3.6 shows the usage of the eight subcodes that were used most often though the years. The recent increase of synergies in policy is something that is considered to be a positive development (Interview 5).

"Everything on the island is interwoven with each other: spatially, socially, economically and in terms of family ties. Therefore, integration in policy would be very useful." (Interview 5)

However, this observation can be challenged as well, because integration of policy domain is considered to be something different than the implementation of it (Interview 8)

"Saying that you want integration of policy is something different than practice. They say it, but the end result does not go in that direct yet." (Interview 8)

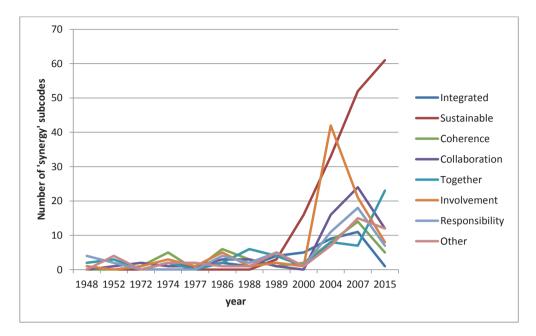


Figure 3.6 | The number of subcodes relating to 'synergy' in planning documents about Terschelling by year

3.5 Interpreting the historical institutional context of Terschelling

The first part of the analysis illustrated that past policies and plans influenced the course of future developments, but also had unintended consequences. We observed that tourism development was enabled thanks to interventions that initially had other objectives, although it was constrained due to major events. The interventions on Terschelling and the improvements in infrastructure led to the island becoming perceived as more attractive for tourism. Nevertheless, the development plans of the 1930s were constrained by a financial crisis and a war, which perversely helped to maintain nature and the landscape in a state where the impacts of tourism were minimal. It is evident that major events can have a large influence regarding tourism—landscape interactions on Terschelling. To understand these interactions better, seeing coastal areas as a social-ecological system where tourism and landscape are constantly interacting with each other can be helpful. Seeing Terschelling as part of a dynamic and complex system can help to explore past patterns and behaviours and thereby better understand the current situation.

According to the literature about the Wadden in general, halfway through the 1970s is considered to be a turning point in the way the region was being managed (Meijer et al., 2004; Oosterveld, 2011).

Therefore, it is surprising that our results from the content analysis showed a relative early shift to a more nature protection oriented policy. A possible explanation for this could be that this emphasis on nature was based on local cultural arguments rather than the ecological arguments of external environmental interest groups operating at a national or international scale (Interview 5). The demand for more and better tourist accommodation and facilities led to a proliferation of accommodation and activities. These developments were considered undesirable by some islanders, because they had a negative effect on the traditional island culture (Interview 5). This created some local resistance to tourism developments, leading to the establishment of a protest group, S.O.S. Terschelling, in 1962, which still exists today. S.O.S. Terschelling advocates the need to maintain the unique character of the island. At that time as now, they perceived a need to stabilize development to make sure that the demand for tourism could be managed properly by minimizing its impacts on the landscape and the community (Interview 2).

The policy measures of the 1970s were effective in slowing down the development of tourism and in limiting impacts on the landscape. However, this also hindered adaptation processes to both social and ecological change (Interview 4). The 'Stabilization Policy' of 1974 successfully limited the growth of tourism on the island. Most of the large scale impact on the landscape was caused in the 1930s and 1950s. However, as one person indicated, tourism markets keep changing constantly, and in order to respond to these changes, innovation is required. However, because of the Stabilization Policy, options for innovation were also constrained. However, to remain an attractive tourism destination and to secure tourism as an important source of income for the future is a challenge for Terschelling (Interview 4) and requires constantly looking for a balance between tourism and the landscape on which tourism is dependent.

"The disadvantage is that there is not much attention for what happens in the world around us. How does the market changes and how do you anticipate to this. This does not mean you have to flog the island, but you are dependent of tourists for 90 percent. Therefore there is a need to maintain them and connect them with the island. This is something Terschelling has to watch out for." (Interview 4)

Our results from the content analysis showed that in the 1980s and 1990s, there were fluctuations in the focus of policy. This can be interpreted as the coexistence of documents with an emphasis on nature protection and socio-economic development, but where the next document is often a reaction to the previous document. The focus on nature protection gained more standing after the 1970s not only in local policy, but especially in policies at higher levels such as at the European level (e.g. Bird Directive 1979 and Habitat Directive 1992) and the national level (e.g. PKB First Policy Report Wadden Sea 1980, PKB Second Policy Report Wadden Sea 1994, Management Plan Wadden Sea 1996 and Nature Protection Law 1998). Similarly, the focus on socio-economic development can be explained by the difficulties the tourism sector on Terschelling experienced in the 1980s. After years of growth, there was an economic downturn, which also affected the islands. Tourism turned out to be sensitive to the business cycle and tourist numbers dropped. In 1988, tourist entrepreneurs reacted with a Tourist Recreational Action Plan Terschelling. This plan states that the municipality must create opportunities for the tourism sector to expand and modernize. According to the entrepreneurs, there has not been enough quality improvement or efforts to extend the tourist season. Terschelling was not able to adapt to a changing tourist market, because innovation had been stalled due to previous stabilization policy.

Based on this analysis, there seems to be a divergence of policy and associated goals. This divergence can be a potential source of conflict.

Synergy is a relatively recent phenomenon and thinking in terms of synergies has only slowly became more important in policy. Our analysis showed that such change take time. The example of Terschelling showed that tourism development and the protection of nature were both important in the second half of the twentieth century, but that thinking in terms of synergies took a couple of decades to take hold. This paper discussed the changing orientations in local documents. However, an additional analysis on changes in public opinion and on how people interpret local policies and plans and act upon them could improve the effectiveness of policy implementation.

Reflecting on SES thinking suggests that the island of Terschelling is a coupled system – it is a small island where many social and ecological issues are inter-related with each other. However, the island was managed as if tourism and landscape were separate systems. The results showed that, in the past up until about 2000, the focus of policy tended to be either nature protection or socio-economic development, with only limited attention given to possible synergies. The illustrative example of the business park on Terschelling revealed that thinking in terms of synergies between tourism and landscape is highly desirable. The example showed that there was a realisation that the way the business park was constructed was suboptimal and that, with the benefit of hindsight, the construction could have been done better.

3.6 Conclusion

Content analysis of local policy and planning documents is a valuable tool to understand the historical institutional context and how it has changed over time. In our study of Terschelling in the Wadden Sea Region, the content analysis revealed a greatly changing emphasis in policy documents between nature protection and socio-economic development. In recent decades, the focus on synergies between these orientations has increased. We suggest that these patterns are likely to apply elsewhere in the world, although there may be some differences with regard to the relative amount of synergy present and in terms of when synergy first appeared. Content analysis can help identify these historical-institutional patterns.

Historically, acknowledgment of possible synergies in policies and plans has limited. Terschelling showed that, since 2004, there has been an increase in the discussion of synergies between tourism and landscape. However, our example assessment also showed that the usage of synergy in documents is still limited in comparison with nature protection and socio-economic development. We conclude that the idea of using tourism to balance the needs of nature protection and socio-economic development is promising, but not easy to pursue.

We used SES theory as our conceptual starting point and we specifically looked at the institutional context within the social-ecological system where decisions regarding tourism-landscape interactions are made. To understand this institutional context fully, an historical approach is necessary. We used a content analysis to show the change in tourism-landscape interactions over time by using local policy and planning documents as a proxy for the institutional context.

We have two key suggestions for policymakers and planners. First, understanding the historical and institutional context can help in developing better policies. A content analysis of past documents can be a helpful and effective tool to systematically reveal the past patterns that have shaped the current situation. Second, there is considerable potential for synergies between tourism and landscape and there should be a greater focus on this. Nevertheless, achieving these synergies is not easy and can take time. Designing policies and plans that take an integrated approach is a good first step.

References

- Berkes, F. (2007). Understanding uncertainty and reducing vulnerability: lessons from resilience thinking. *Natural Hazards*, *41*(2), 283–295.
- Buckley, R. (2004). The Effects of World Heritage Listing on Tourism to Australian National Parks. *Journal of Sustainable Tourism*, 12(1), 70-84.
- Buckley, R. (2011). Tourism and Environment. *Annual Review of Environment and Resources*, *36*(1), 397–416.
- Carpenter, S.R., Westley, F. and Turner, G. (2005). Surrogates for resilience of social-ecological systems, *Ecosystems*, 8(8), 941–944.
- Choi, S., Lehto, X.Y., and Morrison, A.M. (2007). Destination image representation on the web: Content analysis of Macau travel related websites. *Tourism Management*, *28*(1), 118–129.
- Council of the European communities (1979). Council directive on the conservation of wild birds (Birds directive). Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31979L0409&from=EN
- Council of the European communities (1992). *Council directive on the conservation of natural habitats* and of wild fauna and flora (Habitat directive). Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01992L0043-20070101&from=EN
- Cumming, G.S., Allen, C.R., Ban, N.C., Biggs, D., Biggs, H.C., Cumming, D., ... Schoon, M. (2015).

 Understanding protected area resilience: A multi-scale, social-ecological approach. *Ecological Applications*, *25*(2), 299–319.
- Dredge, D. (2001). Local government tourism planning and policy-amaking in New South Wales: Institutional Legacies. *Current Issues in Tourism*, 4(2-4), 355-380.
- Drisko, J.W., and Maschi, T. (2015). Content Analysis. Oxford: Oxford University Press.
- Folke, C., Hahn, T., Olsson, P., and Norberg, J. (2005). Adaptive Governance of Social-Ecological Systems. *Annual Review of Environment and Resources*, *30*(1), 441–473.
- Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., and Rockström, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4).
- Glaser, J., and Laudel, G. (2013). Life with and without coding: Two methods for early-stage data analysis in qualitative research aiming at causal explanations. *Forum: Qualitative Social Research*, 14(2), 1-25.
- González, J.A., Montes, C., Rodriguez, J., and Tapia, W. (2008). Rethinking the Galapagos Islands as a complex social-ecological system: Implications for conservation and management. *Ecology and Society*, *13*(2), art.13.

- Farrell, B.H. and Twining-Ward, L. (2004). Reconceptualizing tourism. *Annals of Tourism Research*, 31(2), 274–295.
- Hall, C.M. and Page, S.J. (2006). The Geography of Tourism and Recreation: Environment, Place and Space (3rd edn). New York: Routledge.
- Hartman, S., and de Roo, G. (2013). Towards managing nonlinear regional development trajectories. *Environment and Planning C: Government and Policy*, *31*(3), 556–570.
- Heslinga, J.H., Groote, P.D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism Futures*, 3(1), 1-15.
- Hoekstra, H., Zijlstra, E., Zwart, F., Smit-Zwanenburg, E., and Kok, J. P. (2009). *Een eeuw badgasten: een beeld van 100 jaar toerisme op Terschelling* [A century of bathers: an overview of 100 years of tourism on Terschelling]. Terschelling West: Isola Arte.
- Imperiale, A.J. and Vanclay, F. (2016). Experiencing local community resilience in action: Learning from post-disaster communities. *Journal of Rural Studies*, 47, 204-219.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P.M.J., van Oijen, T., Pejrup, M., ... Wolff, W.J. (2012). The Wadden Sea Region: Towards a science for sustainable development. *Ocean and Coastal Management*, *68*, 4–17.
- King, B., Pizam, A., and Milman, A. (1993). Social impacts of tourism. *Annals of Tourism Research*, 20(4), 650–665.
- Kirchhoff, T., Brand, F.S., Hoheisel, D. and Grimm, V. (2010). The one-sidedness and cultural bias of the Resilience Approach, *Gaia*, 19(1), 25–31.
- Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology* (2nd edn). Thousand Oaks: Sage.
- Krippendorff, K. (2013). *Content Analysis: An Introduction to Its Methodology* (3rd edn). Thousand Oaks: Sage.
- Levin, S., Xepapadeas, T., Crépin, A.-S., Norberg, J., de Zeeuw, A., Folke, C., Hughes, T., et al. (2012).

 Social-ecological systems as complex adaptive systems: modeling and policy implications.

 Environment and Development Economics, 18(2), 111–132.
- Lew, A. A. (2014). Scale, change and resilience in community tourism planning. *Tourism Geographies*, *16*(1), 14–22
- Libosada, C.M. (2009). Business or leisure? Economic development and resource protection-Concepts and practices in sustainable ecotourism. *Ocean and Coastal Management*, *52*(7), 390–394.

- Liburd, J.J., and Becken, S. (2017). Values in nature conservation, tourism and UNESCO World Heritage Site Stewardship. *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2017.1293067
- Liu, J., Dietz, T., Carpenter, S.R., Alberti, M., Folke, C., Moran, E., ... Taylor, W.W. (2007). Complexity of coupled human and natural systems. *Science*, *317*(5844), 1513–1516.
- McCombes, L., Vanclay, F., and Evers, Y. (2015). Putting social impact assessment to the test as a method for implementing responsible tourism practice. *Environmental Impact Assessment Review*, *55*, 156–168.
- McCool, S.F., and Spenceley, A. (2014). Tourism and protected areas: a growing nexus of challenge and opportunity. *Koedoe*, *56*(2), 1-2.
- Meijer, W., Lodders-Elfferich, P.C., and Hermans, L.M.L.H. (2004). *Ruimte voor de Wadden: eindrapport adviesgroep waddenzeebeleid*.
- Ministry of VRO (1980). *PKB First Policy Report Wadden Sea* [Eerste Planologische Kern Beslissing Waddenzee]. The Hague.
- Ministry of VROM (1994). *PKB Second Policy Report Wadden Sea* [Tweede Planologische Kern Beslissing Waddenzee]. The Hague.
- Ministry of LNV (1998). Nature Protection Law [Natuurbeschermingswet]. The Hague.
- Municipality of Terschelling (2016). *Toeristenaantallen per jaar vanaf 1973 (inclusief EVT)* [Amount of tourist arrivals per year from 1973 (including EVT)].
- Municipality of Terschelling (2014). *Ontwikkeling aantal overnachtingen op jaarbasis Terschelling* [Development of annual amount of overnight stays on Terschelling].
- Oosterveld, H.R. (2011). *Een wereld van verschil: Veertig jaar beleid in het Waddengebied*. (A world of difference) Leeuwarden: Waddenacademy.
- Parra, C. and Moulaert, F. (2016). The governance of the nature-culture nexus: lessons learned from the San Pedro de Atacama case-study, Nature+Culture, 3, 1–26.
- Rijkswaterstaat (1996). *Management Plan Wadden Sea* [Beheersplan Waddenzee 1996-2001]. Leeuwarden.
- Revier, H. (2013). Nature conservation and tourism development in the Dutch Wadden Sea region: a common future?, In Postma, A., Yeoman, I. and Oskam, J. (Eds.), *The Future of European Tourism, Leeuwarden: European Tourism Futures Institute,* pp. 177-193.
- Saarinen, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research*, 33(4), 1121–1140.
- Sijtsma, F. J., Broersma, L., Daams, M.N., Hoekstra, H., and Werner, G. (2015). Tourism Development in the Dutch Wadden Area: Spatial-Temporal Characteristics and Monitoring Needs. *Environmental Management and Sustainable Development*, 4(2), 217–241.

- Sijtsma, F.J., Daams, M.N., Farjon, H., and Buijs, A.E. (2012). Deep feelings around a shallow coast: A spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area. *Ocean and Coastal Management*, (68), 138–148.
- Sijtsma, F.J., Werner, G.J., and Broersma, L. (2008). *Recreatie en toerisme in het Waddengebied:*Toekomstige ontwikkelingsmogelijkheden en hun effecten op economie duurzaamheid en identiteit.
- Terkenli, T.S. (2004). Tourism and landscape. In Lew, A.A., Hall, C.M. and Williams, A.M. (Eds.), *A Companion to Tourism* (pp 339-348). Oxford: Blackwell.
- van der Aa, B.J.M., Groote, P.D., and Huigen, P.P.P. (2004). World heritage as NIBMY? The case of the Dutch part of the Wadden Sea. *Current Issues in Tourism*, 7(4-5), 291-302.
- Vanclay, F., Baines, J., and Taylor, C.N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal* 31(4), 243-253.
- Walker, B., Carpenter, S., Anderies, J., Abel, N., Cumming, G., Janssen, M., ... Pritchard, R. (2002). Resilience management in Social-Ecological Systems: a working hypothesis for a participatory approach. *Conservation Ecology*, *6*(1), art.14.
- Williams, S. (2009). Tourism Geography: A New Synthesis (2nd edn). Abingdon: Routledge.



Reprint of **Heslinga, J.H.**, Groote, P.D. and F. Vanclay (2017). Examining social-ecological resilience: using content analysis to assess changes in public perceptions of the synergetic interactions between tourism development and landscape protection. In J. Saarinen and A.M. Gill (Eds.), Resilient destinations: *Governance strategies of tourism in the transition towards sustainability* (in press). Abingdon: Routledge.

Abstract

In this chapter we examine the synergetic interactions between tourism development and landscape protection. Identifying changes in the way people think about tourism and landscape interactions is important because this improves our understanding of the institutional context in which decisions about landscape management are made. Understanding the institutional context can be helpful in finding strategies to build the social-ecological resilience of a region. A content analysis of newspapers was used for analysing changes in tourism and landscape relations in the island of Terschelling, a part of the UNESCO World Heritage listed Wadden Sea region. Our historical content analysis of newspaper articles (1945-215) was supported by key informant interviews. Our results revealed fluctuations over time in terms of the extent to which public opinion was oriented towards nature protection, socio-economic development, or to the synergies between them. To improve future policy relating to socio-ecological systems (SES), we recommend that policy makers seek a greater understanding of the influence of the current institutional context on policy decisions. We suggest that content analysis can be a helpful tool to achieve this.

4.1 Introduction

Tourism destinations constantly need to adapt to socio-economic and environmental changes (Davidson, 2010; Lew, 2014). Recently resilience thinking has emerged as a concept to understand how to cope with these changes (Biggs, 2011; Espiner and Becken, 2014; Lew, 2014; Luthe and Wyss, 2014; Imperiale and Vanclay, 2016). Resilience thinking may help decision-makers process more-informed decisions regarding the management of the interactions between tourism and landscape. In tourism literature, resilience has been widely discussed as a theoretical concept, however, its application in empirical research lags behind the conceptual discussion (Lew, 2014). This chapter addresses this gap by providing an empirical application of the concept of resilience to the Island of Terschelling in the Wadden Sea region of the Northern Netherlands, a tourism destination experiencing changing social-ecological conditions.

In this chapter resilience is examined from the institutional context. While the institutional context consists of both formal (e.g. rules and regulations) and informal aspects (e.g. cultural values and norms) (Alexander, 2005; Cumming et al., 2006; Pahl-Wostl, 2009), the focus in this chapter is on informal aspects. A brief synopsis of the key constructs of resilience, socio-ecological systems and institutions precedes discussion of the empirical study. We examine the institutional context by analyzing changes in public thinking about the interactions between tourism development and landscape protection. The current institutional context of development in Terschelling reflects the trajectories of the island's past path dependencies, which in turn will also influence future development plans.

We use content analysis as a method to analyze the informal aspects of the institutional context. Content analysis can assist in analyzing the changing dynamics over a long time period. We argue that institutional ways of thinking are reflected in their communication in the public arena, and institutions are also influenced by public opinion. Because the informal context is intangible, it is difficult to directly measure. To get an indication of (or proxy for) the informal institutional context, we analyzed newspaper articles dealing with the interactions between tourism development and landscape protection for the period 1945 to 2015. To gain extra information and to cross-validate the data, our content analysis was supported by key informant interviews with local experts and other stakeholders. We specifically considered the case of the Island of Terschelling (Province of Friesland) in the Wadden Sea region of the northern Netherlands

Tourism and landscape can interact in multiple ways (Terkenli, 2004; Liburd and Becken, 2017). The emphasis in the institutional context can vary over time between nature protection, socio-economic development, or on the synergies between them (Heslinga et al., 2017). In this chapter, we are particularly interested in the synergetic interactions and how they emerged over time. Synergies can be described as situations in which the interactions between elements of a system catalytically combine in ways that result in a greater sum-total outcome than would have been achieved otherwise, with benefits across the full range of social, economic and ecological dimensions (Persha et al., 2011).

