STEFAN HARTMAN

Leisuring Landscapes

ON EMERGENCE, TRANSITIONS AND ADAPTATION

PhD series

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Leisuring Landscapes

On emergence, transitions and adaptation

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Voor mijn vader

CONTENTS

SUMMARY

This thesis examines the role of spatial planning in shaping the development trajectories of regions that are in the process of 'leisuring'. Leisuring is understood as the on-going spatial transformations driven by activities and projects related to tourism, recreation and leisure (Bunce, 2008; Hartman, 2013). Many places are being developed as tourism destinations, including cities, villages, and areas featuring specific natural beauty or cultural heritage. Peri-urban areas are experiencing transformations, becoming transitional zones between the urban and the rural and facing new activities and facilities related to leisure and recreation. The influx of new functions, land uses, firms and activities is driving the gradual change of existing functions, structures as well as the identities.

These socio-spatial transformations relate to our globalized economy and network society, are complex, and result in development trajectories – how regions evolve over time – which are nonlinear, are open to change and are uncertain. This thesis shows that it is possible, nevertheless, to observe patterns that emerge, to examine directions in which places evolve, to distinguish transitions, and to develop adaptive planning strategies and reflexive governance approaches to support and guide places in their evolution in a meaningful way. The argument is developed that strategic spatial planning increasingly involves a focus on adaptive capacity of places so to navigate (themselves) through a contextual environment that is changing continually. Doing so meets the aims of the thesis: 1.) discuss the implications and issues that the leisuring of regions raise for spatial development and planning; 2.) elaborate how institutional frameworks shape regions that are leisuring; and 3.) discuss how the leisuring of regions can be stimulated through spatial planning.

The leisuring of regions is an addition to the spatial planning repertoire and adds to the difficulty of managing the development of today's society. It is a dynamic process that includes multiple actors, policy domains and governance levels. Due to the rise of regions that are leisuring communities are facing new challenges, planners are confronted with new issues, and actors in decision-making positions are presented with new options for development. Fortunately, we are also learning about the emergence and management of such new situations. The chapters that are part of this thesis contribute to this body of knowledge by presenting the results of multiple case studies. The main conclusions of the individual chapters are the following.

Chapter 2 examines the transition of the Wadden Sea Region from a predominantly agricultural area to a more leisure-oriented landscape. It shows that this transition is inhibited by a quite strong restrictive planning

regime. Mainly in spite of and not because of this planning regime, land uses and activities related to the leisure economy do emerge as these are triggered by changing circumstances. In this context, it is argued that planners are challenged to become "*transition managers* who aim to guide regions through transition processes by ensuring that those regions have the adaptive capacity to do so" (Hartman & De Roo, 2013, p. 566). This allows for transitions "to become more fluid; instead of a collapse, this could involve a gradual process of moving from one state to the other through iterative adaptation to changing circumstances" (ibid, p. 566).

Chapter 3 examines how planning interventions shape the integration of peri-urban Midden-Delfland and Vlietzone into the urban fabric of the Greater Hague Region (GHR). Midden-Delfland is gradually becoming a metropolitan park and positioned as 'Hof van Delfland' whilst Vlietzone remains a less coherent, somewhat fragmented leisure zone. The chapter develops the perspective that peri-urban areas are open and nested socio-spatial systems that adaptively respond to a dynamic contextual environment, which drives change (urban growth in the GHR, emergent leisure economy) but also inhibits change (planning interventions, financial crisis). In turn, planners and planning authorities are challenged to manage and adapt to the changing speed, intensity and character of peri-urban development. This includes timely changing visions about the future of peri-urban areas, establishing new organizations to steer and reshaping governance arrangements.

Chapter 4 concerns a case study on the policy approach of the Dutch province of Friesland to stimulate spatial quality, which is a fundamental pillar of the development of the leisure economy. It argues that places should not only feature the capacity to mitigate and avoid developments that negatively perturb spatial qualities (robustness) but should also feature a degree of flexibility in order to progress and improve (flexibility). The province of Friesland therefore created an institutional framework that consists of a set of *generic norms* relating to environmental quality, *process requirements* including planning principles and the obligation to account for the so-called 'core qualities', and *planning strategies* revolving around stakeholder management to organisationally connect actors, societal organisations and institutions at various governance levels and spatial scales. The analysis also shows that what is conceptualized and enforced as spatial quality in Friesland is selective, which relates to political and pragmatic choices made in decision-making processes.

Chapter 5 connects contributions of storytelling and transitions for the analysis of two projects wherein strategic storytelling (SST) is used to foster the

'leisuring' of the Hondsrug and Friese Meren regions. It examines the extent to which SST can serve as a transition catalyst for regions that are leisuring. The research findings suggest that SST may serve as a transition catalyst in the sense of uniting actors, pooling resources, and fostering spatial development. The effect of SST may not instantly become visible in terms of spatial development because the leisuring of regions is a long term transitions process. The contribution of SST may (at first) concern mobilizing and uniting actors and establishing or institutionalizing actor networks. An adaptive approach of continually evaluating and adjusting stories is suggested in order to continually reinforce actor commitment.

Chapter 6 examines the planning challenge to stimulate *adaptive* tourism areas, being capable of responding to changing contexts in order to maintain or improve the performance of these areas as competitive tourism destinations. Theories on complex adaptive systems are used to draw attention to the importance of a balanced degree of diversity in terms of tourism products, experiences and firms. Encouraging a degree of diversity requires among other things interconnectivity among actors to ease communication and coordination, (policy) experimentation for niche-innovations, learning and reflexivity.

Throughout this thesis complexity theories are used for conceptual support to examine the emergence, development and management of regions that are leisuring. When the contributions of all chapters are taken together they offer a complex adaptive system (CAS) perspective on regions that are leisuring.

Nonlinear development trajectories

The CAS perspective is used to show that regions are leisuring as a result of the interplay between changing contextual circumstances, planned interventions and processes of self-organisation by actors on multiple governance levels and spatial scales. The result is that planners are facing development trajectories that evolve nonlinearly. Nonlinearity applies to situations that cannot be interpreted as exact continuations or extrapolations of past trajectories due to fundamental changes in terms of structures, functions and identities. It applies to regions that are leisuring as these areas are undergoing a complex and often long-term transition process of departing from one relatively stable state and gradually moving towards a state that fundamentally differs in terms of structures, functions and identities. The cases of the Wadden Sea Region (chapter 2), peri-urban development in the Greater Hague Region (chapter 3) as well as the areas of Hondsrug and Friese Meren (chapter 5) show that the state of agricultural dominance is gradually being supplemented amongst others by

functions, structures and identities that relate to the development of these areas as destinations for tourism, leisure and recreation. The development trajectories of these areas are therefore conceptualized as nonlinear. This process is not easy and generally takes time – the cases of Midden-Delfland and Vlietzone show that it takes many decades to change and the strategic storytelling projects reveal the difficulty to achieve/enforce change.

A long-term transition process

Transitions may take several decades to become spatially manifest at a regional level because of various reasons. First, the upper hand is often with approaches that restrict projects and plans that intend to fundamentally change structures and functions at a large scale and in a relatively short period of time. Strong restrictive planning regimes can 'trap' places and prevent agents from exploring alternative options for development. When spatial transformation gains support it is then often incidentally, ad hoc by opportunity and rather locally as is shown by the cases of the Wadden Sea Region and the Greater Hague Region. Second, the leisuring of regions requires the coordination and organization of many actors (individuals, firms, societal organizations, and institutions), the mobilization and allocation of financial resources, and the adaptation of spatial, organizational and institutional structures. It requires individuals and/or intermediary organizations ('signifying agents') to actively create and manage networks of actors (e.g. using storytelling) and on leadership to persuade these networks to engage in collative action. Organizing and coordinating actor networks is a delicate as well as time and energy consuming challenge which means successes are not guaranteed. Third, no single agent is in complete control of how development trajectories evolve over longer periods of time because of the involvement of many actors in different (policy) domains that are dispersed over multiple governance levels and spatial scales. The implication is that trajectories cannot be completely predicted or steered neither by means of blue-print planning and end-state plans nor for that matter by consensus planning and participatory plans. Although for certain periods command-and-control planning approaches may be used to strongly shape development trajectories (compare to the Reconstruction Act in the case of peri-urban Midden-Delfland), in the long haul they may need to be adapted (shown by the cases of peri-urban Midden-Delfland and Vlietzone) or can become counterproductive (shown by the case of the WSR).

The capacity to adapt

Regions that are leisuring are conceptualized in this thesis as 'open' socio-spatial systems because actors that are part of these systems continually respond and adapt to changing circumstances. Adaptation is an important capacity to have and, therefore, an interesting capacity to actively pursue by planners. Adaptation is the process of achieving a better 'fit' between a system and its contextual environment. Because contextual circumstances often change, systems will need to be 'refitted' by means of adaptation. Similarly, regions that are leisuring also need 'refitting' in response to changes in their contextual environment such as changing economic structure, life styles, demographics, technology, travel behaviour, etc. The following (non-exhaustive) set of factors is identified in this thesis that contributes to the adaptive capacity of regions and thereby to their ability to transition towards enhanced states.

- **A diverse regional leisure economy**
  Diversity makes regions robust and flexible at the same time. It contributes to the robustness of regions because eliminating or replacing elements does not cause negative effects on the overall functioning of regions. Moreover, diversity makes regions flexible, easing the ability to reorient or switch between multiple trajectories. This is important to avoid negative lock-in situations and important to adapt to a highly competitive leisure economy and (re)claim a competitive position.

- **Collective action**
  The development of attractive, competitive destinations for tourism and recreation depends on the collective actions of a range of actors. Governance arrangements are needed that consist of (representatives of) governments, societal organizations and/or private actors that have a shared or common interest in the realization of particular projects. This requires intermediaries and bridging organizations that establish relationships and networks between public and private sector agents. Such connectivity is a prerequisite for aligning the actions of governments, societal organization and market parties. Forming such governance arrangements requires leadership: (groups of) entrepreneurs and representatives of (semi-)governmental agencies that take initiative and mobilize resources to establish and support the bridging organizations that are entrusted with the formation of governance arrangements around initiatives that support the leisuring of regions.

- **Design of institutional frameworks**
  Planners are challenged to find institutional framework that offers a satisfactory balance between inhibiting, allowing and encouraging particular land uses and activities over others. On the one hand, this balance is important to encourage innovations in niches of tourism, leisure and recreation and the pursuit of diversity. On the other, it is important to protect nature, heritage, and spatial quality from the negative impact of spatial development. Chapter 4 of this research indentifies that such a framework is likely to be 1.) selective in order not to be too comprehensive and prescriptive from the top down; 2.) multi-component to achieve the composite goal of inhibiting, allowing and encouraging; and 3.) dynamic because the framework is constantly renegotiated in multilevel decision-making processes.

- **Reflexive stance towards governance**
  Reflexivity emphasizes the need to recognize when and how situations are changing, to call into question whether concepts, practices and institutions are still sufficient, and to envision alternative approaches. For strategic spatial planning the consequence is that systems of planning and governance must themselves also prepare and be ready for adaptation in order to timely respond to changing circumstances.

In short, this thesis identifies that socio-spatial systems, such as regions that are leisuring, benefit from the capacity to adapt. It draws attention to a set of factors that contribute to adaptive capacity of regions and their ability to transition towards enhanced states. Moreover, it discusses in-depth the multiple implications for strategic spatial planning in the context of the design of institutional framework, stimulating organizing capacity and managing adaptive capacity.

SAMENVATTING

Dit proefschrift gaat over de rol van ruimtelijke planning bij regio's die een ontwikkeling doormaken tot vrijetijdslandschap. Vrijetijdslandschappen zijn regio's die sterk in het teken staan van de vrijetijdseconomie – het industriecluster bestaande uit de sectoren toerisme, recreatie en vrije tijd. Vrijetijdslandschappen ontstaan als het gevolg van elkaar opvolgende ruimtelijke transformaties, die gedreven worden door activiteiten en projecten gericht op toerisme, recreatie en andere vormen van vrijetijdsbesteding. Veel plekken worden ontwikkeld tot toeristische bestemmingen zoals steden, dorpen en gebieden met unieke natuurlijke schoonheid of cultureel erfgoed. Stadsranden transformeren tot overgangszones tussen stad en platteland en worden geconfronteerd met activiteiten en faciliteiten bedoeld voor recreatie en vrijetijdsbesteding. De instroom van nieuwe functies, bedrijven en activiteiten stuwen de geleidelijke verandering van de bestaande functies, structuren en identiteiten.

Deze sociaalruimtelijke transformaties houden verband met de globaliserende economie en netwerksamenleving, zijn complex, en resulteren in ontwikkelingspaden – hoe regio's zich door de tijd heen ontwikkelen – die niet-lineair zijn en die open staan voor verandering. Dit proefschrift maakt duidelijk dat het desalniettemin mogelijk is om opkomende, emergente patronen te observeren, om de ontwikkelingsrichting van regio's te onderzoeken, om transities te onderscheiden en om adaptieve planning strategieën en reflexieve governance benaderingen te ontwikkelen die op een betekenisvolle manier de evolutie van regio's ondersteunen en begeleiden. Beargumenteerd wordt dat ruimtelijke planning steeds meer gaat om een focus op de adaptieve capaciteit van regio's, waardoor regio's in staat zijn om (zichzelf) te navigeren door een contextuele omgeving die voortdurend veranderd. Hiermee wordt voldaan aan de doelstellingen van dit proefschrift: 1.) bediscussieer de implicaties en vraagstukken die het ontstaan van vrijetijdslandschappen met zich mee brengen voor ruimtelijke ontwikkeling en planning; 2.) analyseer hoe institutionele kaders het ontstaan van vrijetijdslandschappen beïnvloeden; and 3.) beargumenteer hoe ruimtelijke planning het ontstaan van vrijetijdslandschappen kan ondersteunen en stimuleren.