We believe that synergies hold promise for resilience thinking in tourism destinations because they relate directly to the feedback mechanisms in the social-ecological systems in which the interactions between tourism and landscape take place. For a tourism destination to increase its resilience, a balance

between nature protection and socio-economic development is desirable (Heslinga et al., 2017). This means that a destination should not just be managed only for the sake of nature protection (which can be socially undesirable), or for socio-economic development (ecologically undesirable), but for the sake of both. The idea of synergies between tourism development and landscape protection offers potential for better understanding and management of tourism-landscape interactions. To reveal whether synergies are considered in public thinking and how they have changed over time, we conducted a content analysis of newspaper articles between 1945 and 2015. We argue that this approach reveals the informal aspects of the institutional context.

4.2 Synergies, social-ecological systems, institutions and resilience

Tourism destinations are facing environmental and social changes (Davidson, 2010; Lew, 2014). To deal with these changes, there is an on-going need to address the ecological, economic and social-cultural aspects of tourism (Wesley and Pforr, 2010). Policy makers adapt to these changes by making interventions. Understanding the institutional context in which these decisions and interventions have been made helps policy makers and planners make better future decisions (Alexander, 2005) and can help reinforce the resilience of the destination.

Tourism destinations tend to experience conflicting goals, between the protection of nature and socio-economic development. However, the promise of synergies means that these goals do not necessarily have to be in conflict. For example, nature-based tourism is not just a socio-economic activity that provides income and other benefits to local communities (Libosada, 2009), it also plays an important role in facilitating the understanding of natural heritage, and in gaining public support and raising funding for conservation (Libosada, 2009; McCool and Spenceley, 2014). Nevertheless, tourism may also have negative impacts on the landscape (Saarinen, 2006; Buckley, 2011) and on the host communities (King et al., 1993; Liu et al., 2007; McCombes et al., 2015). In this chapter, we look at the synergetic interactions between tourism development and landscape protection.

To help identify these synergetic interactions, we use a social-ecological systems (SES) perspective, which presumes an integrated system of human society and ecosystems, with reciprocal feedback loops and interdependencies (Berkes, 2007). This means that tourism development and landscape protection are not seen as separate social and ecological entities, they are part of a coupled social-ecological system. In SES theory, institutions play an important role in managing the social-ecological interactions within the system (Anderies et al., 2004; Brondizio et al., 2009; Ostrom, 2009; Ostrom and Cox, 2010). Institutions are the central component linking the social and ecological systems (Adger, 2000). As institutions are often path-dependent, a contextual and long-term approach to institutional development is needed. This is also reflected in SES thinking where the exploration of historical (long term) relationships between society and the environment is important for understanding the current institutional context (González et al., 2008; Parra and Moulaert, 2016).

Institutions can be defined as "systems of established and prevalent social rules that structure social interactions" (Hodgson, 2006, p.2). They consist of formal aspects (e.g. rules and regulations) and informal aspects (e.g. cultural values and norms) (Alexander, 2005; Cumming et al., 2006; Pahl-Wostl, 2009). Formal institutions are openly codified, in the sense that the social rules are established and communicated through channels that are widely accepted as official. Informal institutions are socially shared rules that are created, communicated, and enforced outside of the officially sanctioned channels (Helmke and Levitsky, 2004). Because we are interested in the way people think about how tourism and landscape interactions has been changing over time, our focus lies on the informal institutional aspects.

Resilience is a key concept in SES thinking and implies that a system is able to cope with changes in the present and future (Walker et al., 2004; Holling, 2008; Folke et al., 2010). For a tourism destination to increase its resilience, a balance between nature protection and socio-economic development is required. Tourism may have a key role in this balance, especially if the potential synergies between tourism and landscape are acknowledged (Heslinga et al., 2017). If the potential synergies between tourism and landscape are recognized, and regional development options that find a balance between tourism and landscape are selected, then tourism could be an opportunity to increase the social-ecological resilience of a region (Buckley, 2011; Heslinga et al., 2017).

We adhere to the social-ecological (or evolutionary) view of resilience, which rejects the idea of steady states (Davoudi et al., 2013). The evolutionary view sees the world as complex, uncertain and relatively unpredictable instead of ordered, mechanical and reasonably predictable (Davoudi et al., 2013; Wilkinson, 2012). Carpenter et al. (2005) do not conceive of resilience as a return to a normal or stable situation, but as the ability of systems to continuously change, adapt and transform in response to stresses and tensions. The social-ecological system is continuously influenced by social and ecological changes. To deal with these changes and to enable the system to maintain resilience, the various formal and informal institutions within tourism destinations need to constantly adapt.

4.3 Undertaking a Content Analysis

Krippendorff (2013) defines content analysis as a research technique for making replicable and valid inferences from texts and other meaningful materials. Content analysis has been frequently used in the field of tourism studies, for example as a method to analyze destination image representations (Choi et al., 2007). An important advantage of content analysis over interviewing is that it avoids the problem of memory reconstruction by research participants (Lowenthal, 2015). This is particularly important in research that seeks to go back over time. Thus, instead of asking people to try to recollect what happened in the distant past, content analysis uses material that was actually published in the past – in other words, that was published contemporaneously with the events described in those articles. A further advantage is that, although there is still room for varying interpretations, the source material

remains constant (rather than the key informant telling a different story depending on how they feel each time they are interviewed). Content analysis therefore has high reliability.

We undertook a content analysis of newspaper articles extracted from the online database, *De Krant van Toen* (www.dekrantvantoen.nl), which contains all articles published in the larger newspapers in the Netherlands. To construct our database of articles for analysis, we started with the two major daily newspapers published in the Province of Friesland (Leeuwarder Courant and Friesch Dagblad). Since our interest was with the Island of Terschelling, only articles that contained the word 'Terschelling' were included in the selection. To further select the articles for analysis, we chose various combinations of the terms: toerisme (tourism), recreative (recreation), nature (nature), and landschap (landscape). The stipulated time period was 1945 to 2015, since this is the period in which tourism became strongly established in the Wadden region (Sijtsma, 2015).

From the initial selection, some articles were excluded because they were not appropriate to include. First, many advertisements were removed. Second, some articles were excluded because they were published in both regional newspapers. Third, articles that were accidently selected because of the inclusion of the Dutch word 'naturlijk' (meaning 'naturally' as in 'of course' and not relating to nature); and fourth, articles that contained some of the keywords but were evidently primarily about other topics, were excluded. After the process of selection and deselection, the resulting database consisted of 291 articles.

Content analysis is done by using codes (usually in a hierarchy) to describe the content of the text (Krippendorff, 2013; Gläser and Laudel, 2015). Codes can be derived from theory (i.e. *a priori* coding), from the texts themselves (i.e. emerging coding), or the methods can be mixed (Drisko and Maschi, 2015). For our analysis, the overarching *a priori* codes were: (1) socio-economic development; (2) nature protection; and (3) synergies between socio-economic development and nature protection. A wide range of subcodes was used (see Appendix C). The subcodes were developed by scanning the newspaper articles for any word that arguably functioned as synonyms, alternates or flags for the concepts represented by the overarching codes. The analysis was performed using the qualitative data analysis software, Atlas.ti (version 7.5.10). The 'Word Cruncher' function in Atlas.ti gave the frequency and relative proportion of each code and subcode per article.

Expert interviews were conducted to critically reflect on the content analysis and to increase our understanding of the role of changing public opinion in influencing policy and about the pivotal points in time and significant events. The experts were recruited via the lead author's network, snowballing and through online searching. A total of 8 interviews were held. The interviewees were comprised of a local tourism expert, representatives from local interest groups that arise for the preservation of the island, representatives from a nature organization, a civil servant, a former mayor, and a historian with local knowledge. Prior to the interviews, the respondents were provided with a research information sheet and asked to complete an informed consent form which covered issues of anonymity, use of the research, and their rights during and after the interview (Vanclay, 2013). With the permission of all respondents, the interviews were audio-recorded, and later transcribed. For the analysis of the interviews, the qualitative data software Atlas.ti was also used.

4.4 Applying Content Analysis to examine tourism-landscape interactions on the Island of Terschelling

We analyzed newspaper articles about the island of Terschelling, which is part of the Dutch Wadden. The Wadden is the largest contiguous natural area of Western Europe and is one of the largest tidal wetlands in the world (Kabat et al., 2012). Stretching from the northwest of the Netherlands, along the German coast, and the south-western part of Denmark, the Wadden includes an archipelago of more than 30 inhabited and many uninhabited islands that shield a tidal mudflat from the North Sea (see Figure 4.1). The area is renowned for its outstanding ecological qualities and scenic landscapes, and was listed as a UNESCO Natural World Heritage Site in 2009 (Sijtsma et al., 2012). Because of the widespread recognition of its ecological qualities and scenic landscapes, the Wadden has become very attractive to tourists (Revier, 2013). From early tourism in the 1950s, the Wadden islands have become an increasingly popular holiday destination and tourism has become the dominant economic activity, especially during the last decades (Sijtsma et al., 2012). The Wadden is an area where the objectives of tourism development and landscape protection coincide and potentially clash, and therefore the region is very relevant for researching tourism-landscape interactions.

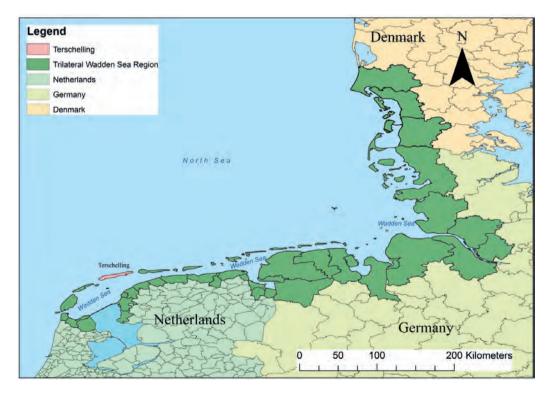


Figure 4.1 | The Wadden Sea region

Source: Created by author

The way the Wadden Sea region is and/or should be managed has been constantly under discussion (Van der Aa et al., 2004; Kabat et al., 2012). Managing the Wadden is complicated because the area is not a remote ecosystem that humans can be excluded from; in contrast, the area has been heavily influenced by human activity for a long time (Knottnerus, 2005). Nowadays, the area is used for socio-economic activities such as agriculture, energy generation, fisheries, gas extraction, mining, manufacturing, shipping, and recently tourism (Kabat et al., 2012). Proper management that contributes to tourism and landscape protection is therefore necessary.

In this chapter, we specifically discuss the island of Terschelling, one of the five inhabited Dutch Wadden islands. Terschelling is renowned for its biodiversity and highly-appreciated landscapes (Kabat et al., 2012). The island has an area of 8,616 hectares, with around 80 percent comprising dunes, forests and salt marshes, which are major attractions for tourists (Hoekstra et al., 2009). Terschelling is an established tourist destination attracting over 400,000 visitors (Sijtsma et al., 2015; Municipality of Terschelling, 2016) and around 1.8 million overnight stays annually (Municipality of Terschelling, 2014). Historically, there have been strong interactions between tourism development and landscape protection on Terschelling. On the one hand, the island is among the most important tourism destinations in the Wadden, and on the other hand Terschelling has many sensitive significant nature areas (Sijtsma et al., 2012). While tourism impacts on the landscape, the landscape is an asset that must remain attractive if tourists are to continue visiting Terschelling into the future.

4.5 Results: What content analysis reveals about changing tourism-landscape interactions

The coding and analysis of the 291 newspaper articles for the period 1945 to 2015 resulted in a total of 4031 code words. Of these, almost 52% were classified under 'socio-economic development', 41% under 'nature protection', and 7% under 'synergies'. The frequency of use of the three overarching codes changes constantly, with a high annual volatility and without a clear trend. Using a three-year rolling average of the annual scores to reduce annual fluctuation (see Figure 4.2), although the annual figures still vary, the relative proportions of the three categories are rather stable over time.

In the 1950s and the first half of the 1960s, there was an increase in thinking in socio-economic terms, from a minimum of less than 20% to a maximum of 75% being coded as socio-economic development (Figure 4.2). From 1962 until the end of 1970s, socio-economic thinking decreased and nature protection gained importance. The next turning point is visible in 1979. From then until the end of the 1980s, the emphasis shifted back to socio-economic development. From the end of the 1980s, attention towards nature protection gained importance again at the expense of socio-economic development. However, from the mid-1990s until the start of the 21 century, there was again a reversal in thinking with a stronger focus on socio-economic development.

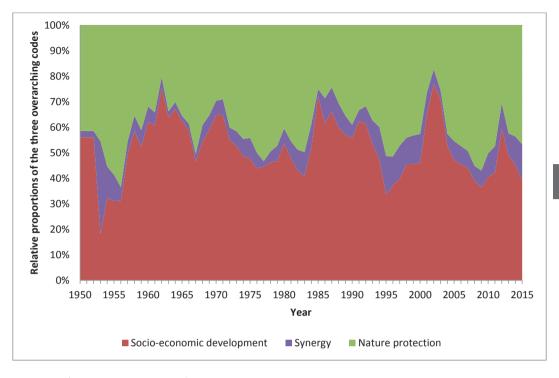


Figure 4.2 | Relative proportion of the three overarching code words depicted as a rolling three year average

Since our interest is primarily with synergies, in Figure 4.3 we focus specifically on how the topic of synergy has changed over time. Overall, there was an increase in thinking in terms of synergies. However, despite the overall increase, there was much fluctuation from year to year and the percentage interest in synergy remains quite low.

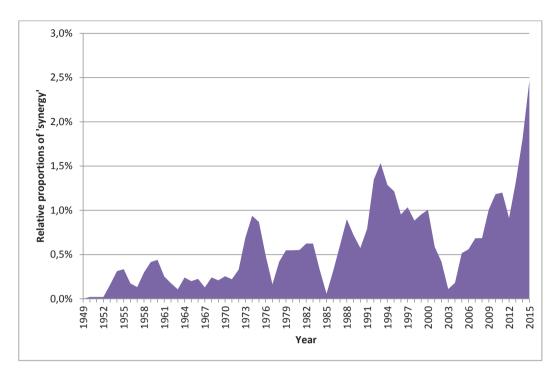


Figure 4.3 | Relative proportion of 'synergy' weighted by newspaper article size (three year rolling average)

Figure 4.4 presents an analysis of the subcodes for synergy. The five most important subcodes (i.e. most frequently used) were 'Together', 'Involved', 'Collaboration/Collaborative', 'Responsible/Responsibility' and 'Sustainable/Sustainability'. In Figure 4.5, the historical fluctuations of these five subcodes are given. For example, 'Sustainable' increases in frequency from the end of the 1980s, and after a decrease in 2002-2003, it again is increasing. We also observe that the subcode 'Together' is relatively dominant in these fluctuations over time. This analysis on the subcode level helps to determine the factors that are contributing to an increase in the usage of synergies.

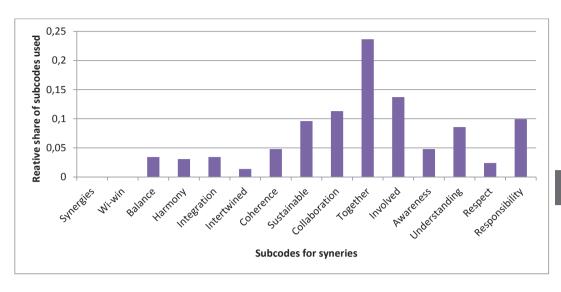


Figure 4.4 | Relative share of subcodes contributing to 'synergies'

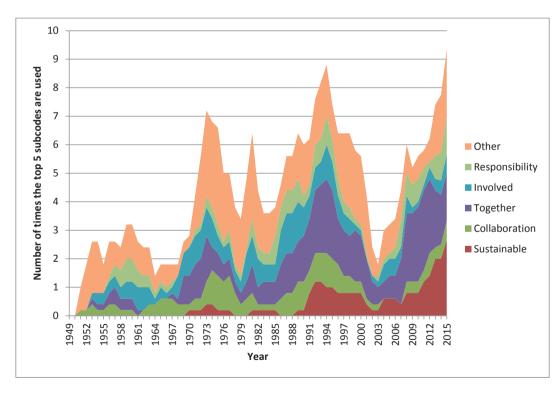


Figure 4.5 | Frequency of use of the top five subcodes for synergy over time

4.6 Discussion: What does the fluctuating public discourse mean for Terschelling

The dominance of the code 'socio-economic development' in the 1950s is not surprising. In The Netherlands, the 1950s was a period of post-WWII reconstruction. This period was characterized by a strong feeling of the need to rebuild Dutch society and its economy. During the Nazi occupation (1940-1945), planning and policy making in The Netherlands had been changed to a centralised and top-down system, and perversely this was kept in place during the subsequent period of reconstruction (Van der Cammen and De Klerk, 2012). As the socio-economic situation gradually improved and people started to have more money and leisure time, tourism developed on Terschelling, as reflected in the newspaper extract:

"The National Forest Management Agency makes the dune area available for the expansion of the village of Terschelling-West." (Leeuwarder Courant, 07-09-1951)

Our interviewees stated that tourism started to grow exponentially, starting with relatively small-scale camping sites with only basic amenities. To meet the demands of the tourists, inhabitants would also rent out their backyards or dwellings during the summer season to gain additional income. The substantial increase in tourist arrivals in the post-war period explains the shift towards a more nature protection oriented discourse halfway the 1960s. Local people started to realize that it might be necessary to safeguard the island's natural qualities and character. The growing concern about development resulted in the establishment of the S.O.S. Foundation (*Stichting Ons Terschellingerland*), an interest group of local inhabitants interested in preserving the unique character of Terschelling (Interview 5; Leeuwarder Courant, 27-08-1962). As stated in the newspaper extract:

"S.O.S. stands up to defend the character and beauty of the island." (Leeuwarder Courant, 27-08-1962)

On the regional and national scales, this development coincided with the establishment of another foundation, the Wadden Association (*Waddenvereniging*) in 1965. It was founded to protect the Wadden Sea from being developed as a land reclamation project (another polder). Later, the Wadden Association broadened its objectives and stressed the importance of protecting the whole of the Dutch Wadden area due to its ecological importance. 'Keep your hands off the Wadden' was their motto (Revier, 2013, p.13).

The shift towards nature protection in the 1960s and 1970s can be positioned in a period that witnessed a worldwide turning point in thinking about the human influence on the environment. It was partly triggered by the 1972 United Nations Conference on the Human Environment, which was held in Stockholm. Important also was the 'Club of Rome' think tank and its report, *The Limits to Growth* (Meadows et al., 1972). On Terschelling, the shift in attention from solely economic development (largely through tourism) towards more nature protection encouraged the National Forest Management Agency to intervene, as demonstrated in the following newspaper quote.

"Recreation pressure affects the dunes on Terschelling excessively: The National Forest Management Agency closes off the inner dunes by barbed wire". (Friesch Dagblad, 22-09-1973)

Also the Municipality of Terschelling started taking policy measures such as fixing the maximum number of tourist beds (at 20,000), restricting the number of motor vehicles, and established land use zoning

restrictions. In addition, policy measures also focussed on the quality and added value of tourism development, and trying to flatten the peak in tourism arrivals by extending the tourist season and through the organisations of large events in off-peak periods. Most of these measures that were taken in 1974 are considered to have had great influence in steering the development of tourism and are still valid now (Interview, 2). In that year, a Parliamentary Commission led by J.P. Mazure advised abolishing all plans for reclamation of the Wadden and suggested protecting the whole area as a nature reserve or National Park (Kabat et al., 2012).

At the end of the 1970s and beginning of the 1980s, there was a shift back to a more socio-economic oriented discourse again. This can be explained by the difficulties the tourism sector on Terschelling experienced in the 1980s. After years of growth, there was an economic downturn in this period. This downturn was triggered by the oil crises of 1973 and 1979 that exacerbated the already existing economic recession in The Netherlands. The worldwide economic downturn affected the Netherlands more than most other countries due to the dependence of its extensive welfare state on profits from natural gas production (the phenomenon now called Dutch disease) (Van der Cammen and De Klerk, 2012). Terschelling was also affected; tourism on the island turned out to be sensitive to the business cycle, tourist numbers and expenditure dropped. Tourism entrepreneurs argued at the time (the 1980s) that the municipality should create better opportunities for the tourism sector to expand and modernize. Terschelling had not been able to adapt to a changing tourism market, and innovation had stalled due to the national and local government policies of the 1970s.