De ontwikkeling van vrijetijdslandschappen is een toevoeging aan het repertoire van de ruimtelijke planning en draagt bij aan de moeilijkheidsgraad om de ontwikkeling van de huidige maatschappij te managen. Het is een dynamisch proces dat gepaard gaat met vele actoren, beleidsdomeinen, bestuursniveaus en ruimtelijke schaalniveaus. Het ontstaan van vrijetijdslandschappen leidt tot nieuwe uitdagingen voor lokale gemeenschappen, tot nieuwe vraagstukken voor ruimtelijke planners en tot nieuwe opties voor actoren

met beslissingsbevoegdheid. Tegelijkertijd leren we ook over het ontstaan en managen van zulke nieuwe situaties. De hoofdstukken in dit proefschrift dragen bij aan deze *body of knowledge.* Elk hoofdstuk presenteert de resultaten van een of meerdere case studies. De belangrijkste conclusies uit de individuele hoofdstukken worden onderstaand kort besproken.

In hoofdstuk 2 staat centraal het transitieproces van de Waddenregio, van een overwegend landbouwgebied in de richting van een vrijetijdslandschap. Deze transitie wordt geremd door een sterk beperkend planningsregime. De vrijetijdseconomie komt van de grond onder andere omdat het voorziet in lokale sociaaleconomische behoeften, maar dit gebeurd eerder ondanks dan dankzij dit planning regime. Tegen deze achtergrond wordt in dit hoofdstuk beargumenteerd dat ruimtelijke planners worden uitgedaagd om transitiemanagers te worden, die zich inzetten om regio's in hun transitieproces te begeleiden door er op toe te zien dat regio's beschikken over de benodigde adaptieve capaciteit. Dit leidt er toe dat transities meer fluïde worden; in plaats van een dramatische ineenstorting, een meer gelijkmatig, stapsgewijs proces van aanpassing aan veranderende omstandigheden.

In hoofdstuk 3 wordt onderzocht hoe planning interventies invloed uitoefenen op stadsrandgebieden Midden-Delfland en Vlietzone die langzaam maar zeker worden geïntegreerd in het stedelijk weefsel van de stadsregio Haaglanden. Midden-Delfland wordt geleidelijk een metropolitaan park en tegenwoordig gepositioneerd als 'Hof van Delfland' terwijl Vlietzone een minder coherente en meer gefragmenteerde leisure zone blijft. Het perspectief wordt geïntroduceerd dat stadsrandgebieden zijn te zien als open en geneste sociaalruimtelijke systemen die adaptief reageren op de dynamische contextuele omgeving waarin ze zijn geleden. Deze omgeving levert krachten die verandering stimuleren (stedelijke groei, opkomende vrijetijdseconomie) maar ook krachten die verandering afremmen (planning interventies, financiële crisis). Bevindingen laten zien dat ruimtelijke planners worden uitgedaagd om met veranderingen in snelheid, intensiteit en het karakter van stadsrandontwikkelingen om te gaan. Dit omvat het tijdig aanpassen van gebiedsvisies, het vormen van nieuwe organisaties en het aanpassen van governance arrangementen.

In hoofdstuk 4 wordt een analyse gepresenteerd van de aanpak van de provincie Friesland om ruimtelijke kwaliteit te stimuleren. Ruimtelijke kwaliteit is een fundamentele pilaar van de vrijetijdseconomie. De analyse laat zien dat regio's niet alleen moeten beschikken over de capaciteit om met verstoringen om te gaan en deze te voorkomen (robuustheid), maar ook moeten beschikken over een mate van flexibiliteit om vooruitgang en verbetering te

boeken (flexibiliteit). De analyse laat zien dat provincie Friesland daarom een institutioneel kader heeft gecreëerd dat bestaat uit een set van *generieke normen* gericht op milieukwaliteit, *procesvereisten* zoals planningsprincipes en motivatieplicht hoe er rekening is gehouden met vastgelegde 'kernkwaliteiten', en *planningstrategieën* gericht op stakeholder management teneinde het organisatorisch verbonden van actoren, organisaties en instituties op verschillende bestuursniveaus en ruimtelijke schaalniveaus. De analyse laat ook zien dat de conceptualisatie van ruimtelijke kwaliteit Friesland selectief is, wat te herleiden is tot onder andere politieke en pragmatische keuzes in besluitvormingsprocessen.

In hoofdstuk 5 wordt een verbinding gelegd tussen theorieën over 'storytelling' en transities ten behoeve van de analyse van twee projecten waarin een strategische vorm van storytelling is toegepast om de vrijetijdseconomie te stimuleren in de regio's Hondsrug in de provincie Drenthe en de Friese Meren in de provincie Friesland. De analyse gaat in op de mate waarin 'strategic storytelling' (SST) een katalysator kan zijn voor de ontwikkeling van de vrijetijdseconomie, en daarmee voor het ontstaan van vrijetijdslandschappen. De bevindingen wijzen er op dat SST een katalysator kan zijn voor het bijeenbrengen van actoren, het samenbrengen van middelen en het bevorderen van ruimtelijke ontwikkelingen. Echter, het effect van SST hoeft niet meteen zichtbaar te worden in termen van ruimtelijke ontwikkeling omdat de ontwikkeling van vrijetijdslandschappen een langdurig transitieproces is. De bijdrage van SST kan in eerste instantie beperkt blijven het mobiliseren en bijeenbrengen van actoren en het vormen of institutionaliseren van actor-netwerken. Een adaptieve benadering wordt voorgesteld om verhalen continu te evalueren en aanpassen als middel om commitment te bewerkstelligen.

In hoofdstuk 6 wordt dieper ingegaan op de planologische uitdaging om te komen tot adaptieve toeristische bestemmingen. Adaptief betekent dat deze het vermogen hebben om te reageren op een veranderende contextuele omgeving en daardoor in staat zijn om de presentaties als competitieve toeristische bestemming te handhaven of te verbeteren. Theorieën over complex adaptieve systemen worden gebruikt om de aandacht te vestigen op een gebalanceerde mate van diversiteit in termen van toeristische producten, belevingen en bedrijven. Het bevorderen van diversiteit vereist ondermeer een hoge mate van connectiviteit tussen actoren om communicatie en coördinatie (beleid) te vergemakkelijken, het stimuleren van experimenteerruimte voor innovaties in niches van de vrijetijdseconomie en het vergroten van lerend en reflexief vermogen.

Complexiteitsdenken wordt in de gehele thesis gebruikt als conceptuele ondersteuning voor het onderzoeken van het ontstaan, de ontwikkeling en management van vrijetijdslandschappen. Als de bijdrages van de individuele hoofdstukken worden samengebracht bieden zij tezamen een complex adaptief systeem (CAS) perspectief op de ontwikkeling van vrijetijdslandschappen.

Niet-lineaire ontwikkelingspaden

Het CAS perspectief wordt gebruikt om te laten zien dat de ontwikkeling van vrijetijdslandschappen het resultaat is van het samenspel tussen veranderen contextuele omstandigheden, geplande interventies en processen van zelforganisatie door actoren op verschillende bestuursniveaus en ruimtelijke schaalniveaus. Het resultaat is dat ruimtelijke planners worden geconfronteerd met ontwikkelingspaden van regio's die niet-lineair evolueren. Niet-lineair is van toepassing op situaties die niet geïnterpreteerd kunnen worden als exacte voortzettingen of extrapolaties vanuit het verleden door fundamentele veranderingen in structuur, functie en identiteit. Het is van toepassing op de ontwikkeling van vrijetijdslandschappen omdat deze gebieden een complexe en vaak langdurig transitieproces ondergaan waarbij afscheid wordt genomen van een relatief stabiele systeemstatus en bewogen wordt in de richting van een systeemstatus die fundamenteel anders is vergeleken met de structuren, functies en identiteiten van het verleden. De case studies van de Waddenregio (hoofdstuk 2), stadsrandontwikkelingen in de stadsregio Haaglanden (hoofdstuk 3) en de analyses van de Hondsrug en de Friese Meren (hoofdstuk 5) laten zien dat de focus op productie (landbouw, tuinbouw, bosbouw) geleidelijk wordt aangevuld met structuren, functies en identiteiten die duiden op een focus op consumptie (toerisme, recreatie, vrije tijd). Het ontwikkelingspad wordt daarom geconceptualiseerd als niet-lineair. Echter, dit proces is niet gemakkelijk en kost doorgaans veel tijd – de casussen Midden-Delfland en Vlietzone laten zien dat verandering meerdere decennia kan kosten en de analyses van de SST projecten onthullen de moeilijkheid om verandering te bereiken.

Een langlopend transitieproces

Het duurt doorgaans meerdere decennia voordat transities zich hebben gemanifesteerd op regionaal niveau. Verschillende redenen zijn aan te wijzen. Ten eerste, de nadruk ligt doorgaans op planningsbenaderingen die beperkend zijn voor projecten en plannen die op grote schaal en in kort tijdsbestek leiden tot de transformatie van ruimtelijk-economische functies en structuren. Sterk restrictieve planningsregimes kunnen zelfs gebieden 'gevangen zetten' en voorkomen dat actoren alternatieve opties verkennen en ontwikkelingspaden

insla an. Wanneer ruimtelijke transformaties worden ondersteund dat is het vaak incidenteel, ad hoc gedreven door voorbijkomende kansen en lokaal. Ten tweede, de ontwikkeling van vrijetijdslandschappen vereist de coördinatie en organisatie van vele actoren (individuen, bedrijven, maatschappelijke organisaties en instituties), het mobiliseren en toekennen van financiële middelen en de adaptatie van ruimtelijke, organisatorische en institutionele structuren. Het vereist individuen of intermediaire organisaties ('signifying agents') die actief netwerken van actoren creëren en managen (bijvoorbeeld gebruikmakend van 'storytelling'). Het vereist ook leiderschap om die netwerken over te halen om tot collectieve acties over te gaan. Organiseren en coördineren van actor-netwerken is een delicate alsook tijdsintensieve en energieconsumerende bezigheid, wat impliceert dat successen niet gegarandeerd zijn. Ten derde, er niet één actor met complete controle over die manier waarop ontwikkelingspaden evolueren over langere perioden. Dit komt door de betrokkenheid van vele actoren in diverse (beleids)domeinen die verspreid zijn over verschillende bestuursniveaus en ruimtelijke schaalniveaus. De implicatie is dat ontwikkelingspaden niet exact voorspeld of gestuurd kunnen worden, niet door blauwdrukplanning noch door consensusplanning of participatieve planningsbenaderingen. Hoewel benaderingen die uitgaan van controle en beheersing gebruikt kunnen worden om ontwikkelingspaden sterk te beïnvloeden (zie de Reconstructiewet in de casus Midden-Delfland, hoofdstuk 3), op de lange termijn zullen deze mogelijk ook aangepast moeten worden (casus Midden-Delfland en Vlietzone, hoofdstuk 3) en kunnen zelfs contraproductief worden (casus Waddenregio, hoofdstuk 2).

Het adaptief vermogen

Regio's die een ontwikkeling doormaken tot vrijetijdslandschap worden in deze thesis geconceptualiseerd als open sociaalruimtelijke system omdat de actoren binnen deze systemen continu bezig zijn met reageren op en aanpassen aan veranderende omstandigheden. Adaptiviteit is daarbij een belangrijke capaciteit en, daarom, een interessante capaciteit om actief op in te zetten door ruimtelijke planners. Adaptiviteit is een proces dat kan leiden tot een betere 'fit' tussen het systeem en de contextuele omgeving waarin het systeem is gelegen. Omdat contextuele omstandigheden vaak veranderen moeten systemen deze 'fit' kunnen herstellen, waartoe adaptief vermogen dient. Ook regio's die een ontwikkeling doormaken tot vrijetijdslandschap moeten deze 'fit' continu herstellen als reactie op veranderingen in bijvoorbeeld consumentenbestedingen, levensstijlen, concurrentieposities, demografische ontwikkelingen, technologie, reisgedrag, etc. De volgende (niet-limitatieve) set van factoren zijn geïdentificeerd in deze thesis die bijdraagt aan het adaptieve vermogen van regio's.

- **Een diverse regionale vrijetijdseconomie**
  Diversiteit maakt regio's tegelijkertijd robuust en flexibel. Het draagt bij aan robuustheid omdat het elimineren of vervangen van elementen geen negatieve effecten veroorzaakt voor de algemene werking van de regio's. Diversiteit maakt de regio's flexibel omdat het de mogelijkheid vergemakkelijkt om te heroriënteren of te schakelen tussen meerdere ontwikkelingspaden. Dit is belangrijk om beknellende 'lock-in' situaties te voorkomen, om mee te bewegen met de sterk competitieve vrijetijdseconomie en een goede concurrentiepositie op te eisen.

- **Collectief handelen**
  De ontwikkeling van een aantrekkelijke en concurrerende bestemmingen voor toerisme en recreatie is afhankelijk van de collectieve acties van uiteenlopende actoren. Governance arrangementen zijn nodig die bestaan uit (vertegenwoordigers van) overheden, maatschappelijke organisaties en / of private actoren die een gedeelde of een gemeenschappelijk belang hebben bij de realisatie van specifieke projecten. Dit vereist personen en organisaties die optreden als verbinders en relaties opbouwen en netwerken vormen tussen publieke en private actoren. Dergelijke verbindingen zijn voorwaardelijk voor het samenbrengen en coördineren van de verschillende acties van overheden, maatschappelijke organisatie en marktpartijen. Bovendien is leiderschap vereist voor het vormen van governance arrangementen: (groepen van) ondernemers en vertegenwoordigers van (semi-) overheidsinstellingen die initiatief nemen en middelen mobiliseren ter ondersteuning van intermediaire personen en/of organisaties die belast zijn met de vorming van governance arrangementen rond initiatieven die de ontwikkeling van vrijetijdslandschappen ondersteunen.