After a slow economic recovery during the 1980s, a reorientation towards nature protection around 1990 is visible in the data. This reorientation can be attributed to a worldwide shift towards an environmental discourse in which sustainability was a core concept. The Brundtland Report (WCED, 1987) and the United Nations Conference on Environment and Development (or Earth Summit), which was held in Rio de Janeiro in 1992, were important milestones on the world scale. On the local level, this sustainability thinking was clearly implemented in the 1989 Landscape Policy Plan of Terschelling. The emphasis for a shift in thinking was highlighted in many quarters:

"The policy of the municipality and the attitude of the entrepreneurs on Terschelling must change in the coming years in order to ensure a good future for Terschelling." (Leeuwarder Courant, 12-04-1988)

The most recent period (2005-2014) can be characterized as a period of thinking in terms of synergies. The newspaper quote below is an example of the acknowledgment of synergies (Leeuwarder Courant, 27-06-2009):

"Nature and economy can go hand in hand very well." (Leeuwarder Courant, 27-06-2009)

Immediately before the latest increase in synergetic thinking, the Meijer Report (2004) was published. It proposed an integrated vision for the Wadden in which sustainable protection and development should occur together, with priority for nature with human co-use. Thinking in terms of synergies, however, is not just something recent, as is witnessed by earlier periods of attention, often followed by decline. In the beginning of the 1960s, there was an early awareness on the islands that, although tourism was an important economic activity, it must not harm the landscape. Around 1974, awareness grew that it might be necessary to curtail the growth of tourism.

In the last ten years or so, there has been a strong increase in interest in synergies. The newspaper quote below emphasizes this by stating that nature and tourism and recreation cannot be seen as detached from each other and under the condition of stakeholder consultation can be combined:

"It should not be forgotten that in many places recreation is possible because of the presence of nature. That is the basis! This realization urges those stakeholders to be involved more often. To handle nature well requires a lot of consultation. Practice shows that, if this is the case, many activities can be combined with each other quite well." (Leeuwarder Courant, 03-04-2010)

4.7 Conclusions

Our chapter contributes to resilience thinking and SES thinking, as it assists in understanding the institutional context for managing tourism-landscape interactions. From the literature, it is clear that the concept of resilience is difficult to apply in practice and empirical work is needed. We demonstrated how content analysis can assist in understanding the institutional context in which decision-making about the future takes place. The extent of fluctuation in the usage of socio-economic development and nature protection discourses suggests that they are not the result of intended and rational policy interventions rather that the system is constantly adapting to changing circumstances. Our analysis of the institutional context contributes to a better understanding of the mechanisms that build the resilience of social-ecological systems.

We conclude from our analysis that the way people in Terschelling think about the interactions between tourism development and landscape protection has been fluctuating over time, especially in the period from 1945 to 2015. Our analysis showed that during this period, thinking in socio-economic terms has been important in the development of tourism and landscape on the Island. Our example shows that the way people think about nature is heavily determined by the up-and-down swings of the business cycle. This would imply short-term thinking where, in times of economic downturn, nature protection become less important. This seems to fit with the standard Maslow (1943) hierarchy of needs, with nature protection as a higher order need that will come to the forefront only when basic human needs are fulfilled. Nevertheless, we also found that thinking about nature protection was predominant at some points in our time period. Important here is that these changes in public thinking were often influenced by external (and often macro) triggers, where caring for nature, landscape and environment was brought to people's attention.

By analysing the informal historical institutional context, our analysis also shows that thinking in terms of synergies has been increasing recently. The acknowledgement of synergies fluctuates, yet overall we can observe that the general trend is upwards. In our results, we found that the factors that largely determine the overall increase of synergies relate to collaboration, working together and being involved. Also, the current frequent use of the word 'sustainability' contributes to the recent increase in the number of newspaper articles coded as synergies. While synergies remain limited compared to the focus

on tourism development or nature protection, this upward trend looks promising. Synergies however, are not only a recent phenomenon. Our analysis showed that thinking about synergies also occurred in earlier times. We can conclude that a historical approach assists in understanding that synergies develop in a cyclical way and are influenced by the vagaries of time.

Our content analysis of newspaper articles has proven to be a valuable tool for identifying changes in thinking in the public discourse on tourism and landscape interactions over time. It helped identify the way people think about tourism development and landscape protection and how this has changed over time. We used content analysis of newspaper articles as a proxy for the institutional context. The added value of content analysis is that it can be done in a rigorous and transparent manner over a long timeframe. This sets content analysis apart from research methods such as interviewing, because content analysis goes beyond the availability of people to interview, and overcomes the changes in their perceptions that may occur over time. Content analysis, therefore, is helpful in understanding the historical institutional context, although subsequent interviews can help in validating and interpreting the data.

Based on this analysis, we have three suggestions for policy makers and planners. First, tourism development and landscape protection have potential for synergies between them. Nevertheless, policy makers need to be aware that achieving these synergies is not something that is easy controllable. We showed that thinking about synergies has fluctuated considerably over time. Furthermore, it is clear that it takes time for policy measures aimed at promoting synergies to be effective. Second, to gain insight into the current institutional context in which future policy is made, it is important to take past trajectories into account and consider how they have evolved over time. Third, knowledge which is based on content analysis of historical newspaper articles or similar textual materials can be a helpful and effective tool to systematically reveal the past patterns that have shaped the current situation.

References

- Adger, W.N. (2000). Social and ecological resilience: are they related? *Progress in Human Geography*, 24(3), 347-364.
- Alexander, E.R. (2005). Institutional transformation and planning: from institutionalization theory to institutional design. *Planning Theory*, 4(3), 209-223.
- Anderies, J., Janssen, M., and Ostrom, E. (2004). A framework to analyze the robustness of social-ecological systems from an institutional perspective. *Ecology and Society*, *9*(1), art.18. Retrieved from http://www.ecologyandsociety.org/vol9/iss1/art18/
- Berkes, F. (2007). Understanding uncertainty and reducing vulnerability: lessons from resilience thinking. *Natural Hazards*, *41*(2), 283-295.
- Biggs, D. (2011). Understanding resilience in a vulnerable industry: the case of reef tourism in Australia. *Ecology and Society*, 16(1), art.30. Retrieved from http://www.ecologyandsociety.org/vol16/iss1/art30/
- Brondizio, E.S., Ostrom, E., and Young, O.R. (2009). Connectivity and the governance of multilevel social-ecological systems: The role of social capital. *Annual Review of Environment and Resources*, *34*(1), 253-278.
- Buckley, R. (2011). Tourism and environment. *Annual Review of Environment and Resources*, *36*(1), 397-416.
- Carpenter, S.R., Westley, F., and Turner, G. (2005). Surrogates for resilience of social-ecological systems. *Ecosystems*, 8(8), 941-944.
- Carson, R. (1962). Silent Spring. Boston: Houghton Mifflin Harcourt.
- Choi, S., Lehto, X.Y., and Morrison, A.M. (2007). Destination image representation on the web: Content analysis of Macau travel related websites. *Tourism Management*, *28*(1), 118-129.
- Cumming, G.S., Cumming, D.H.M., and Redman, C.L. (2006). Scale mismatches in social-ecological systems: causes, consequences, and solutions. *Ecology and Society*, 11(1), art.14. Retrieved from https://www.ecologyandsociety.org/vol11/iss1/art14/
- Davidson, D.J. (2010). The applicability of the concept of resilience to social systems: some sources of optimism and nagging doubts. *Society and Natural Resources*, *23*(12), 1135-1149.
- Davoudi, S., Brooks, E., and Mehmood, A. (2013). Evolutionary resilience and strategies for climate adaptation. *Planning Practice and Research*, *28*(3), 307-322.
- Derissen, S., Quaas, M.F., and Baumgartner, S. (2011). The relationship between resilience and sustainability of ecological-economic systems. *Ecological Economics*, 70(6), 1121-1128.
- Drisko, J.W., and Maschi, T. (2015). Content analysis. Oxford: Oxford University Press.

- Espiner, S., and Becken, S. (2014). Tourist towns on the edge: conceptualising vulnerability and resilience in a protected area tourism system. *Journal of Sustainable Tourism*, 22(4), 37-41.
- Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., and Rockström, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, *15*(4), art.20. Retrieved from http://www.ecologyandsociety.org/vol15/iss4/art20/
- Gläser, J., and Laudel, G. (2013). Life with and without coding: Two methods for early-stage data analysis in qualitative research aiming at causal explanations. *Forum: Qualitative Social Research*, 14(2), art.5. Retrieved from http://nbn-resolving.de/urn:nbn:de:0114-fqs130254
- González, J., Montes, C., Rodriguez, J., and Tapia, W. (2008). Rethinking the Galapagos Islands as a complex social-ecological system: Implications for conservation and management. *Ecology and Society*, *13*(2), art.13. Retrieved from https://www.ecologyandsociety.org/vol13/iss2/art13/
- Hartman, S., and De Roo, G. (2013). Towards managing nonlinear regional development trajectories. *Environment and Planning C: Government and Policy*, *31*(3), 556-570.
- Helmke, G., and Levitsky, S. (2004). Informal institutions and comparative politics: a research agenda. *Perspectives on Politics*, 2(4), 725-740.
- Heslinga, J.H., Groote, P.D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. *Journal of Tourism Futures*, 3(1), 23-38.
- Hodgson, G.M. (2006). What are institutions? Journal of Economic Issues, 40(1), 1-25.
- Hoekstra, H., Zijlstra, E., Zwart, F., Smit-Zwanenburg, E., and Kok, J. P. (2009). *Een eeuw badgasten: een beeld van 100 jaar toerisme op Terschelling* [A century of bathers: an overview of 100 years of tourism on Terschelling]. Terschelling-West: Isola Arte.
- Holling, C.S. (2008). Theories for sustainable futures. *Conservation Ecology, 4*(2), art.7. Retrieved from http://www.consecol.org/vol4/iss2/art7/
- Imperiale, A.J., and Vanclay, F. (2016). Experiencing local community resilience in action: Learning from post-disaster communities. *Journal of Rural Studies*, 47, 204-219.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P.M.J., van Oijen, T., Pejrup, M., ... Wolff, W.J. (2012). The Wadden Sea Region: Towards a science for sustainable development. *Ocean and Coastal Management*, *68*(2012), 4-17.
- King, B., Pizam, A., and Milman, A. (1993). Social impacts of tourism. *Annals of Tourism Research*, 20(4), 650-665.
- Knottnerus, O.S. (2005). History of human settlement, cultural change and interference with the marine environment. *Helgoland Marine Research*, *59*(1), 2-8.

- Krippendorff, K. (2013). *Content Analysis: An Introduction to Its Methodology* (3rd edn). Thousand Oaks: Sage.
- Lebel, L., Anderies, J.M., Campbell, B., Folke, C., Hatfield-Dodds, S., Hughes, T.P., and Wilson, J. (2006).

 Governance and the Capacity to Manage Resilience in Regional Social-Ecological Systems. *Ecology and Society*, 11(1), art.19. Retrieved from http://www.ecologyandsociety.org/vol11/iss1/art19
- Lew, A.A. (2014). Scale, change and resilience in community tourism planning. *Tourism Geographies*, *16*(1), 14-22.
- Libosada, C. M. (2009). Business or leisure? Economic development and resource protection-Concepts and practices in sustainable ecotourism. *Ocean and Coastal Management*, *52*(7), 390-394.
- Liburd, J.J., and Becken, S. (2017). Values in nature conservation, tourism and UNESCO World Heritage Site Stewardship. *Journal of Sustainable Tourism*, 1-17.
- Liu, J., Dietz, T., Carpenter, S.R., Alberti, M., Folke, C., Moran, E., ... Taylor, W.W. (2007). Complexity of coupled human and natural systems. *Science*, *317*(5844), 1513-1516.
- Lowenthal, D. (2015). The past is a foreign country-revisited. Cambridge: Cambridge University Press.
- Luthe, T., and Wyss, R. (2014). Assessing and planning resilience in tourism. *Tourism Management*, 44, 161-163.
- Maslow, A.H. (1948). "Higher" and "lower" needs. *The Journal of Psychology: Interdisciplinary and Applied*, 25(1948), 433-436.
- Meadows, D.H., Meadows, D.L., Randers, J., and Behrens, W.W. (1972). *The Limits to Growth: A report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.
- McCombes, L., Vanclay, F., and Evers, Y. (2015). Putting social impact assessment to the test as a method for implementing responsible tourism practice. *Environmental Impact Assessment Review*, *55*, 156-168.
- McCool, S., and Spenceley, A. (2014). Tourism and protected areas: a growing nexus of challenge and opportunity. *Koedoe*, *56*(2), 1-2.
- Meijer, W., Lodders-Elfferich, P., and Hermans, L. (2004). *Ruimte voor de Wadden: eindrapport adviesgroep waddenzeebeleid*.
- Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, 325(5939), 419-422.
- Ostrom, E., and Cox, M. (2010). Moving beyond panaceas: a multi-tiered diagnostic approach for social-ecological analysis. *Environmental Conservation*, *37*(4), 451-463.
- Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change*, *19*(3), 354-365.

- Parra, C. and Moulaert, F. (2016). The governance of the nature-culture nexus: lessons learned from the San Pedro de Atacama case-study, Nature+Culture, 11(3), 239-258.
- Persha, L., Agrawal, A. and Chhatre, A. (2011). Social and ecological synergy, *Science*, 331(6024), 1606-1608.
- Revier, H. (2013). Nature conservation and tourism development in the Dutch Wadden Sea region: a common future? In A. Postma, I. Yeoman, and J. Oskam (Eds.), *The Future of European Tourism* (pp. 177-193). Leeuwarden: European Tourism Futures Institute.
- Saarinen, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research*, 33(4), 1121-1140.
- Sijtsma, F.J., Broersma, L., Daams, M.N., Hoekstra, H., and Werner, G. (2015). Tourism development in the Dutch Wadden Area: Spatial-temporal characteristics and monitoring needs. *Environmental Management and Sustainable Development*, 4(2), 217-241.
- Sijtsma, F.J., Daams, M.N., Farjon, H., and Buijs, A.E. (2012). Deep feelings around a shallow coast. A spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area. *Ocean and Coastal Management*, *68*, 138-148.
- Terkenli, T.S. (2004). Tourism and landscape. In A.A. Lew, C.M. Hall, and A.M. Williams (Eds.), *A Companion to Tourism* (pp. 339-348). Oxford: Blackwell.
- van der Aa, B.J.M., Groote, P.D., and Huigen, P.P.P. (2004). World heritage as NIBMY? The case of the Dutch part of the Wadden Sea. *Current Issues in Tourism*, 7(4-5), 291-302.
- van der Cammen, H, and De Klerk, L. (2012). *The Selfmade Land; Culture and Evolution of Urban and Regional Planning in The Netherlands*. Utrecht: Spectrum.
- Vanclay, F., Baines, J. and Taylor, C.N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, 31(4), 243-253.
- Walker, B., Holling, C.S., Carpenter, S.R., and Kinzig, A. (2004). Resilience, adaptability and transformability in social-ecological systems. *Ecology and Society*, *9*(2), art.5. Retrieved from http://www.ecologyandsociety.org/vol9/iss2/art5/
- WCED. (1987). Our Common Future (The Brundtland Report). Oxford: Oxford University press.
- Wesley, A., and Pforr, C. (2010). The governance of coastal tourism: unravelling the layers of complexity at Smiths Beach, Western Australia. *Journal of Sustainable Tourism*, 18(6), 773-792.
- Wilkinson, C. (2012). Social-ecological resilience: Insights and issues for planning theory. *Planning Theory*, *11*(2), 148-169.
- Williams, S. (2009). *Tourism Geography: A New Synthesis* (2nd ed.). Abingdon: Routledge.

STRENGTHENING GOVERNANCE PROCESSES TO IMPROVE BENEFIT SHARING FROM TOURISM IN PROTECTED AREAS BY USING STAKEHOLDER ANALYSIS

Reprint of **Heslinga**, **J.H.**, Groote, P.D. and F. Vanclay (2017). Strengthening governance processes to improve benefit sharing from tourism in protected areas by using stakeholder analysis. *Journal of Sustainable Tourism* (in press).

Abstract

The concept of benefit sharing refers to the idea that the benefits arising from tourism should be distributed across a wide range of stakeholders. To provide benefits to local communities, we argue that the development of synergetic interactions between stakeholders involved in governance processes is a prerequisite for effective benefit sharing from tourism in protected areas. Our stakeholder analysis of the actors with an interest in the island of Terschelling in the northern Netherlands revealed how relationships between stakeholders enable and/or constrain the sharing of benefits from tourism. Our analysis helped to understand better the governance arrangements pertaining to the management of tourism and protected areas. We ascertained that the national forest management agency (Staatsbosbeheer), a large landowner on the island, is highly influential, but nevertheless often found it difficult to gain local support for its activities. The local government was also an important stakeholder, but was often considered to constrain the development of tourism and thus limit the potential for benefit sharing. Effective communication, good collaboration with stakeholders, and an attitude of openness were identified as being important preconditions for developing synergistic interactions between stakeholders.

Keywords

Protected area management, good governance, nature protection, sustainable tourism, resilience, social sustainability

5.1 Introduction

We consider that 'benefit sharing' in the context of tourism in protected areas refers to the idea that the benefits arising from tourism should be shared amongst a wide range of stakeholders, and especially with the local communities (Foxlee, 2007). Despite widespread use of the term, benefit sharing (Söderholm and Svahn, 2015; Wang, 2012; Vanclay, 2017), there is no well-established definition (Swemmer et al., 2014). However, in the context of protected areas, benefit sharing can be defined as being "the process of making informed and fair trade-offs between social, economic and ecological costs and benefits within and between stakeholder groups, and between stakeholders and the natural environment, in a way that is satisfactory to most parties" (Swemmer et al. 2014, p.7).

In this paper, we move beyond 'trade-offs' to argue that 'synergies' can be an important precursor to achieve effective benefit sharing from tourism in protected areas. Developing synergies can be described as facilitating the interactions between actors to achieve greater combined outcomes across the social and ecological domains (Persha et al., 2011). For example, this could mean that tourism development and nature protection should not be considered as being in conflict, but rather as goals that can be balanced to create win-win situations and be mutually supportive. Acknowledging synergetic tourism-landscape interactions is important because tourism generates income and job opportunities that rely on the landscape, although simultaneously tourism impacts on the landscape (Buckley, 2012; Saarinen, 2006) and the community (Snyman, 2015; King et al., 1993; McCombes et al., 2015). Tourism is also an opportunity for nature protection, because tourism plays a role in creating awareness, public support and in generating funding for nature protection (Libosada, 2009; McCool and Spenceley, 2014). To achieve both nature protection and socio-economic development, we consider it is important that the synergetic interactions between tourism and protected areas be recognised and stimulated. In other words, instead of 'fair trade-offs' in a zero-sum game, combining both objectives can create synergetic effects, win-win-win outcomes, as well as enhancing benefit sharing possibilities.

A problem, however, is that the potential synergies between tourism development and landscape protection (T&L) are often overlooked and underutilized (Hartman, 2015; Heslinga et al., 2017). One way to identify synergies lies in the governance arrangements in managing T&L in coastal areas (Lockwood, 2010). This is because these governance arrangements affect the processes by which synergies are activated or inhibited. Beaumont and Dredge (2010) emphasize the need to further explore these governance arrangements. In this paper, we aim to improve the understanding of the governance processes that could help facilitate benefit sharing arising from tourism in protected areas.

Surprisingly, governance as a conceptual frame has only had relatively limited use in the tourism literature (Bramwell and Lane, 2011). To make up for this, we explore governance from the perspective of social-ecological systems (SES) theory. SES theory is useful because it does not consider the social and the ecological as distinct separate entities, but instead as an integrated whole. Using a holistic approach helps to understand the interactions between tourism and landscape protection in coastal areas better (Heslinga et al., 2017). In this paper, we drawn on an SES perspective to provide principles that will

contribute to a deeper understanding of how tourism-landscape interactions in coastal areas can be better managed.