- **Het ontwerp van institutionele kaders**
  Planners worden uitgedaagd om institutioneel kaders te ontwerpen die een bevredigend evenwicht bewerkstelligen tussen het remmen, toestaan en stimuleren van specifieke vormen van grondgebruik en activiteiten. Enerzijds is dit evenwicht van belang om innovaties te stimuleren in niches van toerisme, vrije tijd en recreatie die bijdragen aan een diverse regionale vrijetijdseconomie. Anderzijds is dit evenwicht van belang voor de bescherming van natuur, erfgoed en ruimtelijke kwaliteit tegen de negatieve gevolgen van ad hoc plannen en projecten. In hoofdstuk 4 wordt geïdentificeerd dat een dergelijk kader waarschijnlijk 1.) selectief is om te voorkomen dat kaders die top-down worden vestgesteld niet te veelomvattend en voorschrijvend zijn; 2.) samengesteld is uit meerdere componenten om invulling te geven aan de meervoudige doelstelling van

remmen, toestaan en stimuleren; en 3) dynamisch is omdat het kader voortdurend wordt heroverwogen in multilevel besluitvormingsprocessen.

- **Een reflexieve opstelling ten opzicht van governance**
  Reflexiviteit benadrukt de noodzaak om te herkennen wanneer en hoe situaties veranderen, het in twijfel trekken van de houdbaarheid van gehanteerde concepten, handelingen en instituties, om open te staan voor alternatieve benaderingen en deze actief te ontwikkelen. De consequenties voor ruimtelijke planning is dat systemen van ruimtelijke planning en governance zelf ook voorbereid zijn op en gereed zijn om tijdig mee te bewegen, door middel van aanpassing, met veranderende omstandigheden.

Kortom, dit proefschrift maakt duidelijk dat sociaalruimtelijke systemen, zoals de regio's die een ontwikkeling doormaken tot vrijetijdslandschap, baat hebben bij adaptief vermogen. Het vestigt de aandacht op een set van factoren die bijdragen aan dit adaptieve vermogen. Het bespreekt de meervoudige implicaties voor ruimtelijke planning die behoren bij het vormgeven van institutionele kaders, het stimuleren van organiserend vermogen en het managen van adaptief vermogen.

THE CHAPTERS IN THIS THESIS ARE REPRINTED (WITH PERMISSION FROM THE PUBLISHERS AND AUTHORS) FROM THE FOLLOWING PUBLICATIONS AND MANUSCRIPTS:

Chapter 1
Hartman, S. (2013). Exploring a planner's adaption to 'leisuring' regions. In A. Postma, I. Yeoman & J. Oskam (Eds.) *The Future of European Tourism* (pp. 238-253). Stenden University: Leeuwarden.

Chapter 2
Hartman, S. & De Roo, G. (2013). Towards managing nonlinear regional development trajectories, *Environment & Planning C: government and policy*, 31(3), 556-570. http://dx.doi.org/10.1068/c11203r

Chapter 3
Hartman, S. & De Roo, G., "Planning for peri-urban development: towards guiding dynamic peri-urban areas in their evolution." *submitted to an international journal*

Chapter 4
Hartman, S., Parra, C., & De Roo, G. (2015). Stimulating spatial quality? Unpacking the approach of the province of Friesland, the Netherlands. *European Planning Studies.* Published online ahead of print.
http://dx.doi.org/10.1080/09654313.2015.1080229

Chapter 5
Hartman, S., Parra, C., & De Roo, G., "Strategic storytelling: a development catalyst for 'leisuring' regions?", *submitted to an international journal*

Chapter 6
Hartman, S. (2015). Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity". *Journal of Sustainable Tourism.* Published online ahead of print.
http://dx.doi.org/10.1080/09669582.2015.1062017

1

Introduction[1]

"Our era is more in flux, more in process, more rapidly changing than any previous one in history." Maslow (1965, p. 23)

Cities, urban regions, rural territories are all dynamic entities to a greater or lesser extent. They perpetually change, being subjected to the dynamics of and interactions between socio-cultural, economic, and institutional processes that take place at multiple spatial scales and governance levels. For instance as a response to the rise of a leisure economy we encounter regions that are 'leisuring', experiencing on-going transformative processes that are designed to foster touristic, recreational and residential demands. These dynamics relate to our globalized economy and network society, are complex, and make development trajectories – places evolving over time – which are nonlinear, are open to change and are uncertain. It is possible, however, to observe patterns that emerge, to examine directions in which places evolve, to distinguish transitions, and to develop adaptive planning strategies and reflexive governance approaches to guide places in their evolution in a meaningful way. Taking such a nonlinear perspective, strategic spatial planning increasingly involves a focus on adaptive capacity of places so to navigate (themselves) through a contextual environment that is changing continually.

1 An earlier version of this chapter has been published as: Hartman, S. (2013) Exploring a planner's adaption to 'leisuring' regions. In A. Postma, I. Yeoman & J. Oskam (Eds.) The Future of European Tourism (pp. 238-253). Stenden University: Leeuwarden

1.1

‘Leisuring’ landscapes

Over the last decades, many places around the world are witnessing a spatial development process that I refer to in this thesis as ‘*leisuring*’. The gerund leisuring is introduced by Bunce (2008) to describe the on-going transformative processes that are designed to foster touristic, recreational and residential demands. This process has become spatially manifest and visually perceptible in many places. Large scale examples are the rise of tourist destinations around the coastal zones of the Mediterranean Sea or the winter sports destinations in the Alps. Moreover, many cities are oriented towards tourism, recreation and events such as the frequently visited cities of Paris, Rome, Amsterdam, Bangkok, London, Singapore, New York. In the Netherlands, at the regional scale we also find areas that are subjected to leisuring, including the islands of the Wadden Sea, the archipelago of Zeeland, and the coastal zone of the North Sea. But also at the local, micro scale, traces can be found of leisuring processes in nearly every village, city and rural territory.

As a development process, leisuring relates to the emergence of the leisure economy – a container concept used in Dutch planning practice to describe land uses and activities related to tourism, recreation, leisure, wellness, and exurban living and working (cf. Hartman et al., 2011). Enormous growth has been realized in these sectors throughout the world, and it is expected to do so in the future (see UNWTO, 2011). At the global level, the tourism industry is growing gradually. It is nowadays the fastest growing sector, and it is predicted to continue its growth in the near future, despite the financial crisis. This is the case amongst others due to the increasing welfare standards in Southeast Asian countries, Brazil and India. The growth of the leisure economy is also facilitated by innovations in communication and transportation technology, which improved the action radius of people, reinforced the accessibility of places and the competition between them. The result is a diffusion of developments over larger geographical scale. Moreover, entrepreneurs tend to specialize and develop niches to deal with (global) competition (Brinkhuijsen et al., 2007). Tourism and recreation becomes more intense and active, on the one hand whilst on the other hand experiences are sought that are more extensive, revolving around relaxation, tranquillity, culture, authenticity, identity, spirituality, etc. Also for living, people tend to diffuse over wide geographical surfaces settling in the urban, peri-urban and rural areas in search for the experiential values that fit their lifestyles. The urban cores provide high density, highly dynamic places. The city’s edges offer the benefits of both the urban and the rural, where

developments are known as suburbanisation. In addition, exurbanization is coined to describe the phenomena of “very-low-density, amenity-seeking, post-productivist residential settlements in rural areas” wherein the inhabitants “have deliberately chosen the rural landscape as a setting for their homes” (Taylor, 2011, p. 324). Bruegmann (2005) adds that these lay beyond the suburbs but are still an integral part of the urban system. Similarly, it is found that peripheral places may face an influx of highly specialized, small businesses (e.g. consultants, architects, designers, artists, internet-based businesses) that operate in supra-regional or international networks, which are categorized as cottage industries (Tordoir, 2010). Hence, it is no surprise that nowadays many regions are directly or indirectly dependent on and shaped by the leisure economy.