To understand governance arrangements better, examining the relationships between the stakeholders who are involved in this network can be helpful (Dredge, 2006). We use stakeholder analysis because it can reveal the interests and influences of the different stakeholders, and determine whether their interactions are conflicting, complementary or cooperative (Reed et al., 2009). It is generally accepted that the use of real life examples assists in demonstrating the usefulness of an approach (Wesley and Pforr, 2010). Therefore, we utilise the case of Terschelling, an island located in the Wadden Sea region, a UNESCO World Heritage site in the north of The Netherlands. The Wadden is renowned for its ecological qualities and highly-valued landscapes. Due to its attractiveness, tourism is a significant activity, especially on the five main islands of the Wadden. On Terschelling, there are many stakeholders groups who are involved in decision-making processes relating to tourism, each with their own varying interests. Our stakeholder analysis identified who these stakeholders were and helped understand the interactions between them.

5.2 Governance to facilitate benefit sharing from tourism in protected areas

Despite the potential for synergetic tourism-landscape interactions in coastal areas, managing these interactions can be inherently complicated because many actors are involved in decision-making processes and these stakeholders usually have different and sometimes contradictory values, attitudes and interests. What an environmental stakeholder, for example, considers to be important in an area can be very different to what tourism promoters, developers, recreational users, or local residents consider to be important (Jamal, 2004). Given the complexity of the stakeholder interactions and the difficulties of managing their diverse interests, increasing attention has been given to exploring other ways of managing tourism development processes (Wesley and Pforr, 2010; Luthe and Wyss, 2014). The concept of governance, for example, is likely to be a promising approach for managing synergies between tourism and landscape in coastal areas. This is because 'governance' is a broader concept than 'the government', in that it also includes non-state actors, including business, community and civil society, notably the voluntary sector (Parra, 2010). Governance can be defined as "the complex system of regulation involving the interactions of a wide variety of actors, institutions, the environment and all types of socio-institutional arrangements at different territorial levels" (Parra, 2010, p.491).

Balancing the objectives of both nature protection and socio-economic development, and thereby achieving long-term sustainability goals, requires organizational structures that are more decentralized than central governments tend to be, as well as effective linkages between the many stakeholders (Crona and Bodin, 2006; Plummer and Fennel, 2009; Reed et al., 2009; Strickland-Munro et al., 2010; Beaumont and Dredge, 2010); Imperiale and Vanclay, 2016). Central governments can be useful in assisting in the formation of groups and in providing support for collective action, but they sometimes

interfere when there is well-functioning civil society (Mehmood and Parra, 2013). Governance arrangements that accommodate inclusion and participation are desirable so that effective rules, institutions and incentives can be developed to influence the management of tourism-landscape interactions in a complex and uncertain world (Armitage et al., 2009).

The interest in governance as a concept has increased significantly in the social sciences over the last few decades (Wray, 2015; Bramwell and Lane, 2011; Kooiman, 2003). Nevertheless, despite the potential of governance to provide insights regarding the management of tourism-landscape interactions, its usage in the tourism literature is limited. Bramwell and Lane (2011) claim that the term, governance, has been used less frequently than related terms — e.g. tourism politics, policy, policy-making, planning, or destination management. When Bramwell and Lane (2011) wrote their article, only a few scholars working on governance in relation to tourism were influential (Eagles, 2009; Hall, 2011; Higgins-Desbiolles, 2011; Beaumont and Dredge (2010); Wesley and Pforr, 2010). Since then, usage of governance in relation to tourism has increased considerably (Halkier, 2014; Sharpley and Ussi, 2014; Wray, 2015).

The concept of governance has been discussed at some length in other bodies of literature, notably in SES theory (Brondizio et al., 2009). Therefore, to enrich the tourism literature, we connect with SES theory. We believe that a SES perspective can be useful to understand tourism-landscape interactions in coastal areas (Heslinga et al., 2017). This is because such a perspective sees 'tourism' and 'landscape' as part of an integrated social and ecological system. Additionally, the SES perspective also helps to understand T&L as part of a complex social-ecological system that is continually adapting to changing circumstances (Strickland-Munro et al., 2010).

For the management of tourism destinations to address the twin goals of nature conservation and socio-economic regional development, it is important to understand how social-ecological systems are governed and to consider the roles institutions can, do and could play (Bramwell and Lane, 2011). SES thinking provides principles for the way tourism-landscape interactions should be governed. In our previous work (Heslinga et al., 2017), we identified three principles – inclusiveness, more flexible social arrangements, and multi-scalarity – which we use as an organising structure for this paper. These principles are explained below.

Inclusiveness is a principle around the ideas that all actors have a right to be involved in the decision-making process, that they should be given every opportunity to be involved, and that no actors are excluded (Lockwood, 2010). However, the relevant actors and stakeholders involved in the governance of T&L are often diverse and have varied interests and priorities (Bramwell and Lane, 2011; Jamal and Stronza, 2009). Additionally, the interactions between tourism and landscape span numerous policy domains. These characteristics make effective decision-making complex. Including all the different interests fairly and avoiding the marginalization of any group can help to prevent conflict among stakeholders (Prenzel and Vanclay, 2014). Conflict may arise in the governance of tourism-landscape interactions because each group is likely to pursue their preferred policy outcomes (Bramwell and Lane, 2011). Avoiding conflict is crucial, because it can impact on economic, ecological and socio-cultural wellbeing (Jamal and Stronza, 2009).

Another principle of good governance is flexible social arrangements. Governance includes more actors than just the central government. Although centralized government bodies can be helpful in building support for collective action (Olsson et al., 2004; Prell et al., 2009), a central government is often limited in its ability to respond to rapid social-ecological change or to cope with uncertainty (Armitage et al., 2009). We believe that governance arrangements in which flexibility is taken into account can be helpful in developing more effective ways of managing tourism-landscape interactions in a dynamic world. An adaptive approach that is flexible enough to deal with future social and ecological changes can assist in enabling progressive learning at individual, community, institutional, and policy levels (Plummer and Armitage, 2007).

Multi-scalarity implies that the governance processes of T&L do not only take place at one single level (or scale), but are also influenced from multiple scales (Adger et al., 2003; Folke et al., 2005; Berkes, 2007; Liu et al., 2007; Brondizio et al., 2009; Lew, 2014). The difficulties of managing T&L include discrepancies between socio-economic activities occurring at the local scale and nature protection initiatives imposed from higher scales. Paloniemi and Tikka (2008) noted, for example, that nature protection has been prescribed and stipulated in international and national laws and procedures regulated by the public sector. However, they also observed that the issues and relationships surrounding nature protection play out in various ways at the local level. The everyday lives of local people are affected by their social positions, cultural activities and cultural heritage (Vanclay, 2012). For the management of tourism-landscape interactions, this could mean a mismatch between the regulations for nature protection and those for the socio-economic activities of tourism entrepreneurs (Paloniemi and Tikka, 2008). Acknowledging these multi-scalar tourism-landscape interactions can help to understand the difficulties in managing them better.

Despite the interesting insights SES theory provides for understanding the governance of tourism-landscape interactions in coastal areas, there is a need for more diverse and more detailed case studies into coastal tourism development planning and management (Wesley and Pforr, 2010). These real life cases can help demonstrate the usefulness of SES. We suggest that using stakeholder analysis helps understand governance arrangements better, as it illuminates the 'action arena' within these arrangements by revealing each actor's positions, their interests, and how they interact with others (Ostrom, 2011).

5.3 Data and methods for our case study

We used stakeholder analysis to identify the stakeholders, consider their interests, and to analyse whether their inter-relationships were conflictual, complementary, or based on cooperation. Reed et al. (2009) described stakeholder analysis as a process that identifies the individuals, groups and organisations (including future generations and non-human and non-living entities) who are affected by or can affect a decision, action or part thereof. We used stakeholder analysis because it identifies who

the stakeholders are, what their interests are, who has the power to influence what happens, and how the stakeholders interact.

Stakeholder analysis has increasingly been used in many different fields and for an increasing variety of purposes (Reed et al., 2009). From its original application in the field of strategic management (Freeman, 1984), it is now widely used in the fields of policy studies, development studies and natural resource management (Prell et al., 2009; Reed et al., 2009; Dare et al., 2014). Stakeholder analysis has often been used in tourism research, especially in relation to sustainable tourism development (Currie et al., 2009; Waligo et al., 2013). To understand the shared objectives between tourism development and landscape protection, we emphasize the importance of involving all stakeholders. We believe that, in a tourism context, stakeholder analyses that focus solely on the tourism industry are inadequate. A tourism destination is more than just economic activity (Higgins-Desbiolles, 2006); the social (King et al., 1993; McCombes et al., 2015), and environmental aspects (Buckley, 2012; Saarinen, 2006) must also be taken into account. Therefore, we are interested in the multitude of different stakeholders that are involved in the management of T&L in coastal areas, ranging from tourism entrepreneurs, policy makers, environmental groups, interests groups, and civil society.

There are numerous methods available for analysing stakeholders and understanding their interrelationships. We utilized the three steps nominated by Reed et al. (2009): (1) identify the stakeholders; (2) categorize them; and (3) investigate the relationships between them. To identify the stakeholders involved in the decision-making processes on Terschelling, we used a snowballing process as part of the interviews conducted by the lead researcher. Starting from people in our networks, the initial interviews were conducted in early 2015 with well-connected local identities and people knowledgeable about Terschelling or the Dutch Wadden area generally. In the initial eight interviews (which ranged from 60 to 120 minutes each), a total of some thirty or so stakeholders (or groupings of stakeholders) were identified.

The categorization of these stakeholders was done in August 2016 by a panel comprising tourism researchers from the European Tourism Futures Institute at Stenden University in Leeuwarden, The Netherlands, all of whom were highly knowledgeable about Terschelling. Using a card sorting technique, the panel was asked to discuss and position the identified stakeholders on an interest-influence matrix (Reed et al., 2009, discussed below). This matrix comprises four categories: Key Players, Context Setters, Subjects, and the Crowd. These categories are based on the combination of the amount of interest in and influence the stakeholders have in terms of tourism issues on the island. 'Key Players' are those stakeholders who have both a high interest in and high influence over tourism. 'Context Setters' are highly influential, but only have little interest. 'Subjects' have high interest, but only low influence. They need to form alliances with other stakeholders in order to become more influential. The 'Crowd' has little interest and little influence. Each category is represented by a quadrant in the interest-influence matrix. From a theoretical point of view, the strategies used by a stakeholder should vary according to the category in which they are located.

In order to categorize the stakeholders on Terschelling, the panel was given a set of cards, in random order, on which each identified stakeholder was named. The researchers collectively discussed which

quadrant each stakeholder should be best placed and why. The categorization process was audiorecorded and transcribed. This resulted in an interest-influence matrix, which provided an overview of the stakeholders involved in decision making on Terschelling.

The interrelations between the stakeholders were assessed by a thorough re-analysis of the original eight interviews, which were augmented by an additional six interviews. For the extra interviews, which were done in September 2016, the interest-influence matrix was used to focus discussion specifically on the interactions between stakeholders. Overall, the 14 interviews (12 men, 2 women) included tourism entrepreneurs, policy makers, and representatives of environmental interest groups and civil society. Given the nature and topics of the discussion, after 14 interviews it was considered that saturation had been reached.

The interviews were conducted in a manner consistent with ethical research principles (Vanclay et al. 2013). Prior to the interview, the respondent was provided with a research information sheet and was asked to complete an informed consent form that covered issues of anonymity, the use of the research, and their rights during and after the interview. With the permission of each respondent, the interviews were audio-recorded and transcribed verbatim. The transcripts were coded and analysed using the qualitative data software, Atlas.ti (version 7.5.10). *A priori* coding was undertaken with the codes having been derived from our theoretical positioning, especially the principles of inclusiveness, more flexible social arrangements, and multi-scalarity.

The interviews were conducted in Dutch. The transcripts and analysis were done in Dutch. Extracts for this paper were selected and then translated into English by the authors. To preserve the intention and meaning implicit in the Dutch statements, rather than a verbatim, literal translation, some of the excerpts have been modified to ensure that a reader in English comprehends the intention of the statement. We believe we have faithfully represented the essence of the interview in the way the extracts have been translated.

There were some limitations to our methods. For example, we were not able to interview all the stakeholders identified and categorized in the matrix. In addition, the key informants we interviewed often represented an organization — and interviewing a different informant within that organization might have given a different perspective. Nevertheless, despite these limitations, our methods were helpful in providing an illustration of the interactions between stakeholder groups.

5.4 Case-study description

We examine, at different levels, the governance structure and processes that are in place on Terschelling, an island in the Dutch Wadden area (see Figure 5.1). We specifically consider the management of tourism-landscape interactions on the island. The Wadden is a natural coastal area that has considerable biodiversity and highly-valued landscapes (Kabat et al. 2012). These natural qualities led

to the area being designated as a UNESCO World Heritage site in 2009 (Kabat et al., 2012), although amongst some controversy (van der Aa et al., 2004). Because of its natural qualities, the Wadden is one of the most popular tourism destinations in the Netherlands (Revier, 2013; Sijtsma et al., 2012). Tourism to the Wadden islands originally started about 100 years ago. After the Second World War, tourism steadily increased, becoming an important economic activity on the islands (Sijtsma et al., 2015).

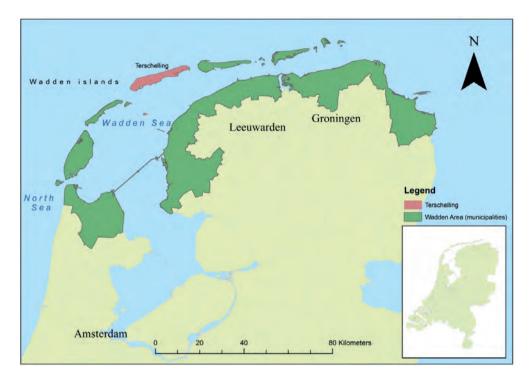


Figure 5.1 | Map of the Dutch Wadden showing the location of Terschelling

The Wadden can be differentiated into three distinct areas, each with different interactions between tourism and landscape. One area is the Wadden Sea, a tidal mudflat and saltmarsh area that is of considerable ecological importance. Here, a limited amount of tourism activities take place such as recreational sailing, seal viewing excursions, and walking on the mudflats (*wadlopen*), a highly popular activity. The second area is the mainland coastal strip adjacent to the Wadden Sea. Here, tourism remains largely under-developed and agriculture is the dominant economic activity. The third area comprises the Wadden islands, which are barrier islands that protect the Wadden Sea from the North Sea. The five main islands have developed as popular holiday destinations. In this paper, we specifically focus on the tourism-landscape interactions on the island of Terschelling.

Terschelling comprises a variety of landscape types, including dunes, beaches, forests, meadows, salt marches, and tidal mudflats. The various qualities of these different landscape types make the island very attractive for tourists. Consequently, over the past century, tourism has developed into a well-established industry and currently tourism is the most important source of employment on the island (Sijtsma et al., 2015). In 2017, Terschelling had 4,856 inhabitants, about half of whom live in the largest town, West-Terschelling, with the remainder spread across nine other villages (CBS Statline, 2017). Terschelling also experiences an annual tourism visitation of around 400,000 tourist arrivals and 1.8 million overnight stays (Municipality of Terschelling, 2014). With a land area of only 86 km², there is considerable pressure on its social and ecological carrying capacity. Since the 1950s, there has been a growing demand for accommodation and services to cater for all the tourists. These developments have had negative impacts on the landscape.

Over the last few decades, national and international laws, regulations and guidelines have greatly increased the protection of the flora, fauna and the ecological state of the area. These include the Bird Directive (1979), the Habitat Directive (1992), and Natura 2000 (1992). This increasing regulatory control means that many proposals for socio-economic developments have been hindered (Hartman and de Roo, 2013). The twin goals of protecting the island's nature and landscape, and enabling socio-economic development by means of tourism are heavily debated on the island. There are many stakeholders involved in the governance of T&L at different levels, many of whom have differing and potentially-conflicting interests, including tourism entrepreneurs, nature protection organizations, interests groups, governmental bodies and civil society.

5.5 Identification and categorisation of stakeholders (Results Part 1)

Figure 2 reveals how our panel categorized the identified stakeholders in terms of the interest-influence matrix. It is evident that most tourism entrepreneurs were clustered together in the matrix (see Figure 2 top-left, circled in red). This observation is supported by what respondents stated in the interviews (e.g. Interviews 9 and 11) – that Terschelling is a relatively small island and that most entrepreneurs are well connected to each other and sometimes transfer business to each other (Interview 9).

Figure 5.2 also shows that most public institutions form a cluster (across the middle, circled in blue). Within this cluster, the Municipality of Terschelling and the national forest management agency, *Staatsbosbeheer* (SBB), were considered to be the most influential stakeholders on the island, a finding that was confirmed in the interviews (Interviews 1 and 8). Although other groupings could potentially be created, these two clusters (entrepreneurs and public institutions) were seen by the panel members as being important, especially because these two clusters were seen as separate worlds that did not connect with each other. However, a more nuanced picture emerges when the interactions between these two groups are examined closely, which we discuss below.

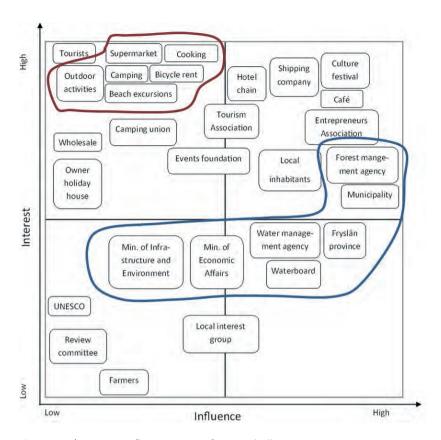


Figure 5.2 | Interest-influence matrix for Terschelling

5.6 Interactions between stakeholders (Results Part 2)

To analyse the interactions between the stakeholders, we specifically looked at the three principles of governance we identified from SES theory: inclusiveness, flexibility and multi-scalarity.

5.6.1 Inclusiveness

It was evident from the interviews that many stakeholders were involved in the decision-making processes regarding tourism development on Terschelling. Nevertheless, we also observed that there were some stakeholders who were or felt, to some extent, left out. For example, some camping-ground owners on Terschelling thought that their views should be taken into consideration more, and that they were not really involved in decision-making processes, which was frustrating for them (Interview 13). Also, many farmers thought that they were not involved much in these processes, perhaps because they

were less interested in tourism development. Nevertheless, some stakeholders considered that there was greater potential for farmers to link with the tourism sector (Interview 11). Instead of intensifying their agricultural businesses, as was happening on the mainland, it was proposed that the island farmers should engage in small-scale organic farming and the selling of local products to tourists (Interviews 11 and 14). The interviewees said this would include the farmers more and would be a better fit with the place-branding characteristics of the island they were trying to promote, which they considered were its small size and its balance with nature.

To stimulate more inclusion, the municipality has been attempting to get stakeholders involved by organizing discussion groups to consider future developments (Interview 9). However, there was some doubt whether this was tokenistic (and perceived to be a mandatory requirement), rather than being a genuine intention to engage with local people (Interview 10). Also, some interviewees observed that the other influential stakeholder, the forest management agency (SBB), was increasingly including stakeholders in its decision-making processes by sharing and explaining their plans in an open and public way.

"This has resulted in that, almost every year, we have an evening in the pub with SBB, where they explain what they are planning to do. Consequently, they get our support and we appreciate what they do much better. They don't talk about their forest anymore, but about our forest, and that is how we feel as well." (Interview 11)

Communication is an important component in the effective inclusion of stakeholders (Dare et al. 2014). It was stated that both Key Players on the island (i.e. SBB and the municipality) have recently improved their communication with other stakeholders (Interview 9). While their previous communication practices were considered to be problematic, nowadays SBB was considered to clearly communicate and discuss its intended plans. As a result, they find more support and appreciation for what they are doing.

5.6.2 Flexibility

Developments on Terschelling have been highly regulated since the 1970s (Interviews 2 and 4). However, there were some examples that showed how there can be flexibility as well. In terms of the flexibility of regulation, we observed a difference between those tourism activities having a temporal character and those developments that were more permanent, such as real-estate and infrastructure. Activities with a temporal character – such as annual festivals, outdoor activities, seal excursions, and beach excursions – were seen as providing opportunities for development (Interviews 7 and 9). While these activities were considered to be impossible 10-15 years ago (because of the regulatory regime), the interviewees mentioned there have been changes in the management style of SBB. Before these changes, SBB was considered to have had a stubborn attitude, making it almost impossible to negotiate about anything (Interviews 1, 2, 12). One interviewee (an employee of SBB) indicated that SBB nowadays gets into dialogue with tourism entrepreneurs to explore the kinds of activities they want to conduct and to consider under which conditions this could be possible without creating impacts on the landscape:

"So, from 'No, unless' to 'Yes, provided that'. We [SBB] look at things differently now, which means that we are less likely to wind up in conflict, and we have more real conversations" (Interview 6).

Some interviewees (Interviews 6 and 10) stated that this changing role of SBB can be explained by three factors. First, on a national level, the organization changed its policy to be more 'public friendly' and towards one in which communication with stakeholders was considered to be important. Second, on the local level, there were some cultural changes between different generations of local staff of SBB on Terschelling. Third, these changes within the organizational culture of SBB were promulgated by a large budget cut from the national government about ten years ago. To cope with this cut, SBB had to reinvent itself and had to find other financial sources, which made it much more outward looking. These three reasons led to more dialogue with other stakeholders about possibilities for developing initiatives, instead of SBB telling other stakeholders what was best for the island and what can and cannot be done.

In contrast to these examples relating to temporal activities, there were no examples of flexibility in relation to developments of a permanent character reported to us. This indicates that there are difficulties in the flexibility of the policies. At the local level, in its detailed land use plans, the Municipality of Terschelling outlines what land uses are permitted on the island and what is not. Camping-ground operators, for example, are entrepreneurs who are subject to these rules and regulations. While these entrepreneurs acknowledged and understood that these rules exist for good reason, they often asked for flexibility to be able to innovate. Some entrepreneurs argued that the tourism market is very fickle, because tourists' preferences are continuously changing, and that to meet such changing demands, innovation is continuously required (Interview 4). Camping-ground operators indicated that they wanted to cope with these changing demands by implementing quality improvements for the sake of sustainability. However, they felt that they were often hindered by the current regulations (Interview 13).

"The municipality should not always try to regulate everything, but they need to cooperate with us and not hinder us. We are already sufficiently constrained by regulation from higher government levels" (Interview 13).

The interviewees stated that the Municipality of Terschelling tends to play it safe when it comes to innovative and creative ideas. Some argued that this was because the municipality lacked a clear vision of future development on the island and they see tourism in only a very simplistic way (Interview 12).

"What worries me is that the municipality puts everything on hold. It does not dare to take responsibility, does not dare to take any risk, and keeps everything out. It is performing a sort of 'village politics', without any vision on where we should go, what we value, and what we should do." (Interview 12)

Respondents argued that the Municipality of Terschelling is incapable of managing all the issues on the island. Because the Wadden area is highly regulated at higher government levels, the municipality has a heavy workload, and therefore its staff do not have the time to fully grasp the full meaning of all the policy documents (Interview 10). There was a tendency for the municipality not to take any risks and to leave things as they are, which is likely to hinder Terschelling's full potential into the future. Initiatives that are about the intersection of tourism development and landscape protection may fit with the island's character, but these intersections are difficult for the municipality to deal with, because it is not something that is standardized and consequently may be regarded as too risky (Interview 12). Respondents said that, due to this attitude, initiatives were often postponed for administrative reasons, and that eventually nothing happens. To break through such an impasse, one interviewee suggested that

experimentation might be a solution. It was argued that some issues are just too complicated for the Municipality to fully grasp, but simply trying and executing a project can sometimes show the added value of a risky initiative and can help build trust between stakeholders (Interview 12).

5.6.3 Multi-scalarity

We found that many stakeholders on Terschelling were aware that they live in a world that is multiscalar and that they are dependent on decisions made at higher scales of governance. Many entrepreneurs acknowledged that they "just have to deal with the regulations" from higher levels (Interview 9). However, the way these regulations were implemented by the local government causes dissent. Some stakeholders knew their rights very well and knew how to navigate in the multi-scalar governance system. There was an example of an entrepreneur who disagreed with a decision from the local government. Not satisfied, the entrepreneur pursued their claims and the case ended up at the Council of State, the highest court in The Netherlands (Interviews 9 and 10). In 2010 the entrepreneur won the court case and the municipality had to revise its decision. Interviewees said that, from then on, the municipality's fear of litigation was one reason why the municipality was very cautious in making decisions and was not very willing to support risky developments.

For the long term development of tourism, Terschelling is highly dependent on external actors. Many stakeholders expressed concern about the interference of external actors (i.e. anyone not from the island). For example, external investors, particularly real estate developers, were considered to be a threat because they were considered by some interviewees as having little concern for the local situation and only seeing the island as site for commercial investment from which they can make a fast profit (Interview 12).

"When you arrive on Terschelling by boat, you think, 'What a charming little harbour!'. Why should that wonderful feeling be spoilt because some jerk thinks he can construct a high-rise building with lots of apartments and make millions of euros in a very short time and leave us with all the rubbish?" (Interview 12)

Some respondents considered another external threat to be interference from mainland consultancy firms. Interviewees said that the municipality has an immense workload and therefore the municipality sometimes hired consulting firms to do various tasks, including social research. It was argued that the mainland firms do not know the local context very well and they often gave the wrong advice. The provincial aesthetics committee was also accused of ignoring and being ignorant of the local context (Interview 11). The aesthetics committee, which is based in Leeuwarden (the capital of the Province of Friesland), comprised architects and other professionals, none of whom were from Terschelling. The committee is charged with assessing building proposals to ensure they meet local aesthetic standards, but in the case of Terschelling, the committee lacked people with appropriate local knowledge. The interviewees said that these external threats can hinder benefit sharing because, in their view, the benefits accrue to the external investors, while the negative impacts are incurred by the local communities.

5.7 Discussion

We believe all three steps in stakeholder analysis are needed to reveal the interactions within and between groups of stakeholders. The first two steps, identification and categorization, helped to show that entrepreneurs are clustered together in the governance structure. Furthermore, despite the fact that they may be competitors, it was shown that they have strong links with each other. In the management literature, this is referred to as 'coopetition' (Bengtsson and Kock, 2014). Despite being each other's competitors, the success of each entrepreneur also requires success of the other entrepreneurs. For Terschelling, this means that getting tourists to the island is more important than to which establishment on the island the tourist goes.

The two steps also helped to observe the discrepancy described by Paloniemi and Tikka (2008) between nature protection policies from public institutions at higher scales and socio-economic developments by tourism entrepreneurs at the local scale. This discrepancy is also considered by Reed et al. (2009), who classify the cluster of entrepreneurs as 'Subjects' and the public institutions as 'Key Players' and 'Context Setters'. Subjects, or in our example tourism entrepreneurs, need to establish stronger links and alliances with the public institutions.

The third step, assessing the interactions between stakeholders, is the step we consider most important because it provides complementary qualitative in-depth insights about the interactions. In contrast to the discrepancy described above, this step showed that entrepreneurs and the public institutions were linked quite well, and many stakeholders were involved in decision-making through boards, associations and networks. The three steps of stakeholder analysis, when taken together, help to provide an overview of the stakeholders involved in governance processes and how they interact with each other.

The example of SBB showed that the role of large land owners is crucial in influencing developments in a region. SBB is considered to be a Key Player and how it fulfils its role partially determines the way other stakeholders interact with each other and the benefits that are shared with these stakeholders. The example of the changing role of SBB showed that a large land owner managing a nature area in a stubborn and authoritarian way would be ineffective. Investing in community relations and effective communication, together with an organisational culture change, helped SBB improve the local community's understanding of and support for nature protection and the way they manage the island.

We showed that inclusion of stakeholders in decision-making processes is an important condition for benefit sharing from tourism. Involving all stakeholders is vital for collaboration between stakeholders, because whenever a stakeholder is, or feels, ignored, this could lead to frustration and a lack of willingness to participate. This reflects the idea that collaboration helps avoid conflict (Bramwell and Lane; 2011, Jamal and Stronza, 2009). What was not discussed above was that inclusion of stakeholders in governance processes is a way to keep the communication lines between different stakeholders open. The case of Terschelling showed that communication between the tourism entrepreneurs and the forest management agency is now perceived to be much better than in the past. Improving collaboration and communication between stakeholders can create mutual understanding and are important preconditions for facilitating benefit sharing.

Flexibility in decision-making at the local level was considered to be an important factor in facilitating benefit sharing from tourism in protected areas. Providing flexibility by allowing temporal activities under certain conditions can help explore the possibilities for benefit sharing in relation to tourism and landscape management. Despite the fact that Terschelling has been highly regulated since the 1970s, flexibility in what was permitted was perceived to be increasing. The interviewees stated that influential stakeholders, such as SBB and the Municipality of Terschelling, played an important role in providing this flexibility. Nevertheless, these stakeholders remained hesitant in providing flexibility with regard to developments of a more permanent character. Some interviewees mentioned that this lack of flexibility was problematic, because it made Terschelling vulnerable as a tourism destination in the longer term. Tourism is a sector that changes rapidly, because the demands of tourists are fickle. A tourism destination needs to be flexible and adaptive to be able to cope with changing demands. Wherever a tourism destination is unable to innovate, it runs the risk that tourists will desert it for other places. Not being able to cope with these changes, may mean that many (local) stakeholders would miss out on the benefits that may flow from tourism. This makes Terschelling, which is highly dependent on tourism, particularly vulnerable.

We observed that the Municipality of Terschelling struggled to cope due to the combination of strict and complicated regulations regarding nature protection imposed by the national government (a Context Setter), and because of its limited resources. The interviewees stated that the municipality had difficulties in making clear decisions, tended to avoid risky plans and ideas, and generally 'played it safe'. This constrained other stakeholders in accomplishing their initiatives and thereby to benefit from tourism. Given these difficulties, the local government is hampered in fulfilling its role as a facilitator of benefit sharing.

5.8 Conclusion

We revealed how the relationships between stakeholders enable and/or constrain the sharing of benefits from tourism in protected areas. The ability to develop synergetic interactions between stakeholders involved in governance processes is likely to be a prerequisite for the effective achievement of benefit sharing. However, some constraining factors are the lack of capacity of the local government and its ability to cope with future changes. Despite regulations being imposed from above, the way they are interpreted at lower levels is important, because this is where most of the opportunities for benefit sharing lie. We saw that where local government lacks the resources to deal with issues that may foster synergies, it tends to be risk-averse in its decision-making. Consequently, initiatives that could foster benefit sharing are postponed or obstructed. This means that possibilities for benefit sharing are often restricted at the lower levels as well as by national and international regulation.

Another constraining factor can be the way an influential stakeholder (in our case the national forest management agency) has interacted with other stakeholders in the past. In our case, the recent positive

change in organisational culture within this agency had implications for the whole island in facilitating benefit sharing from tourism. How this agency will continue to deal with different stakeholder interests will largely determine the future course of the island. We found that effective communication and an attitude of openness towards all stakeholders were important conditions in facilitating benefit sharing.

By providing a means to consider the issues faced by all stakeholders, the technique of stakeholder analysis helps to identify the enabling and constraining factors. It helps to systematically provide an overview of who the important stakeholders are, and how they can be categorized. Furthermore, stakeholder analysis provides useful insights into the way stakeholders interact with each other. Using stakeholder analysis as a method also contributes to a better understanding of governance processes that could help facilitate benefit sharing from tourism in protected areas.

Governance has recently emerged as a way of understanding and managing tourism-landscape interactions better. We drew on insights from social-ecological systems (SES) theory, in which governance is a key concept. The benefit of using this approach is that SES considers the social and the ecological as an integrated whole, which is helpful for acknowledging synergetic interactions between tourism and landscape. In this paper, we considered three principles: inclusiveness, flexibility and multiscalarity, and we discussed the way they allow or constrain benefit sharing between tourism and protected areas. These principles are valuable in providing a deeper understanding of the governance of the interactions between tourism and landscape management.

Based upon our research, we have three main recommendations for policy makers. First, the interest-influence matrix will assist policy makers to identify and categorize stakeholders. Use of the matrix could be helpful in making strategic choices about how to deal with each type of stakeholder. Second, stakeholder analysis is a valuable tool to provide an overview that shows which interactions between stakeholders are facilitating and which have limiting effects for benefit sharing. Third, stakeholder analysis helps policy makers to intervene more effectively by raising their awareness of the facilitative potential of certain interactions. We hope that with an enhanced understanding of governance processes, policy makers and landscape managers will be able to increase the potential for benefit sharing from tourism in protected areas.

References

- Adger, W.N., Brown, K., Fairbrass, J., Jordan, A., Paavola, J., Rosendo, S., and Seyfang, G. (2003). Governance for sustainability: Towards a "thick" analysis of environmental decision-making. *Environment and Planning A*, 35(6), 1095–1110.
- Armitage, D.R., Plummer, R., Berkes, F., Arthur, R.I., Charles, A.T., Davidson-Hunt, I.J., Diduck, A.P., Doubleday, N.C., Johnson, D.S., Marschke, M., McConney, P., Pinkerton, E.W., Wollenberg, E.K. (2009). Adaptive co-management for social–ecological complexity. *Frontiers in Ecology and the Environment*, 7(2), 95–102.
- Beaumont, N., and Dredge, D. (2010). Local tourism governance: comparison of three network approaches. *Journal of Sustainable Tourism*, 18(1), 7-18.
- Bengtsson, M., and Kock, S. (2014). Industrial marketing management coopetition Quo vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180–188.
- Berkes, F. (2007). Understanding uncertainty and reducing vulnerability: Lessons from resilience thinking. Natural Hazards, 41(2), 283–295.
- Bramwell, B., and Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, 19(4-5), 411–421.
- Brondizio, E.S., Ostrom, E., and Young, O.R. (2009). Connectivity and the governance of multilevel social-ecological systems: The role of social capital. *Annual Review of Environment and Resources*, 34(1), 253–278.
- Buckley, R. (2012). Sustainable tourism: Research and reality. *Annals of Tourism Research*, 39(2), 528–546.
- CBS (2017). Population; gender; age; marital status and region. [Bevolking; geslacht, leeftijd, burgerlijke staat en regio]. Retrieved May 6, 2017, from http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=03759NED&D1=0&D2=129&D3=1-128,130-797&D4=I&VW=T
- Crona, B., and Bodin, O. (2006). What you know is who you know? Communication patterns among resource users as a prerequisite for comanagement. *Ecology and Society*, 11(2), art.7.
- Currie, R.R., Seaton, S., and Wesley, F. (2009). Determining stakeholders for feasibility analysis. *Annals of Tourism Research*, *36*(1), 41–63.
- Dare, M., Schirmer, J. and Vanclay, F. (2014). Community engagement and social licence to operate. Impact Assessment and Project Appraisal, 32(3), 188–197.
- Dredge, D. (2006). Networks, conflict and collaborative communities. *Journal of Sustainable Tourism*, 14(6), 562-581.
- Eagles, P.F.J. (2009). Governance of recreation and tourism partnerships in parks and protected areas. *Journal of Sustainable Tourism*, 17(2), 231–248.

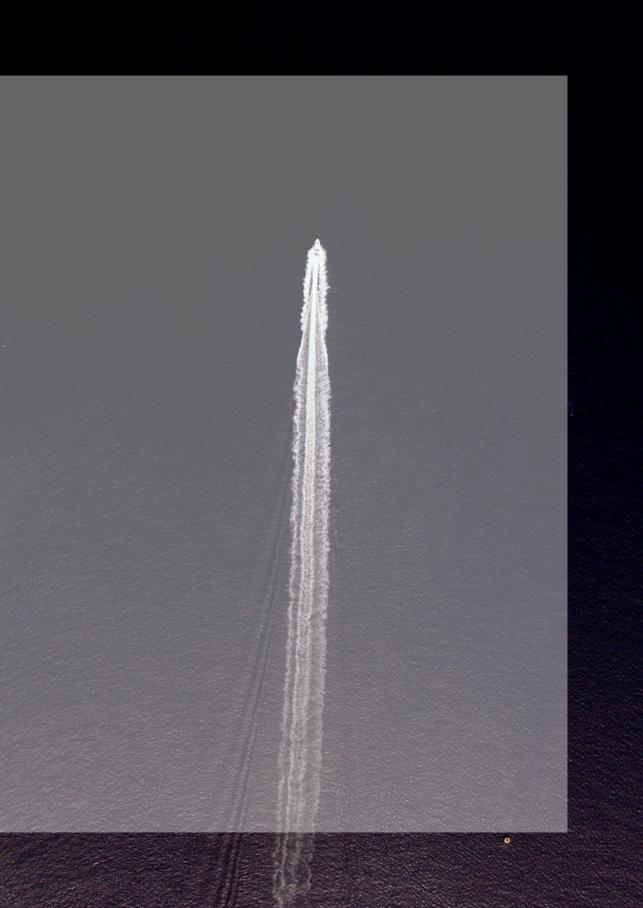
- Folke, C., Hahn, T., Olsson, P., and Norberg, J. (2005). Adaptive governance of social-ecological systems. Annual Review of Environment and Resources, 30(1), 441–473.
- Foxlee, J. (2007). Key principles and direction for tourism in protected areas: A review of existing charters, guidelines and declarations. In R. Bushell and P.F.J. Eagles (Eds.), *Tourism and Protected Areas: Benefits Beyond Boundaries* (pp. 44–69). Wallington: CABI Publishing.
- Freeman, E.R. (1984). Strategic Management: A Stakeholder Approach. Boston: Pitman/Ballinger.
- Hartman, S., and de Roo, G. (2013). Towards managing nonlinear regional development trajectories. *Environment and Planning C: Government and Policy*, *31*(3), 556–570.
- Hartman, S. (2015). Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity. *Journal of Sustainable Tourism*, 24(2), 299–314.
- Halkier, H. (2014). Innovation and destination governance in Denmark: Tourism, policy networks and spatial development. *European Planning Studies*, 22(8), 1659–1670.
- Hall, C.M. (2011). A typology of governance and its implications for tourism policy analysis. *Journal of Sustainable Tourism*, 19(4-5), 437–457.
- Heslinga, J.H., Groote, P.D., and Vanclay, F. (2017). Using a social-ecological systems perspective to understand tourism and landscape interactions in coastal areas. Journal of Tourism Futures, 3(1), 23-38.
- Higgins-Desbiolles, F. (2006). More than an "industry": The forgotten power of tourism as a social force. *Tourism Management, 27,* 1192–1208.
- Higgins-Desbiolles, F. (2011). Death by a thousand cuts: Governance and environmental trade-offs in ecotourism development at Kangaroo Island, South Australia. *Journal of Sustainable Tourism*, 19(4-5), 553–570.
- Imperiale, A.J. and Vanclay, F. (2016). Experiencing local community resilience in action: Learning from post-disaster communities. *Journal of Rural Studies* 47, 204-219.
- Jamal, T. (2004). Conflict in natural area destinations: A critique of representation and "interest" in participatory processes. *Tourism Geographies*, *6*(3), 352–379.
- Jamal, T., and Stronza, A. (2009). Collaboration theory and tourism practice in protected areas: Stakeholders, structuring and sustainability. *Journal of Sustainable Tourism*, 17(2), 169–189.
- Kabat, P., Bazelmans, J., van Dijk, J., Herman, P. M. J., van Oijen, T., Pejrup, M., Reise, K., Speelman, H., Wolff, W. J. (2012). The Wadden Sea Region: Towards a science for sustainable development. Ocean and Coastal Management, 68, 4–17.
- King, B., Pizam, A., and Milman, A. (1993). Social impacts of tourism. *Annals of Tourism Research*, 20(4), 650–665.
- Kooiman, J. (2003). Governing as Governance. London: Sage Publications.