Planners are challenged by the emergence of the leisure economy and regions that are leisuring. As a result planning needs to take into account not only the functional, tangible aspects of a place, but also intangible, hedonistic aspects (Buijs et al., 2006) that provide for a sense of place and belonging (Steele, 1981; Tuan, 1990; Relph, 1976). This is different compared to a more traditional focus on efficiency and quantitative (economic) growth and dealing with landscapes in a factual and technical-rational manner, as is in general adequate for agricultural, industrial and service economies. With the growing importance of leisure, increasingly relevant are the natural (nature, ecology, landscape) and built environment (infrastructure, heritage) as well as their aesthetics, identities, authenticity and uniqueness. The combination of tangible and intangible factors provides a décor for producing leisure experiences (Pine & Gilmore, 1999; Caalders, 2002; Metz, 2002). Moreover, the leisure economy generates a demand for things to do and interesting stories about places, people, culture, histories made available in interesting ways. Overall, it can offer formidable potential for spatial and socio-economic development, but it can also be a force that shapes the physical and socio-economic landscape negatively. The impact can differ greatly, ranging from low-impact being in symbiosis with their natural and social environment to high impact developments that fundamentally transform landscapes. These observations opt for more integrative, holistic approaches that revolve around quality of place compared to approaches that deal with sectors individually, such as nature, infrastructure, housing or water.
Figure 1 provides a spectrum to capture this range of relations between the leisure economy and landscape more conceptually (Hartman et al., 2011; Cadieux & Hurley, 2011).

At one end of the spectrum developments can be positioned that revolve around adapting places and taking opportunities for (socio)economic development.

This includes changing the structures and functions of places, as is the case for instance in the 'Ruhr' area in Germany that has shifted its orientation on industries to the service and leisuring economy, focusing amongst others on design, culture, tourism and recreation – nowadays under the heading of Emscher Park. Brinkhuijsen et al. (2007) observes, however, that this can take parasitic forms when such developments emerge in or near attractive but fragile places, and relations with surroundings are purely functional and matter mostly in terms of location. In these cases functionality can be dominant combined with a focus on quantitative, economic growth over landscape qualities. This is spatially manifest in places that are devoted predominantly to mono-functional development to support leisure complexes such as some forms of hotels, theme parks, bungalow parks as well as suburban neighbourhoods, business parks and agricultural production. To indemnify places from potential negative perturbations, a traditional planning approach is to spatially separate different types of land use through zoning (Hartman & De Roo, 2013).

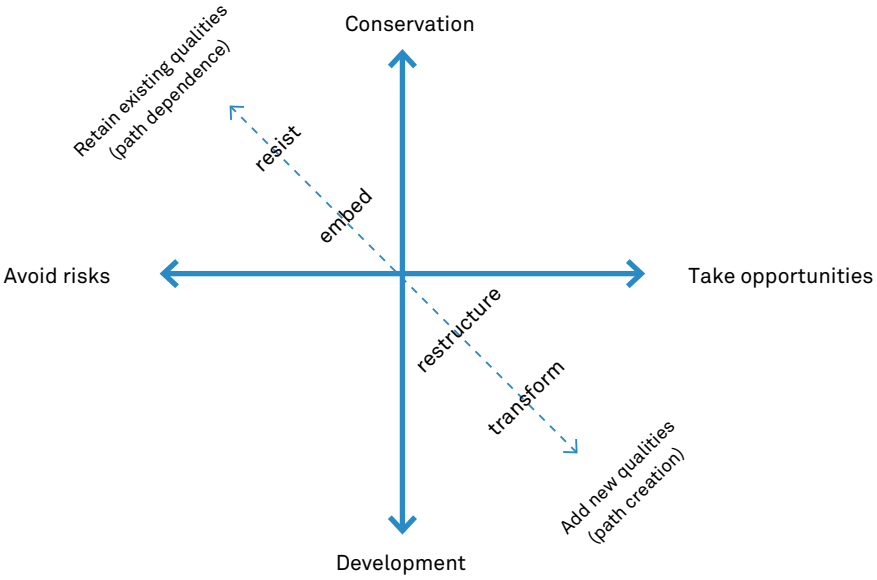

Figure 1: Spectrum of relations between leisure and landscape (Source: adapted from Hartman et al., 2011)

At the other end of the spectrum developments can be located that harmonize with place-based qualities. This could benefit places where land use is mainly devoted to nature, landscape or heritage (Holmes, 2008). However, leisuring

processes can be considered incompatible with nature and heritage when causing deterioration. In addition, impacts may be considered negative when hampering the vested interests coupled to development abilities of agriculture (for example, limiting up-scaling, rationalizing landscapes), forestry (for example, co-use, amenity values), and alter rural communities (gentrification, exclusion) and lifestyles (Theobald, 2005). Through planning interventions perturbing developments may be completely avoided or limited to low impact initiatives to protect particular landscapes or activities.

The hints at the fact that interacting (f)actors on multiple spatial scales and governance levels form a highly complex process that affects how the leisure economy evolves and how leisuring processes become spatially manifest. In this context, planners increasingly acknowledge that the way in which development trajectories unfold towards the future is at least partly uncertain (Albrechts, 2006b; De Roo & Silva, 2010). Some dynamics are (becoming) too complex to comprehensively understand and plan for (Healey, 2007). Moreover, the relevance of (subjective) perceptions related to place quality and the variety of actors involved in spatial development processes limit the control of planners over the outcomes of development processes. This should make planners modest with respect to their ability to control development trajectories of places (cf. Urry, 2003). Alternatively, planners become challenged to guide places in their evolution (Loorbach and Rotmans, 2006).

Is the world is getting more complex or are we learning about its complexity?

We could say that the world is getting more complex. Over the last decades the world has become highly interconnected and interdependent. Physical and virtual networks stretch across the globe, and allow moving people, goods, and thoughts to every corner of the world. This is facilitated by a variety of factors, such as technological innovations in communication and transportation and the relative ease of cross-border movements. Graham & Healey (1999, p. 11) observe that “cultures, economies, social worlds, politics and environments all become driven by logics of increasingly intense interconnections and flows, over larger and larger geographical scales”. Because of the high level of interconnectivity and intensity of interactions the world seems to be in flux, constantly changing, whereby it is rather impossible to say whether someone is in control. These dynamics come with implications. First, it offers opportunities for development, which is amongst others demonstrated by the emergence and dynamics of the leisure economy. Second, due to the impact of or inspired by global trends and events, actors at local, regional as well as national levels (are forced to)

anticipate and adapt to processes they cannot influence directly (Urry, 2003). To continue to participate in the globally interconnected economies and societies mean that actors (have to) conform and adapt to the international 'rules of the game'. Third, the increased interconnectivity gives rise to complex constellations in which it is difficult to distinguish how things are related, how things are organized, and how interactions take place. In such cases it may become difficult to command-and-control how such constellations evolve over time. A recent example of this is the financial crisis and its effects on housing markets, investment plans, governmental budgets, employment rates, etc. Whereas a complex world provides many opportunities for socio-economic, spatial, and socio-cultural development, it also comes with a range of consequences and implications, amongst others for the planning and governance of regions that are leisuring.