- Lew, A.A. (2014). Scale, change and resilience in community tourism planning. *Tourism Geographies*, 16(1), 14–22.
- Libosada, C. M. (2009). Business or leisure? Economic development and resource protection Concepts and practices in sustainable ecotourism. *Ocean and Coastal Management*, 52(7), 390–394.
- Liu, J., Dietz, T., Carpenter, S.R., Alberti, M., Folke, C., Moran, E., Pell, A.N., Deadman, P., Kratz, T., Lubchenco, J., Ostrom, E., Ouyang, Z., Provencher, W., Redman, C. L., Schneider, S. H., Taylor, W.W. (2007). Complexity of coupled human and natural systems. *Science*, *317*(5844), 1513–6.
- Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of Environmental Management*, *91*(3), 754–766.
- Luthe, T., and Wyss, R. (2014). Assessing and planning resilience in tourism. *Tourism Management*, 44, 161–163.
- Mehmood, A., and Parra, C. (2013). Social innovation in an unsustainable world. In F. Moulaert, D. MacCallum, A. Mehmood, and A. Hamdouch (Eds.), *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research* (pp. 53–66). Cheltenham: Edward Elgar.
- McCombes, L., Vanclay, F., and Evers, Y. (2015). Putting social impact assessment to the test as a method for implementing responsible tourism practice. *Environmental Impact Assessment Review*, 55, 156–168.
- McCool, S.F., and Spenceley, A. (2014). Tourism and protected areas: A growing nexus of challenge and opportunity. *Koedoe*, 56(2), 1–2.
- Municipality of Terschelling (2014). *Ontwikkeling aantal overnachtingen op jaarbasis Terschelling* [Development of annual amount of overnight stays on Terschelling].
- Olsson, P., Folke, C., and Hahn, T. (2004). Social-ecological transformation for ecosystem management: The development of adaptive co-management of a wetland landscape in southern Sweden. *Ecology and Society*, *9*(4), art.2.
- Ostrom, E. (2011). Background on the institutional analysis and development. *Policy Studies Journal*, 39(1), 7–27.
- Paloniemi, R., and Tikka, P. (2008). Ecological and social aspects of biodiversity conservation on private lands. *Environmental Science and Policy*, *11*(4), 336–346.
- Parra, C. (2010). Sustainability and multi-level governance of territories classified as protected areas in France: the Morvan regional park case. *Journal of Environmental Planning and Management*, 53(4), 491–509.
- Persha, L., Agrawal, A. and Chhatre, A. (2011). Social and ecological synergy, *Science*, 331(6024), 1606-1608.

- Plummer, R., and Armitage, D. (2007). A resilience-based framework for evaluating adaptive comanagement: Linking ecology, economics and society in a complex world. *Ecological Economics*, 61(1), 62–74.
- Plummer, R., and Fennell, D.A. (2009). Managing protected areas for sustainable tourism: prospects for adaptive co-management. *Journal of Sustainable Tourism*, 17(2), 149–168.
- Prell, C., Hubacek, K., and Reed, M. (2009). Stakeholder Analysis and Social Network Analysis in Natural Resource Management. *Society and Natural Resources*, 22(6), 501–518.
- Prenzel, P. and Vanclay, F. (2014). How social impact assessment can contribute to conflict management. Environmental Impact Assessment Review, 45, 30–37.
- Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C.H., Stringer, L.C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, *90*(5), 1933–1949.
- Revier, H. (2013). Nature conservation and tourism development in the Dutch Wadden Sea region: a common future? In A. Postma, I. Yeoman, and J. Oskam (Eds.), *The Future of European Tourism* (pp. 177–193). Leeuwarden: European Tourism Futures Institute.
- Saarinen, J. (2006). Traditions of sustainability in Tourism Studies. *Annals of Tourism Research*, 33(4), 1121–1140.
- Sharpley, R., and Ussi, M. (2014). Tourism and governance in Small Island Developing States (SIDS): The case of Zanzibar. *International Journal of Tourism Research*, 16(1), 87–96.
- Sijtsma, F.J., Broersma, L., Daams, M.N., Hoekstra, H., and Werner, G. (2015). Tourism development in the Dutch Wadden Area: Spatial-temporal characteristics and monitoring needs. *Environmental Management and Sustainable Development*, 4(2), 217–241.
- Sijtsma, F.J., Daams, M.N., Farjon, H., and Buijs, A.E. (2012). Deep feelings around a shallow coast: A spatial analysis of tourism jobs and the attractivity of nature in the Dutch Wadden area. *Ocean and Coastal Management*, 68, 138–148.
- Snyman, S. (2015). Strategic community participation in sustainable tourism. In S. F. McCool and K. Bosak (Eds.), *Reframing Sustainable Tourism* (pp. 65–77). New York: Springer.
- Söderholm, P., and Svahn, N. (2015). Mining, regional development and benefit-sharing in developed countries. *Resources Policy*, *45*, *78-91*.
- Strickland-Munro, J.K., Allison, H.E., and Moore, S.A. (2010). Using resilience concepts to investigate the impacts of protected area tourism on communities. *Annals of Tourism Research*, *37*(2), 499–519.
- Swemmer, L., Grant, R., Annecke, W., and Freitag-Ronaldson, S. (2016). Toward more effective benefit sharing in South African national parks. *Society and Natural Resources*, 28(1), 4–20.
- van der Aa, B., Groote, P. and Huigen, P. (2004). World Heritage as NIMBY? The case of the Dutch part of the Wadden Sea. *Current Issues in Tourism*, 7(4-5), 291–302.

- Vanclay, F. (2012). The potential application of Social Impact Assessment in integrated coastal zone management. *Ocean and Coastal Management*, 68, 149-156.
- Vanclay, F. (2017). Project induced displacement and resettlement: From improverishment risks to an opportunity for development? *Impact Assessment and Project Appraisal*, 35(1), 3-21.
- Vanclay, F., Baines, J. and Taylor, C.N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, 31(4), 243–253.
- Waligo, V.M., Clarke, J., and Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism Management*, *36*, 342–353.
- Wang, C. (2012). A Guide for Local Benefit Sharing in Hydropower Projects. Washington D.C.: The World Bank
- Wesley, A., and Pforr, C. (2010). The governance of coastal tourism: Unravelling the layers of complexity at Smiths Beach, Western Australia. *Journal of Sustainable Tourism*, 18(6), 37–41.
- Wray, M. (2015). Drivers of change in regional tourism governance: A case analysis of the influence of the New South Wales Government, Australia, 2007–2013. *Journal of Sustainable Tourism*, 27(7), 990-1010.





6.1 Introduction

This dissertation addressed the following research question "what are the constraining and enabling factors that influence the role of tourism in building social-ecological resilience in coastal areas?" To answer this question, three different directions have been analyzed: policy, public discourse and governance processes. Each direction provides a different emphasis with regard to the same topic: interactions between tourism and landscape. Based on the outcomes of each chapter in this thesis, section 6.2 summarizes the constraining and enabling factors that influence tourism-landscape interactions and therewith provides overarching conclusions for the research as a whole. Section 6.3 provides a reflection on the application of SES theory and resilience thinking to understand tourism and landscape interactions. In this same section, there is a discussion on the applied methods that were demonstrated to improve the operationalization and empirical application of this theory. In section 6.4 recommendations for policymakers are presented, which are based on the research outcomes. Finally, section 6.5 is a short synthesis which reflects on synergetic tourism-landscape interactions and examining policy, public discourse and partnerships. This section provides some final notions for future policy making.

6.2 Enabling and constraining factors for synergetic interactions

Based on the chapters in this dissertation, a series of key factors were distinguished that influence synergetic interactions between tourism and landscapes. These key factors can be grouped into those factors that relate to "policy" (path-dependencies in the historical institutional context, fluctuations in policy orientations, a recent increase in synergies in policy, clear rules and regulations), "public discourse" (short-term economic public thinking, the influence of environmental macro events, the cyclical way of the occurrence of synergies) and "partnerships" in governance processes (inclusion of stakeholders in governance processes, an attitude of openness and effective communication between all stakeholders, the changing attitude of influential stakeholders, flexibility for innovation at the local level, and lack of capacity of local governments). These key factors are further explained and discussed in the following paragraph. Some factors can be both constraining and enabling.

The historical institutional context in which future decision-making takes place is an important factor which can enable or constrain synergetic interactions between tourism and landscape. Because of path-dependency, this can be highly influential in determining the future course of the interactions between tourism and landscape. This is because the current institutional context is a product of past policy which could potentially hinder other development trajectories. Looking at the institutional context from an historical perspective gave an indication of how the interactions between tourism and landscape within the social-ecological system (SES) have been managed. It can also indicate which opportunities and threats have been observed which steer the course of future developments.

To understand the institutional context, chapter 3 identified changes in policy over times. The analysis revealed constant fluctuations in policy orientations between an emphasis either on social-economic development or nature protection. The analysis also showed that the acknowledgement of possible synergies in policies and plans has been relatively limited. Despite a recent increase in the attention for synergies, this chapter demonstrated that there has been a lot of 'black and white' thinking in the past, in which the emphasis of policy was either on socio-economic development or nature protection. This does not fit with the idea of the system being a social-ecological whole, as was proposed in chapter 2. If synergies are desirable, a focus on either social-economic development or nature protection is a constraining factor. It was found that this sectoral way of designing policy is path-dependent, and therefore not easy to change. From a SES perspective, a more integrated policy is desirable, as this could enable synergetic interactions between tourism and landscape. However, it was found that integration was difficult in the past, but is currently improving.

Public opinion is a crucial factor that can constrain or enable synergetic tourism-landscape interactions. These informal aspects of the institutional context were researched in chapter 4. This analysis displayed the fluctuations in public thinking over time between social-economic development, nature protection and synergies. It was found that short-term economic thinking is an essential factor that constrains synergetic thinking. The analysis revealed that the economic situation is highly influential in the way the public opinion on tourism and landscape interactions changes. At some points in time, nature protection became more important in public thinking. This shift was, in many cases, influenced by external (and often macro) triggers, when the care for nature, landscape and the environment was brought to people's attention more prominently. Reflecting on SES theory, it can be concluded that the case study that was observed is part of a multiscalar system (Parra and Moulaert, 2016), where macro events on higher levels of scale influence lower levels. For tourism destinations, it is important to realize that issues do not only take place at the local level, but it is important to be aware of social and ecological changes taking place at higher levels and the consequences these changes could have for developments at the lower level.

This same chapter also showed that thinking in terms of synergies has been increasing over time. Factors that were found to largely influence the development of synergies are 'collaboration', 'working together' and 'being involved', and in recent times also thinking about 'sustainability' has become more profound. It was also found that the increase in the mentioning of synergies is not only recent; in earlier times, synergies were found to be occurring as well. This demonstrated that thinking about synergetic interactions occurred in a cyclical way. Resilience literature states that not everything can be steered in a desired direction. Situations can be very persistent and adapting to change can take a long time. However, when a tipping point is reached, a situation can also change very sudden. From the example of synergies occurring in a cyclical way, it can be learned that steering towards synergetic tourism-landscape interactions for building social-ecological resilience, is also a matter of timing and momentum (Kingdon, 1995; Olsson et al, 2006; Sorensen, 2015).

Comparing the results of chapters 3 and 4, it was observed that policy often lags behind public opinion and societal changes. The developments on Terschelling were often found to be ahead of policy interventions for nature protection. In the 1970s, the Wadden Area became relevant on a national scale,

whereas earlier there were already protection initiatives on a local scale. The example in the Wadden shows that for synergies it is essential to have strong connections between people and nature areas. Of course, tourism has social and ecological impacts on nature areas, but people also highly appreciate these areas and feel strongly connected to them. As argued in this thesis, tourism can contribute to strengthen this connection between people and nature. Tourism can assist in the protection of nature areas by helping it to become an important societal issue and consequently to be positioned on the political agenda. This observation above indicates that there is a need to further incorporate SES theory with social and political factors as important forces that can affect the course of development (Wilkinson, 2012; Fabinyi et al., 2014).

Key factors with regard to partnerships in governance processes and the way stakeholder interact with each other were found. First, the extent to which stakeholders are included in governance processes is of great importance. In chapter 5, it was demonstrated that a wider involvement of stakeholders leads to more public support. Civilians and entrepreneurs want to be informed, but they also have ideas for future developments and are often willing to take part in activities. Second, it was shown that an attitude of openness, effective communication and good collaboration between all relevant stakeholders are essential conditions for facilitating synergies between tourism and landscape. These factors showed that eventually individuals and organizations and the way they collaborate is highly influencing the development of a social-ecological system (Jamal and Stronza, 2009).

This can also be seen in the role of powerful public stakeholders, which is another factor that can influence the interactions between tourism and landscape. In this thesis, the attitude of the national forestry management agency (*Staatsbosbeheer*/SBB) in the past was observed as a constraining factor, because as a large landowner, this agency was highly influential in determining the course of development. Nevertheless, a recent change in their attitude enabled synergetic tourism-landscape interactions. There was the realization within the organization that closing off nature areas for protection is not socially desirable. They realized that for creating public understanding for their mission and associated activities, SBB needs support from other stakeholders. A dialogue with an attitude of openness and effective communication with all stakeholders are important conditions to achieve this. It was also found that a local government has the potential to facilitate synergies on the local level. Nevertheless, this thesis demonstrated that local governments often struggle with this, because they lack resources and often choose to be risk-avoiding in their decision-making. Consequently, initiatives that acknowledge synergies between tourism and landscape are constrained and as a result postponed or even obstructed.

What can be learned from the example above about the local government is that opportunities for synergies can be additionally constrained on the local level. Regulations from higher governmental levels already constrain the possibilities for synergies on the local level. Nevertheless, how these regulations are implemented at the local level can enable opportunities. However, without clear decision-making by the local government synergetic interactions are constrained even further. A necessary factor is to have clear rules and regulations, but there is also a need to keep room for innovation and adaptation to changing circumstances. In particular on the local level a more flexible attitude could provide more opportunities for enabling synergies between tourism and landscape. SES theory implies a multilevel

system where the higher levels influence the local level and vice versa. From the example can be learned that, despite this multilevel system, solutions and opportunities for synergy should often be strived for at the local level.

Allowing some degree of flexibility in the process of policy implementation is an important factor, because a tourism destination needs to have the capacity to adapt and cope with the changing demands of tourists. Tourism is a sector that changes rapidly, because the demands of tourists are fickle. Whenever a tourism destination is unable to innovate, it runs the risk that tourists will exchange it for other destinations. Not being able to cope with these changes, could mean that many (local) stakeholders would miss out on the benefits that can be derived from tourism. Providing flexibility for synergies and multi-functional usage of space where different functions can be connected to each other is therefore a factor that needs to be taken into account. From an SES perspective the world is considered to be constantly in flux. To cope with changing circumstances, a system requires a degree of flexibility to build social-ecological resilience. Persistence and keeping circumstances in a status quo, is often the policy response, however, sometimes flexibility and allowing change is required for systems to be resilient to change (Folke et al. 2010).

Regarding to flexibility, the final factor that influences synergetic interactions is the difference between temporal and non-temporal land use. Flexibility with regard to temporal land use is promising for enabling synergetic interactions. For example tourism entrepreneurs working together with nature protection organization for the organization of tourism activities taking place in nature areas. The case study showed that in the recent decades more flexibility was provided; through experimentation and learning by doing the opportunities for synergies were shown. What can be learned from this is that apart from rules and regulations it is crucial to build trust between stakeholders with regard to implementation of policy at the local level. Flexibility with regard to land use with less temporal characteristics tends to remain more difficult. For example real estate developments were considered to be problematic and this is expected to cause more problems in the future. This is partly due to fragmentation of ownership and the difficulties the local governments to control this.

6.3 Reflections on methods and theory

For answering the main research question and finding those factors that enable and constrain synergetic tourism-landscape interactions, a multitude of different methods were used. Content analysis was found to be a useful tool for examining the formal and informal aspects of the institutional context of tourism destinations. The added value of this method for this project was the longitudinal approach, which helped making statements about phenomena that lasted over longer periods of time and over a longer time span than people to interview. Interviews were used to support the results of the content analysis; they helped building the coding scheme and improve the interpretation of the results. This method helps prevents researchers from 'picking and mixing' from documents to back-up their statements. It was

demonstrated that triangulation of content analysis with the supporting interviews has a high reliability and validity. A point of critique is that only a 'basic' content analysis was executed to understand the historical institutional context. Despite the usefulness of this method, further research could expand the analytical possibilities of the method. Another issue for reflection is the use of proxies in the method. Newspaper articles and local policy- and planning documents were used to make statements about the institutional context. It is important to realize that documents only represent an abstraction of the institutional context that was under analysis in these chapters.

Stakeholder analysis proved useful in exploring governance processes that pertain the management of tourism-landscape interactions. It helped providing an overview of the stakeholders who are involved in governance processes and the way they interact with each other. Especially, the instrumental value of the interest-influence matrix was considered to be useful as input for the interviews with the stakeholders. Another advantage of stakeholder analysis, as applied in this thesis, is that it allowed to go beyond the scope of the tourism industry. Not only tourism entrepreneurs were analyzed, but a broad range of other stakeholders that are involved in the governance of tourism destinations was included in the analysis. Still, there was a limitation to the amount stakeholder that were included in the analysis. For example, tourists themselves were not included in the stakeholder analysis. Despite they are indirect users of a tourism destination which depends on nature, they are not always represented in governance processes (Bijker, et al. 2014). For further research, exploring the interactions between nature areas and tourists (or so called 'fans' of an area) can be a valuable future contribution.

Another point of critique on the way stakeholder analysis was applied is that for example the strength of the ties between stakeholders was not exactly measured, which could have been achieved using a quantitative approach. The rationale behind the choice for a qualitative approach was to get deeper insights in the relations between stakeholders. For this purpose it was found that a qualitative method was more appropriate to use.

By applying these methods in real life cases, this thesis made a theoretical contribution to social-ecological systems theory and resilience thinking as well. These concepts have been increasingly used in social sciences and recently also in a tourism context. Nevertheless, it was found that the application in empirical research lags behind on the conceptual discussion (Lew, 2014). Through the operationalization of the concepts, this thesis improved ways to examine those factors that influence social-ecological resilience of an area. A possible critique from SES theorists to such operationalization is that it provides a rather reductionist view on the way the world works. SES theorists see the world as being complex, uncertain and unpredictable. With that in mind, it remains difficult to make any substantiated statements about possible future development of tourism destinations. To be able to proclaim anything, this thesis focuses on the parts of the systems that deal with decision-making processes and it was analyzed how the current and past institutional context has been influencing this. There is the realization that it is impossible to know how the entire social-ecological system functions. Nevertheless, it was demonstrated how decision-making within the system has been developing by analyzing only this small part of the whole social-ecological system. Researching this part was helpful to improve the understanding the mechanisms that might influence the system.

This thesis fits with the ongoing and growing debate on resilience and tourism. When starting this PhD research in 2013, not many scholars were establishing the connections between tourism and resilience thinking. Currently, the debate has gained ground within tourism literature. Especially, the contributions of Lew (2014), Becken (2013), Biggs (2011), Ruiz-Ballesteros (2011), Strickland-Munro et al. (2010) have been embracing resilience thinking and have been applying it to a tourism context. These scholars have been discussing a diversity of topics such as tourism in relation to climate change, the resilience of the tourism industry, tourism and community resilience, and protected area tourism on communities. However, contributions dealing with synergetic interactions between tourism and landscape have been limited and therefore this dissertation is a valuable contribution to this debate.

The added value of this thesis to the debate on resilience is a different usage of the concept of resilience than most studies that relate to tourism. First, related to the question 'resilience of what to what', many scholars research the resilience of the tourism sector and how the sector itself can adapt to social and ecological changes. This thesis looks beyond the scope of the tourism industry and examines the social-ecological resilience of an entire region and the synergetic tourism-landscape interactions that are a precondition for balancing social-economic development and nature protection. It analyzes how tourism can help facilitate sustainable regional development by being resilient to changing social and ecological circumstances. Second, the added value of this thesis is that it tried to include elements such as power, conflict, contradiction and cultural values. Resilience is often criticized for being power blind and for depoliticizing the dynamics of changes of a social-ecological system. These element are taken into account by improving the understanding of decision-making processes within the system. This thesis thereby contributes to the development of the debate on resilience in a tourism context.

As a manifestation of the relevance of the debate discussed above, it was observed that multiple (edited) books on tourism and resilience are (or will be) published in 2017. The one edited by Alison Gill and Jarkko Saarinen (2017) is called 'Resilient Destinations: Governance Strategies of Tourism in the Transition towards Sustainability'. This book contains a chapter which is based on a part of this dissertation (Chapter 4). Also, a book on 'Tourism and Resilience' edited by Richard Butler was published this year. In 2017, Alan Lew and Joseph Cheer published two edited volumes which cover the interface of tourism and resilience; one of these books has an environmental focus ('Tourism Resilience and Adaptation to Environmental Change') and the other has a social focus ('Tourism, Resilience, and Sustainability: Adapting to Social, Political, and Economic Change'). Another volume edited by Innerhofer, Fontanari and Pechlaner is forthcoming and is about 'Destination Resilience – Challenges and Opportunities for Destination Management and Governance'. Finally, another book written by Colin Michael Hall (2017) will come out this year ('Tourism and Resilience: Individual, Organizational and Destination Perspectives').

6.4 Recommendations for policy makers

Based on the conclusions that were drawn from the dissertation, a series of recommendations could be provided for policy makers and planners that are working on the intersection between tourism and landscape.

1. Use content analysis to understand an historical institutional context
For policy makers and planners it is vital to understand the local context in which they operate.
Looking back on how policy and public discourse has been evolving over time can make policy makers aware about the obstacles and opportunities for making future policy. This analysis can help policy makers indicate for example path-dependencies that could hinder alternative policy options. This thesis has shown that content analysis can be a user-friendly tool to systematically analyze the way the institutional context has been changing over a longer time period.

2. Strive for integral policy aimed at synergetic interactions

The starting point of this dissertation is that tourism and landscape are highly interlinked and should be managed like that as well. For policy makers, this implies a different way of protection nature areas. Especially in nature areas that are in the adjacent to places where people live, work and spend their free time it is impossible to fully close those areas from human influences. When an area is closed off only for protection purposes, it mean that this area cannot be experienced anymore. For people to support nature protection, they need to know what is being protected and why. Tourism and landscape should therefore not be seen as separated entities, but as an integrated whole. To be able to balance the social and ecological aspects, policy makers are recommended to, whenever possible, strive for integral policy taking synergetic interactions between tourism and landscape into account. Integral policy is helpful as it takes multiple goals into account instead of only sectoral interests. Nevertheless, designing integral policy was found to be challenging. This thesis showed the constant fluctuations in policy focus on either social-economic development or nature protection and these existing paths are hard to change.

3. Involve a wide range of stakeholders.

A wide involvement of stakeholders is helpful to find public support for the proper management of tourism-landscape interactions. There can be differences in the extent stakeholders are involved, but at least stakeholders should be informed about future developments. Potential decisions need to be explained properly and stakeholders need to have opportunities to share their views on it. Connecting with different stakeholders is not only about legitimatize decisions; also more discussion is necessary for understanding each other's perspectives and finding common grounds and shared values. In addition, involving civilians and entrepreneurs can be beneficial, because they could have interesting ideas and are often willing to think along. Local

stakeholders know the region very well and this local knowledge can be of great use for policy makers.

4. Use the influence-interest matrix as an instrument to analyze stakeholders

Stakeholders analysis was found to be a helpful instrument for policy makers to get an overview of who the stakeholders are, how they can be categorized and the way they interact with each other. The influence-interest matrix positions stakeholder and thereby assists policy-makers in making strategic choices for dealing with each different type of stakeholders. Also, this matrix is helpful to influence the interactions more effective; it shows policy makers to interfere in those interactions between stakeholders that are limiting and stimulate those interactions that are enabling synergies.

5. Aim for open decision-making processes and develop a 'narrative together

Policy makers should aim for decision-making processes, which are as open as possible. A shared vision is helpful for including stakeholders in this process. Every stakeholder has its own interests, however, when everyone strives for their own interest, it will negatively affect the bigger picture. To achieve shared vision, it is necessary to develop a story together where many stakeholders can connect to. This storytelling creates direction for all stakeholders and is helpful in making choices. Two important conditions for this are an attitude of openness and clear communication by all stakeholders.

6. Provide a clear vision for the future...

It is recommended for policy makers to make a clear vision for the future aimed at synergetic interactions between tourism and landscape. Clarity in the rules and regulations is needed, because then all the stakeholders have a higher degree of certainty about future policy directions. Rules and regulations are often unclear, confusing and sometimes even conflicting. This can lead to a lack of courage among stakeholders. In addition, a clear vision could also strengthen the position of local policy makers and planners, who are often challenged by the many regulations at place. Local governments lack the resources and the capacity to interpret and to link all those policy documents. As a consequence, to avoid making the wrong decisions, it was observed that they tend to play it safe and no decisions were made at all.

7. ...but also allow for flexibility in the local implementation

Seemingly paradoxical, policy makers are also recommended to allow for a certain degree of flexibility at the local level for the development of initiatives by civilians and entrepreneurs. Rules and regulations from higher governmental levels already restrict the flexibility on the local level, while the opportunities for finding flexibility lie at the implementation at this level. Having space for innovation of a tourism destination is crucial, because tourism is rapidly changing as the demands of tourism are fickle. A tourism destination needs to be able to cope with these changing demands. Creating space for development and the amount of freedom that should be given to entrepreneurs is something that needs to be discussed constantly. Especially with

regard to land use with a temporal character, considering flexibility is recommendable, because these decisions can easily be undone. For the non-temporal forms of land use (such as development of new real-estate project), it is recommended to be more cautious, as these developments are more difficult to control by a local governments. Real-estate related issues are a future challenge for local governments, because the ownership is fragmented and the prices of lots and houses tend to increase rapidly in popular tourism destinations.

8. Dare to experiment.

To prevent, or even breach, a stalemate in decision-making, experimentation can be helpful. Experimentation starts with the execution of the intervention itself, which could then be monitored closely to find out what is going on and how the system responds. An approach that entails 'trial and error' can be promising when a situation is considered to be complex. Because of this complexity, important stakeholders can behave in a risk-avoiding way. Consequently, decision-making for future developments can be postponed or obstructed. Instead of talking about an issue in length, experimentations can demonstrate how the system responds to interventions and what the consequences are. Policy makers can learn from these experiments; it allows them to stimulate developments that are working out, but also adjust and reorient when things are not working out as expected. Also, demonstrating how interventions could work out can build trust among stakeholders and support for activities that comprehend synergetic interactions between tourism and landscape.

6.5 Synthesis

In this dissertation, the role of tourism in building social-ecological resilience was analyzed by looking at enabling and constraining factors. As the core idea, it was argued that striving for synergetic interactions between tourism and landscape is a promising one. In theory this idea makes sense, however, looking into policy, public discourse and partnerships, practice showed that it is rather difficult and takes time.

Nevertheless, looking at current developments, there are some promising notions for the future. For example the new environmental law [Omgevingswet] in the Netherlands offers opportunities for synergies. This new law aims for a simplification and a better alignment of spatial planning, environment and nature. It can stimulate sustainable projects and provide municipalities and provinces more freedom to make policy that fits their specific needs and goals. In addition, it offers more flexibility for ideas by companies and organizations, because the environmental law is more about general rules, than detailed permits. Consequently, the 'bigger picture', with the actual problems that need to be addressed, becomes more central and not the means and the instruments. For those tourism destinations that are dependent on nature and landscape, this new law is a promising development, because the attitude for the assessment of plans will be 'Yes, provided that' instead of 'No, unless'. As shown in this thesis, this changing attitude could enable synergetic interactions between tourism and landscape.

Another notion relates to the way policy making occurs at the local level. It was found that an important factor for enabling synergies is the way stakeholders interact and communicate with each other. Given that, there needs to be a different attitude toward policymaking. It is important that different stakeholders do not (inter)act from their own interest which is often based on the position they hold or the organization they represent. Instead, it is crucial for stakeholders to (inter)act with their core values in mind. For those tourism destinations dependent on attractive nature this is promising, because tourism entrepreneurs and nature protection organizations do have different positions with different interests; however, their values may overlap. In short, in tourism destinations, synergies can be stimulated by policy, but eventually the opportunities for synergies strongly relate to whether stakeholders find common ground on shared values and whether they are willing to collaborate.

References

- Becken, S. (2013). Developing a framework for assessing resilience of tourism sub-systems to climatic factors. *Annals of Tourism Research*, *43*, 506–528.
- Biggs, D. (2011). Understanding resilience in a vulnerable industry: The case of reef tourism in Australia. *Ecology and Society*, *16*(1). 1-18.
- Bijker, R., Mehnen, N., Sijtsma, F., and Daams, M. (2014). Managing Urban Wellbeing in Rural Areas: The Potential Role of Online Communities to Improve the Financing and Governance of Highly Valued Nature Areas. *Land*, 3(2), 437-459.
- Fabinyi, M., Evans, L. and Foale, S. (2014). Social-ecological systems, social diversity, and power: insights from anthropology and political ecology. *Ecology and Society*,19(4).
- Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T., and Rockstrom, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4).
- Jamal, T., and Stronza, A. (2009). Collaboration theory and tourism practice in protected areas: Stakeholders, structuring and sustainability. *Journal of Sustainable Tourism*, 17(2), 169–189.
- Kingdon, J.W. (1995). Agendas, alternatives, and public policies. New York: Harper Collins.
- Lew, A.A. (2014). Scale, change and resilience in community tourism planning. *Tourism Geographies*, *16*(1), 14–22.
- Olsson, P., Gunderson, L. H., Carpenter, S.R., Ryan, P., Lebel, L., Folke, C., and Holling, C.S. (2006). Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society*, 11(1).
- Parra, C. and Moulaert, F. (2016). The governance of the nature-culture nexus: lessons learned from the San Pedro de Atacama case-study, Nature+Culture, 3, 1–26.
- Ruiz-Ballesteros, E. (2011). Social-ecological resilience and community-based tourism: An approach from Agua Blanca , Ecuador. *Tourism Management*, *32*(3), 655–666.
- Sorensen, A. (2015). Taking path dependence seriously: an historical institutionalist research agenda in planning history. *Planning Perspectives*, *30*(1), 17–38.
- Strickland-Munro, J.K., Allison, H.E., and Moore, S.A. (2010). Using resilience concepts to investigate the impacts of protected area tourism on communities. *Annals of Tourism Research*, *37*(2), 499–519.
- Wilkinson, C. (2012). Social-ecological resilience: Insights and issues for planning theory. *Planning Theory*, *11*(2), 148–169.

APPENDICES

Appendix A: Documents included in the content analysis

ETIF (1948). *ETIF Report Tourism* [Economisch Technologisch Instituut voor Friesland: Rapport betreffende het vreemdelingen verkeer Terschelling]. Retrieved from municipal archive

Municipality of Terschelling (1952). *Expansion Plan for Tourism* [Uitbreidingsplan Toerisme]. Retrieved from municipal archive

Staatsbosbeheer (1972). Long Term Plan (LTP) [Lange termijn plan Terschelling]. Retrieved from municipal archive

Municipality of Terschelling (1974). *Structure Plan Terschelling* [Structuurplan Terschelling]. Retrieved from municipal archive

Municipality of Terschelling (1977). *Municipal Policy Recreation* [Nota Recreëren]. Retrieved from municipal archive

Grontmij N.V. (1986). *Recreational Partial Plan Terschelling* [Recreatie-deelplan Terschelling]. Retrieved from municipal archive

CIMK (1988). *Touristic-Recreational Action Plan Terschelling* [Toeristisch-Recreatief Actieplan Terschelling]. Retrieved from municipal archive

Oranjewoud (1989). Landscape Policy Plan Terschelling [Landschapsbeleidsplan Terschelling]. Retrieved from municipal archive

Municipality of Terschelling (2000). *Terschelling Beyond 2000* [Structuurplan Terschelling Voorbij 2000]. Retrieved from municipal archive

Oranjewoud (2004). *Landscape Development Plan Terschelling* [Landschapsontwikkelingsplan Terschelling]. Retrieved from: http://www.terschelling.nl/t-regels-beleid/overige-regels-enbeleid 43160/item/landschapsontwikkelingsplan-terschelling 30176.html

Municipality of Terschelling (2007). *Touristic Future Vision Terschelling* [Toeristische toekomstvisie Terschelling]. Retrieved from municipal archive

Municipality of Terschelling (2015). Future Vision Terschelling [TS 25: Terschelling in 2025]. Retrieved from: http://www.terschelling.nl/t-regels-beleid/overige-regels-en-beleid_43160/item/toekomstvisie-ts-25 32228.html

Appendix B: Coding scheme for policy documents

Natural protection	Social-economic	Synergy
	development	
General	<u>General</u>	<u>Balance</u>
- nature	- tourism	- synergy
- landscape	- recreation	- win-win
- attractiveness	- leisure	- balance
- vulnerable	- economy	- harmony
- quietness	- human	
- open space	- prosperity	<u>Integration</u>
	- profit	- integrated
<u>Activities</u>		- interwoven
- protection	<u>Activities</u>	- sustainable
- conservation	- development	
- preservation	- growth	<u>Social</u>
	- expansion	- collaboration
Actors	- building	- together
- Staatsbosbeheer	- construction	- involvement
- Nature organizations	- initiatives	- awareness
	- services	- understanding
<u>Objects</u>	- mass	- respect
- fauna	- industry	- responsibility
- flora	- investing	
- dunes	- establishing	
- forest		
- beach	<u>Actors</u>	
- salt marsh	- entrepreneurs	
- polder		
- birds	<u>Objects</u>	
- seals	- hotel	
- ban	- camping	
- wire	- caravan	
- fence	- pavilion	
- closed area	- traffic	
	- cycle path	
	- hospitality industry	
	•	

 Table A.1 | Coding scheme for policy documents (NOTE: these are the English version of the terms in Dutch.)

Appendix C: Coding scheme for newspaper articles

No.	C	
Nature protection	Social-economic	Synergy
	development	
<u>General</u>	<u>General</u>	<u>Balance</u>
- nature	- tourism	synergy/synergies
- landscape	- recreation	- win-win
- attractiveness/attractive	- leisure	- balance
 vulnerable/vulnerability 	- economy	- harmony/harmonious
- quietness	- human/humans	
- open space	- prosperity	<u>Integration</u>
	- profit	integral/integration/
Activities		integrated
- protect/protection	<u>Activities</u>	- interwoven
- conserve/conservation	develop/development/	coherence/coherent
- preserve/preservation	developments	 sustainable/sustainability
	- growth	
Actors	expand/expansion	<u>Social</u>
- Staatsbosbeheer	- build/building	 collaboration/collaborative
- Nature organizations	 construct/construction 	- together
	 initiative/initiatives 	 involved/involvement
<u>Objects</u>	- service/services	- aware/awareness
- fauna	- mass/massively	- understanding
- flora	industry/industries	- respect
- dune/dunes	- investing/investment	 responsible/responsibility
- forest/forests	 establishing/establishment 	
- beach/beaches		
- salt marsh/salt marches	<u>Actors</u>	
- polder/polders	- entrepreneur/	
- bird/birds	entrepreneurs	
- seal/seals	·	
- ban/bans	<u>Objects</u>	
- wire	- hotel/hotels	
- fence/fences	- camping/camping grounds	
- closed area	- caravan/caravans	
	- pavilion/pavilions	
	- traffic	
	- cycle path/cycle paths	
	- hospitality industry	

 Table A.2 | Coding scheme for newspaper articles (NOTE: these are the English version of the terms in Dutch).

SAMENVATTING (SUMMARY IN DUTCH)

Synergetische toerisme-landschap interacties: beleid, publieke discours en samenwerking

Toerisme in een fenomeen dat wereldwijd in de afgelopen decennia een versnelde groei en diversificatie heeft ondergaan. Toerisme is de verzameling aan activiteiten van personen die reizen naar, of verblijven in, plekken anders dan de gebruikelijke omgeving voor niet meer dan een aaneengesloten jaar met vrije tijd als voornaamste doel. Toerisme kan beschouwd worden als de som van fenomenen en relaties die ontstaan uit de interacties tussen toeristen, ondernemers, overheden en lokale gemeenschappen. Met name de vormen toerisme die samenhangen met natuur, landschap en natuurlijk erfgoed hebben in toenemende mate aan populariteit gewonnen.

Deze drang van toeristen om natuurgebieden landschappen te bezoeken en te ervaren heeft consequenties voor de landschappen en lokale gemeenschappen in de bestemming. Vaak wordt toerisme gezien als iets dat een negatieve impact heeft op het landschap en deze gemeenschappen, maar het zorgt ook voor inkomen en banen. Daarnaast kan toerisme ook bijdragen aan het beter begrijpen van de waarden van natuurlijke erfgoed, het verkrijgen van meer draagvlak voor natuurbescherming, en als een manier om financiering voor natuurbescherming te verkrijgen. Bovenstaande laat zien dat toerisme en landschap onlosmakelijk met elkaar verbonden zijn. Daarom is het van belang om te kijken naar de interacties tussen toerisme en landschap en hoe deze op een meer duurzame en gebalanceerde manier gestuurd kunnen worden. Dit is in het bijzonder van belang voor kustgebieden (of deltagebieden) waar hoge natuurwaarden te vinden zijn, maar dit zijn tevens de dichtbevolkte gebieden. Het is van belang om te kijken naar de manier waarop toerisme en landschap interageren en hoe deze interacties kunnen worden veranderd om een goede balans te vinden tussen sociaal-economische ontwikkeling en natuurbescherming.

In het proefschrift staan synergetische interacties tussen toerisme en landschap centraal. Vaak ligt de nadruk van deze interacties op natuurbescherming of juist op sociaal-economische ontwikkeling, maar in dit proefschrift wordt specifiek gekeken naar de mogelijkheden tot synergie tussen beide. Synergie gaat over situaties waar wederzijdse winsten te behalen vallen wanneer de interacties tussen de losse elementen van een system verenigd worden op een manier dat het geheel groter is dan de som der delen. Hierbij is het idee dat synergie verder gaat dan een afweging (trade-off) tussen sociaal-economische ontwikkeling en natuurbescherming, waarbij vaak de een boven de andere wordt verkozen. Synergie gaat over balans en win-win situaties waar natuurbescherming en sociaal-economische ontwikkeling niet conflicterende zijn maar elk juist versterken. Dit zorgt er voor dat een regio in staat is om zowel sociale als ecologische veerkracht (resilience) te vergroten gedurende het omgaan met toekomstige veranderingen.

In dit proefschrift wordt het idee van synergie tussen toerisme en landschap bediscussieerd. Om te kijken of dit idee werkt, is er gekeken naar of, en hoe, dit werkt in de praktijk en in hoeverre synergie in overweging wordt genomen. In dit proefschrift staat de vraag centraal welke factoren synergetische

interacties tussen toerisme en landschap belemmeren en welke factoren dit juist bevorderen. Het proefschrift richt zich specifiek op de institutionele context waarin toerisme en landschap bestuurd worden, omdat het van belang is om te begrijpen hoe besluiten genomen worden en in het verleden zijn genomen. In hoeverre het idee van synergie werkt, hangt samen met hoe beleid zich door de jaren heeft ontwikkeld, hoe de publieke opinie is veranderd en op welke manier de samenwerking in bestuurlijke processen, waarbij een breed scala van verschillende belanghebbenden met verschillende interesses en machtsrelaties betrokken zijn, is ingericht. Het proefschrift richt zijn op deze drie aspecten van de institutionele context (beleid, publieke discours en samenwerking).

De theoretische bijdrage van dit proefschrift is het verrijken van toerisme literatuur met inzichten en banderingen uit sociaal-ecologische systeem (SES) theorie en *resilience* literatuur. Een dergelijk perspectief helpt bij het identificeren van synergie, want het ziet de interacties tussen toerisme en landschap als zijnde gekoppeld en constant in verandering. De nadruk ligt op de institutionele context en bestuurlijke processen die sociaal-ecologische systemen kunnen beïnvloeden. Conceptueel draagt een dergelijke focus bij aan het debat rond sociaal-ecologische systemen en veerkracht aangezien meer sociaal-cultureel bepaalde factoren zoals macht, conflict, waarden en culturele normen worden meegenomen. In hoofdstuk 2 wordt dieper ingegaan op de theoretische concepten die worden gebruik in dit proefschrift. Dit hoofdstuk verkent het potentieel van een SES-perspectief om toeristische en landschappelijke interacties beter te begrijpen. Dit hoofdstuk bespreekt de implicaties die dit perspectief heeft voor de manier waarop toerisme en landschap worden geregeld en illustreert de mogelijke toepassing van SES op het Nederlandse Waddengebied.