At the same time, we are learning about the world its complexity. For instance, in various planning-related academic fields, there is an emergent interest in dealing with and managing phenomena that are fundamentally dynamic. Many scholars pursue an understanding of their complexity, their capacity to adapt to changing circumstances, and try finding strategies to deal with their dynamics. In this context, complexity theories are increasingly explored. Complexity theories include literature amongst others on complex adaptive systems (Wolfram, 2002; Holland, 2006; De Roo & Silva, 2010, De Roo et al., 2012; Gerrits, 2012), socio-ecological systems (Gunderson and Holling, 2002; Folke et al., 2005; Gerrits, 2008), organisational dynamics and change management (Axelrod & Cohen, 2000; Weick & Sutcliffe, 2007), socio-technical systems (Geels 2010, Geels & Schot, 2007), climate change (Pahl-Wostl, 2007; Gupta et al., 2010), socio-economic systems and evolutionary economics that focuses on the innovation of firms and industries (Simmie & Martin, 2010; Martin 2010; Boschma & Frenken, 2006), socio-spatial systems (Portugali, 2012), evolutionary transportation planning (Bertolini, 2010). These fields have emerged to learn about complexity, about the behaviour and characteristics of complex (adaptive) systems and to find ways to deal with them and guide them in their evolution. Whereas it might be true that the world is getting more complex, many scholars and practitioners are determined to learn about and deal with its complexity.

Towards guiding places that are 'leisuring' in their evolution

The above provides first insights into the context wherein the development of the leisure economy is situated and provides an understanding of the dynamics to which places that are leisuring are subjected. It highlights that spaces and places are likely to be dynamic, to a greater or lesser extent, being produced,

reproduced and adapted over time – which is confirmed by the fact that many places are engaging in leisuring processes.

In this thesis I interlink the line of thought that regions are embedded in and persistently respond to dynamic (contextual) situations with the line of thought that regions are leisuring. Empirically, I examine the ways in which leisuring processes become spatially manifest, how this relates to changing (contextual) circumstances, and how such processes are shaped by spatial planning strategies and interventions. Analytically, I clarify how planning shapes the evolution of regions that are leisuring and discuss how planning strategies may be enhanced to anticipate dynamic situations and harmonize with the evolution of the leisure economy. Theoretically, I turn to theories on complex adaptive systems which offer a frame of thought that emphasizes nonlinearity and discontinuous change. As such, these offer various concepts and mechanisms to recognize, characterize and make sense of issues that progress in a nonlinear way. These ingredients are combined to raise the insight that guiding regions that are leisuring in their evolution entails a call for a more adaptive approach to spatial planning and development.

1.2 Scope of the thesis

The thesis examines the implications of regions that are leisuring for spatial planning and development and explores the design of institutional frameworks and planning strategies, as means to guide such regions in their evolution. The research questions that guide this thesis are as follows:

- What implications and issues do regions that are leisuring raise for spatial planning and development?
- How is the process of leisuring shaped by institutional frameworks?
- How can the leisuring of regions be stimulated through spatial planning?

It is by no means my intention to claim that the insights presented in this thesis provide a comprehensive overview. For instance, in exploring the design of institutional frameworks and planning strategies I had to be selective – mainly due to time constraints – and focus on particular themes (spatial quality) and approaches (strategic storytelling). Nevertheless, I do believe that the insights presented in this thesis provide a thorough and enhanced understanding of the underlying processes that drive regions that are leisuring, the implications for spatial planning and planning, and the challenges and possible strategies

for designing institutional frameworks and planning approaches. In section 1.3 I further discuss the choices made with regard to case study selection, their analytical focus and methodological approaches.

1.3 Structure of the thesis

The thesis consists of three parts. In the remainder of the first part, being this introduction, I present the research strategy that guided this research (section 1.3). I elaborate on the analytical framework as well as the focus of, and the methodologies used for, the articles that are part of this thesis. The second part is the main body of this thesis and consists of five chapters – which are either reprints from journal articles or submitted manuscripts (for an overview see page 24):

- Chapter 2 analyses on the basis of theories on transitions for the uttermost northern part of the Netherlands how leisuring processes are facilitated and how they are inhibited by means of spatial planning. This allows a discussion on how to guide regions that are leisuring in their evolution.
- Chapter 3 presents a case study on the evolution of peri-urban areas in the metropolitan region of The Hague, the Netherlands. It discusses the transition of peri-urban areas evolving from predominantly rural areas to 'leisure landscapes' that are extensively integrated into the urban fabric of the metropolitan Greater Hague Region. Specific attention is paid to the institutional influence on the evolution of these areas.
- Chapter 4 analyses the design of the institutional framework that is put in place in the Dutch province of Friesland to stimulate spatial quality. Spatial quality is a key factor in the context of leisuring as a spatial and socio-economic development process.
- Chapter 5 examines two projects that revolve around strategic storytelling. The chapter contains an analysis of the extent to which these strategic storytelling project serve as transition catalysts for regions that are leisuring.
- Chapter 6 is a theoretical paper that explores theories on adaptive capacity. This provides a perspective that may help to better understand the implications, complexities as well as potential strategies to deal with regions that are leisuring.

Table 1 summarizes how the individual papers contribute to the research questions. The chapters are ordered as such to first provide insights into the issues and implications for spatial planning and development that are

QUESTIONS / CHAPTERS	What issues do regions that are leisuring raise for spatial planning and development?	How is the process of leisuring shaped by institutional frameworks?	How can the leisuring of regions be stimulated through spatial planning?
Chapter 2: Towards managing nonlinear regional development trajectories	X	X	
Chapter 3: Planning for peri-urban development: towards guiding dynamic periurban areas in their evolution	X	X	
Chapter 4: Stimulating spatial quality: unpacking the approach of the province of Friesland, the Netherlands	X	X	X
Chapter 5: Strategic storytelling: a development catalyst for 'leisuring' regions?	X		X
Chapter 6: Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity	X		X

Table 1: How chapters contribute to research questions (table design based on Wilkinson, 2012)

accompanied by regions that are leisuring. This serves as a background to the chapters on the design of institutional frameworks (chapter 4) and planning strategies (chapter 5). Chapter 6 is a theoretical paper that builds on the insights derived from the other chapters, and explores theories on adaptive capacity as a potential perspective to deal with emergent implications that accompany

regions that are leisuring. In section 1.4 a more elaborate explanation of the focus of the articles and the methodological approaches is given.