De andere bijdrage van dit proefschrift gaat over de toepassing van bovengenoemde theorie in de praktijk. Omdat de toepasbaarheid achterblijft op de conceptuele discussie, is het van belang om een reeks methoden te ontwikkelen die kunnen worden toegepast op empirische cases. In dit proefschrift zijn methoden ontwikkeld en gebruikt die helpen bij het ontrafelen van de institutionele context en het begrijpen van bestuurlijke processen die gaan over toerisme en landschap. Voor dit onderzoek is gebruik gemaakt van een methodologie die zich kenmerkt rond die centrale onderzoek principes: case-study onderzoek, een breed scala aan verschillende onderzoeksmethoden, en methoden die dwingen tot een systematische analyse. Case-study onderzoek wordt gebruikt om bepaalde fenomenen en de context waarin deze plaatsvinden beter te kunnen begrijpen. Een brede variatie van verschillende kwalitatieve en kwantitatieve methoden helpt bij het trianguleren van de resultaten door vanuit verschillende bronnen te kijken in hoeverre er convergentie van de data optreedt. Triangulatie is belangrijk om de consistentie van bevindingen te bepalen en helpt bij het beter begrijpen van de case. Een systematische analyse helpt bij het begrijpen van lange termijn ontwikkelingen door het minimaliseren van problemen met huidige waarnemingen van de respondenten over de ontwikkelingen in het verleden. Daarnaast helpt een systematische analyse bij het minimaliseren van de rol van de onderzoeker en vergroot daarmee de betrouwbaarheid van het onderzoek.

De analyses in het proefschrift hebben betrekking op Terschelling, een eiland dat onderdeel uitmaakt van UNESCO Werelderfgoed Waddenzee. Dit eiland staat bekend om haar natuurschoon, maar is mede daardoor ook erg populair onder toeristen. Kortom, op dit eiland zijn zowel de belangen van sociaaleconomische ontwikkeling (middels toerisme) en natuurbescherming sterk vertegenwoordigd. Om

antwoord te geven op de hoofdvraag is er, naast literatuur onderzoek, gebruik gemaakt van verschillende onderzoeksmethoden ondersteund door verschillende bronnen, waaronder: inhoudsanalyse (content analysis) op zowel beleidsdocumenten als krantenartikelen, interviews (met o.a. toeristisch ondernemers, natuurbeschermers, overheden, belangengroepen en burgers), stakeholder analyse en geografische informatie systemen (GIS).

Hoofdstuk 3 biedt inzicht in de formele institutionele context door de veranderende dynamiek van toerisme en landschap interacties in beleidsdocumenten door de tijd te analyseren. Hierbij is gebleken dat inhoudsanalyse (content analysis) een waardevol instrument is om veranderingen in het beleid over tijd te identificeren. Door historische documenten te analyseren kunnen beleidsmakers en planners de institutionele context waarin beslissingen zijn genomen beter begrijpen. Met behulp van het eiland Terschelling als voorbeeld, wordt laten zien hoe inhoudsanalyse gebruikt kan worden om de historische institutionele context beter te begrijpen. Beleids- en planningsdocumenten van 1945 tot 2015 zijn geanalyseerd en voor een betere interpretatie hiervan tevens ondersteund met semigestructureerde interviews met belangrijke lokale informanten. Hoewel er in de loop van de tijd fluctuaties tussen sociaaleconomische ontwikkeling en natuurbescherming waren, bleek dat er een toenemend bewustzijn van synergie is geweest in beleidsdocumenten. Synergieën zijn van cruciaal belang om natuurbescherming met sociaal-economische ontwikkeling te balanceren en daarmee de sociaal-ecologische veerkracht van regio's te vergroten. Uit dit hoofdstuk blijkt dat inhoudsanalyse van lokale beleidsdocumenten kan worden gebruikt als een proxy voor de institutionele context.

Hoofdstuk 4 identificeert de informele institutionele context door de veranderende dynamiek van toerisme en landschap interacties in de publieke discours over de tijd te analyseren. In dit hoofdstuk worden de synergetische interacties tussen toeristische ontwikkeling en landschapsbescherming onderzocht. Het identificeren van veranderingen in de manier waarop mensen denken over toerisme en landschap interacties is belangrijk omdat dit bijdraagt aan het begrip van de institutionele context. Dit kan helpen bij het vinden van strategieën om de sociaal-ecologische veerkracht van een regio te vergroten. Een historische inhoudsanalyse van krantenartikelen (1945-2015) werd gebruikt voor het analyseren van veranderingen in toerisme en landschap interacties op het eiland Terschelling. Deze analyse van werd gevalideerd door interviews met belangrijke informanten op het eiland. Uit de resultaten bleek dat over de periode van analyse er schommelingen waren in hoeverre de publieke opinie gericht was op natuurbescherming, sociaal-economische ontwikkeling of de synergie tussen beide. Om toekomstig beleid inzake sociaal-ecologische systemen te verbeteren, is het voor beleidsmakers zaak om goed inzicht te krijgen in hoe de huidige institutionele context beleidsbeslissingen beïnvloedt. Inhoudsanalyse kan een nuttig hulpmiddel zijn om dit te bereiken.

In hoofdstuk 5 staat de manier waarop *stakeholders* betrokken worden bij *governance* processen met betrekking tot toerisme en landschap interacties centraal. Hierbij wordt de link gelegd met het concept *benefit sharing* wat verwijst naar het idee dat de voordelen die voortvloeien uit het toerisme over een breed scala aan belanghebbenden zouden moeten worden verdeeld. Om deze voordelen voor lokale gemeenschappen te kunnen bieden is de ontwikkeling van synergistische interacties tussen belanghebbenden een voorwaarde. Synergie tussen diegenen die betrokken zijn bij besluitvormingsprocessen kan zorgen voor een effectievere distributie van de voordelen van toerisme in

beschermde natuurgebieden. De stakeholderanalyse onthulde hoe relaties tussen belanghebbenden het uitwisselen van voordelen uit het toerisme mogelijk maken en / of beperken. Onze analyse heeft ertoe geleid dat de bestuurlijke structuren met betrekking tot het beheer van toerisme en beschermde gebieden beter kan worden begrepen. Er is bijvoorbeeld geconstateerd dat het Staatsbosbeheer, een grootgrondbezitter op het eiland, een invloedrijke speler is, maar desalniettemin het vaak moeilijk heeft om lokale steun te krijgen voor haar werkzaamheden. De lokale overheid is tevens een belangrijke speler, maar werd in veel gevallen gezien als een beperkende speler voor de ontwikkeling van het toerisme en het afremmen van potentiele synergie tussen toerisme en landschap. Effectieve communicatie, goede samenwerking met alle belanghebbenden en een houding van openheid werden geïdentificeerd als belangrijke voorwaarden om synergistische interacties tussen belanghebbenden te ontwikkelen.

Tot slot worden in hoofdstuk 6 de conclusies getrokken. Gebaseerd op de verschillende hoofdstukken in dit proefschrift is er een reeks factoren onderscheiden die invloed hebben op synergetische interacties tussen toerisme en landschap. Deze factoren kunnen worden ingedeeld in factoren die betrekking hebben op "beleid" (pad-afhankelijkheid van de historische institutionele context, fluctuaties in beleidsoriëntaties, een recente toename van synergiën in beleid, duidelijke regels en regelgeving), "publieke discours" (korte termijn economisch denken, de invloed van milieu-macro-gebeurtenissen, de cyclische manier van synergiën) en "samenwerking" in bestuurlijke processen (inclusie van stakeholders in governance processen, een houding van openheid en effectieve communicatie tussen alle stakeholders, de veranderende houding van invloedrijke belanghebbenden, flexibiliteit voor innovatie op lokaal niveau en gebrek aan capaciteit van lokale overheden). Sommige factoren kunnen zowel beperkend als bevorderend zijn.

Ook wordt er in dit hoofdstuk gereflecteerd op het gebruik van SES theorie om toerisme en landschap interacties te begrijpen. Daarnaast is er een discussie over de methoden die in dit proefschrift werden uiteengezet en gebruikt voor de toepassing van SES theorie. In het laatste deel van de conclusie worden de volgende aanbevelingen gedaan voor beleidsmakers die zich bezig houden met toerisme en landschap:

- 1. Gebruik *content analysis* als hulpmiddel om een historische institutionele context beter te begrijpen.
- 2. Probeer te streven naar integraal beleid dat gericht is op synergetische interacties tussen toerisme en landschap.
- 3. Betrek een breed scala aan belanghebbenden voor het vinden van draagvlak en nieuwe ideeën .
- Gebruik de influence-interest matrix als een instrument om stakeholders te analyseren en als hulpmiddel bij het maken van strategische keuzes voor het omgaan met verschillende typen stakeholders.
- 5. Streef naar open besluitvormingsprocessen en ontwikkel gezamenlijk een 'verhaal' waar veel belanghebbenden zich verbonden mee voelen.
- 6. Maak een duidelijke visie om belanghebbenden meer zekerheden te bieden over toekomstige beleidsrichtingen...

- 7. ... maar laat ook flexibiliteit toe bij de lokale implementatie voor de ontwikkeling van initiatieven van burgers en ondernemers die bijdragen aan innovatie van een toeristische bestemming in de omgang met deze veranderende omstandigheden.
- 8. Durf te experimenteren om een patstelling in besluitvorming te voorkomen (of zelfs te doorbreken), steun te vinden door 'te doen' en te leren van fouten.

In dit proefschrift werd de rol van toerisme bij het opbouwen van sociaal-ecologische veerkracht geanalyseerd door te kijken naar bevorderende en beperkende factoren. Als kernidee werd gesteld dat het streven naar synergetische interacties tussen toerisme en landschap veelbelovend is. In theorie is dit idee logisch, maar als we kijken naar beleid, publiek discours en partnerschappen, heeft de praktijk aangetoond dat dit vrij weerbarstig is en tijd kost. Niettemin, als we kijken naar de huidige ontwikkelingen, zijn er enkele veelbelovende ideeën voor de toekomst. De nieuwe omgevingswet in Nederland biedt bijvoorbeeld kansen voor synergieën. Voor toeristische bestemmingen die afhankelijk zijn van natuur en landschap, kan deze nieuwe wet een veelbelovende ontwikkeling zijn, omdat de opstelling voor de beoordeling van plannen 'Ja, op voorwaarde dat' is in plaats van 'Nee, tenzij'. Zoals aangetoond in dit proefschrift, kan deze veranderende houding synergetische interacties tussen toerisme en landschap mogelijk maken.

Een ander aanknopingspunt heeft betrekking op de manier waarop besluitvorming plaatsvindt op lokaal niveau en de manier waarop stakeholders met elkaar interacteren en communiceren. Voor toeristische bestemmingen, die afhankelijk zijn van aantrekkelijke natuur, is het van belang dat ondanks dat toeristische ondernemers en natuurbeschermingsorganisaties verschillende posities hebben met verschillende belangen, hun waarden elkaar kunnen overlappen. Kortom, in toeristische bestemmingen kunnen synergieën door beleid worden gestimuleerd, maar uiteindelijk hebben de kansen voor synergieën sterk te maken met of stakeholders een gemeenschappelijke basis vinden voor gedeelde waarden en of ze bereid zijn samen te werken.

ACKNOWLEDGEMENTS/DANKWOORD

Nou, daar ligt hij dan! Dat 2017 een mooi jaar zou worden was al bekend met het uitroepen van dit jaar tot 'International Year of Sustainable Tourism for Development' door de Verenigde Naties, maar dat het afronden van mijn proefschrift in dit zelfde jaar gebeurt, is toch wel een persoonlijk hoogtepunt. Ondanks dat het schrijven van een proefschrift doorgaans een eenzaam gebeuren is, heb ik niet het gevoel gehad dat ik er alleen voor stond. Dat is te danken aan een heleboel mensen die allen op een bepaalde manier hebben bijgedragen aan het voltooien van dit boekwerk. Middels de volgende opsomming wil ik deze mensen (en ook de mensen die ik ben vergeten) hartelijk danken voor hun bijdrage.

First of all, I would like to thank Frank for his excellent supervision during the last 2 years of my PhD trajectory. Whilst working together on the finalization of the papers I learned a lot from you about structuring thoughts, writing in an academic way, responding to reviewers, and using the Oxford comma. Your comments were often harsh especially after you read my papers in the airplane. Nevertheless, you always provided many suggestions and a helping hand to stimulate me to get the paper up to standard. I really appreciated your full commitment and the structured way of working, which made our meeting together to finalize the papers very efficient.

Ook wil ik naar Peter gro(o)te dank uitspreken. Nadat ik 2,5 jaar onderweg was in mijn onderzoek vroeg ik je of je het zag zitten om mij te begeleiden en je antwoord in de volgende quote vind ik tekenend voor de manier waarop je dit hebt gedaan: "Voor alle duidelijkheid: of het voor mijzelf handig of profijtelijk zou zijn om hier in te stappen, speelt dus geen rol in mijn afweging. Het gaat om jouw belang en dat van de faculteit." Daarnaast waardeer ik je uitgebreide commentaar op mijn stukken en je pragmatische houding met het oog op het maken van keuzes in het onderzoekplan. Bovendien waardeer ik je optimistische houding, waardoor ik erg gemotiveerd werd en bleef om het proefschrift tot een einde te brengen. Een van je belangrijkste punten van kritiek is dat ik te veel woorden gebruik, vandaar dat ik nu maar stop met bedanken.

Daarnaast wil ik mijn leescommissie, bestaande uit prof. dr. Jouke van Dijk, prof. dr. ir. Jan van Tatenhove en prof. dr. Diane Dredge, bedanken voor het feit dat jullie de moeite hebben genomen om mijn proefschrift te lezen en gedurende de verdediging hierover met mij in discussie te gaan. Ook wil ik alle respondenten bedanken die ik heb mogen interviewen en de mensen die mij hebben geholpen bij het proces van het data verzamelen.

Uiteraard gaat er ook veel dank uit naar mijn paranimfen, Melanie en Ferry, die in de aanloop naar de verdediging mijn grote steunpilaren waren. Erg fijn om samen met zulke toppers het laatste stukje te doorlopen. Jullie hebben er mede ervoor gezorgd dat we uiteindelijk alles tot in de puntjes geregeld hadden. Naast een voorbereidende expeditie naar de verdedigingslocatie te Leeuwarden, werd zelfs de zoektocht naar een geschikte feest locatie erg grondig uitgevoerd.

Natuurlijk wil ik mijn 'roomies' van kamer 3.16 bedanken. Ik heb geen idee hoeveel bakken sterke (semiillegale) espresso er bij ons over tafel zijn gegaan, maar het heeft vast geholpen. Tijdens het PhD traject heb ik het niet altijd makkelijk gehad, maar mede door de goede sfeer in onze kamer heb ik toch vooral heel veel plezier gehad. Melanie en Rozanne, ik wil jullie daarom ontzettend bedanken voor een goede tijd en mede dankzij jullie steun kijk ik uiteindelijke positief terug op mijn PhD traject.

En dan ook natuurlijk ook al de andere collega's aan de Faculteit der Ruimtelijke Wetenschappen. Een PhD traject is in basis een individueel traject, maar ik heb me nooit alleen gevoeld door de steun van jullie. Naast uiteraard de serieuze zaken kijk ik vooral met heel veel plezier terug op de lol die we met zijn alleen hebben gehad. Niet alleen op de afdeling, maar vooral in de vele activiteiten die buiten de muren van het Mercator gebouw plaatsvonden: terrasjes, kroegbezoek, feestjes, beachvolleyballen, voetbal kijken, basketbal kijken, voor elkaar koken, etc.

Ook de 'Stenden boys' mogen natuurlijk niet ontbreken in dit rijtje. Jasper, Richard, Jelmer en Stefan; ik heb ervan genoten om de afgelopen vier jaar samen met jullie naar Leeuwarden op en neer te reizen. De vele treinreizen waren nooit saai door de vele discussies die we op zowel hoog als wat minder hoog intellectueel niveau hebben gevoerd. Daarnaast dank ik ook mijn collega's bij Stenden en vooral bij het European Tourism Futures Institute (ETFI) voor de samenwerking en discussies. In het bijzonder wil ik wandelende Wadden encyclopedie Hans bedanken voor het sparren over het Waddengebied. Ook wil ik Bertus bedanken dat hij mij de kans heeft geboden om naast mijn PhD onderzoek bij ETFI aan de slag te gaan en me vast te mogen bijten in allerlei relevante onderzoeksprojecten op het raakvlak van toerisme en natuur zoals het monitoren van vaarrecreatie in de Waddenzee en het ontwikkelen van een governance scan voor Nationale Parken.

Ook wil ik University Campus Fryslân (UCF), of tegenwoordig RuG/Campus Fryslân, bedanken voor de financiële steun die deze promotieplek mede mogelijkheid heeft gemaakt. Maar voor mijn gevoel waren jullie meer dan dat. Ik kijk met grote bewondering terug op het pionieren om een wetenschappelijk netwerk op te bouwen in Friesland en hoe jullie daarin geslaagd zijn. Naast de vele lezingen, cursussen, borrels en andere bijeenkomsten, kijk ik met veel plezier terug op de 'Ameland week' in 2013, maar ook de publieke optredens die jullie mij hebben geboden zoals mijn lezing voor het Café van de Kleine Wetenschap in 2014 en mijn lezing bij de Museum Universiteit in 2017. Daarnaast wil ik ook de Waddenacademie bedanken voor de financiële ondersteuning, maar ook voor de netwerk functie de ze voor mij hebben gehad. Middels de door jullie organiseerde bijeenkomsten, symposia en congressen heb ik veel interessante mensen mogen ontmoeten die zich bezig houden met het Waddengebied.

Ik wil ook nog dank uitspreken aan de leesgroep die ik samen met Fikri, Marije, Yang en Gintare ben gestart in 2015 en waarvan ik nu de laatste ben die gaat promoveren. Het in groepsverband feedback geven op elkaars werk heb ik als zeer nuttig ervaren. Ook wil ik nog Gert, Constanza en ook Kitty bedanken voor hun begeleiding in het eerste gedeelte van het promotietraject. Inmiddels ben ik een andere koers gaan varen, maar mede door jullie begeleiding, adviezen en de diepgaande theoretische discussies die we hebben gehad is er in deze jaren een goed fundament gelegd voor dit proefschrift.

Tot slot, wil ik uiteraard mijn ouders bedanken voor hun onvoorwaardelijke steun en het geloof in mijn kunnen. Pap, Mam, bedankt!

Ok, doei!

SYNERGETIC TOURISM-LANDSCAPE INTERACTIONS

This dissertation assesses synergetic tourism-landscape interactions. While the emphasis of these interactions often lies on either social-economic development or nature protection, synergies are about striving for win-win situations by balancing these twin goals. Acknowledging synergies can assist regions in becoming more resilient when coping with future social and ecological change. This dissertation specifically examines the institutional context, in which tourism and landscape are managed, by exploring constraining and enabling factors that influence the role of tourism in building social-ecological resilience in coastal areas. Inspired by a social-ecological systems perspective, several methods have been developed to empirically analyze how policy has been developing, how public opinion has been changing and how governance is arranged in the case of Terschelling, an island part of the UNESCO World Heritage Wadden Sea.



Jasper Heslinga (1987) holds an MSc in Cultural Geography and an MSc in Economic Geography, both obtained at the University of Groningen (NL). His PhD research was conducted at the Cultural Geography department of the Faculty of Spatial Sciences, University of Groningen. During his PhD research he was also based as researcher at Stenden University of Applied Sciences in Leeuwarden (NL) and its affiliated research department European Tourism Futures Institute (ETFI). Heslinga currently works at this institute as senior researcher and has recently become programme manager at the Centre of Expertise Leisure, Tourism & Hospitality (CELTH).