The third part of the thesis is the conclusion (chapter 7). In this chapter I take the theoretical framework and empirical insights presented in the thesis to address the research questions. Furthermore, I reflect on the theoretical framework and discuss along which lines the insights presented in this thesis may help forward other regions that are leisuring.

1.4 Research strategy

The research questions that guide this thesis are addressed through empirical research on the basis of multiple case studies. The approach of case study research enables to study in-depth the implications of regions that leisuring for spatial planning and development, and to examine the design of institutional frameworks and planning strategies that aim to guide this emergent phenomenon in their evolution. In this section I first introduce the analytical framework to provide a background to the analytical focus of this thesis. Subsequently, I clarify for each chapter the methodological approach and research focus.

Analytical focus

In planning theory and practice there is an increasing awareness that the ways in which space and place develop over time can often not be adequately managed by means of command-and-control approaches. Processes driving spatial and socio-economic development are often highly complex as they include multiple actors, sectors, levels, time scales, objectives, and options (Dewulf et al., 2009). Such complex processes can have unpredictable outcomes and give rise to a sense of uncertainty concerning the ways in which places evolve over time. In other words, development trajectories do not necessarily progress in a linear manner, which are predictable and controllable, but may evolve in a nonlinear manner, being more unpredictable and uncontrollable. With nonlinear we mean that the object of planning (e.g. a neighbourhood, city, region) is not only dynamic, it also implies that characteristics, usages, meanings and values attributed to places may change fundamentally over time. We take the perspective that the process of leisuring embodies an example of such nonlinear development, as it entails that new meanings and values are attributed to landscapes and gives rise to new conditions for its development.

Whereas this thesis further explores this phenomenon, it examines in particular how nonlinearity and strategic spatial planning mutually influence each other: how do development trajectories evolve nonlinearly, what are implications for planning, how does planning shape the nonlinear evolution of development trajectories? In short, the main analytical foci of this thesis are strategic spatial planning and addressing nonlinearity.

Strategic spatial planning

The chapters in this thesis address the relations between strategic spatial planning and regions that are leisuring. In literature, strategic spatial planning is understood as follows. For instance, Healey (2004, p. 46) describes strategic spatial planning as the "self-conscious collective efforts to re-imagine a city, urban region or wider territory and to translate the result into priorities for area investment, conservation measures, strategic infrastructure investments and principles of land use regulation". She adds that "strategic…implies selectivity" and "implies that it is possible to decide between appropriate actions" (ibid., p. 46). Elsewhere Healey (2007, p. 8) highlights that strategic spatial planning concerns "encouraging the emergence of particular development trajectories". Albrechts (2006a, p.1152) argues strategic spatial planning concerns processes that "shape and frame what a place is and may become". In these quotes we find words such as prioritize, selectivity, appropriate, particular, shape and frame to describe the purpose of strategic spatial planning. These words imply, in essence, that strategic spatial planning concerns shaping and governing the ways in which places evolve. As such, we could say that it is a process that involves the design and introduction of governance strategies and institutional structures to, as Jessop (2005, p. 48) puts it, "privilege some actors, some identities, some strategies, some spatial and temporal horizons, some actions over others" as a means to steer and shape how development trajectories unfold.

In a dynamic context, however, strategic planning may be problematic. In case situations change development options may emerge as well as disappear over time, for example due to new technologies, economic crisis, lifestyle changes, emergent markets, etc. This could affect the ways in which places evolve over time. As a result, planning interventions (policies, institutional frameworks, governance structure) that steer and shape the evolution of development trajectories in a particular direction could become less efficient, obsolete or even obstructive. They may need to be revisited, replaced or removed for the benefit of regions their progression. In line, Wilkinson (2011, p. 595) emphasizes that "in face of turbulent change and a spectacular failure to address wicked problems such as sustainability, urban poverty and climate change…[m]ore

open, dynamic and adaptable modes of strategic spatial planning practice are called for under such conditions". In this thesis I demonstrate that regions that are engaged in leisuring processes also benefit from more adaptive planning approaches.

This thesis focuses specifically on how nonlinearity and strategic spatial planning mutually influence each other. Chapter 2 and 3 examine how institutional (macro) forces shape the ways in which regions are leisuring. Chapter 2 focuses on transitional processes in the uttermost northern part of the Netherlands and discusses how leisuring processes are facilitated as well as inhibited by means of spatial planning. Chapter 3 elaborates on the development of peri-urban areas in the Greater Hague Region, and how their evolution from predominantly rural areas to 'leisure landscapes' is shaped by planning. Chapter 4 and 5 examine how planning (institutional frameworks and planning strategies) reinforces regions that are leisuring in their evolution. Chapter 4 concerns strategies to stimulate spatial quality and chapter 5 examines whether strategic storytelling serves as a transition catalyst for regions that are leisuring. Chapter 6 examines the insights theories on complex adaptive systems raise for stimulating the adaptive capacity of regions that are leisuring.

Addressing nonlinearity: theories on complex adaptive systems

Theories on complex adaptive systems are explored to develop a frame of thought that emphasizes nonlinearity and discontinuous change. Complexity theories offer various concepts and mechanisms to recognize, characterize and make sense of dynamic spatial phenomena that progress in a nonlinear way. These theories clarify how complex adaptive systems are able to adapt to changing circumstances, which may raise valuable insights for emergence and progression of leisuring regions as these are subjected to persistently changing (contextual) circumstances. In planning literature, theories on complex adaptive systems are used amongst others to address the evolution of cities, peri-urban areas, urban regions and infrastructure systems (Portugali, 2012; Rauws & De Roo, 2011; Bertolini, 2010; Batty, 2005; Batty, 2008).

Complex adaptive systems are understood as open systems, being interconnected to and in constant interaction with its contextual environment that comprises of other systems, subsystems and system that are of larger scale. For instance, an urban region is connected to other regions and therefore affected by the ways in which other regions evolve. Its evolution is also affected by subsystems (e.g. political, planning, ecosystems) as well as by larger scale systems (e.g. related to ecology, culture, economy, climate). Complex adaptive systems feature the capacity to adapt responsively to dynamics in

other systems. Through this adaptive capacity, systems *co-evolve* in response to one another (Gerrits, 2008). The capacity to adapt involves a process of change, renewal and transformation. These are processes that occur through self-organisation and without central control, whereby the parts or agents that constitute a system are changed over a period of time in terms of their character, relations and interdependencies. Heylighen (2008, p. 4) explains that "an action by one agent will in general trigger further actions by one or more other agents, possibly setting in motion an extended chain of activity that propagates from agent to agent across the system". Out of these local interactions macroscopic patterns may arise that are understood as emergent structures (Epstein & Axtell, 1996; Heylighen, 2001; Allen, 2012). As systems are always interacting, they are "out-of-equilibrium" (De Roo, 2012, p. 153), the emergent structures of systems are continuously produced, reproduced and adapted. Development trajectories may therefore evolve nonlinearly.

The concepts, mechanisms and underlying principles of complex adaptive systems are addressed frequently and more in-depth throughout the chapters of this thesis. I also connect these insights to the concept of *transitions*, a connection that is explored for instance by Rauws & De Roo (2011) and Rotmans & Loorbach (2009). The concept of transitions is used to elaborate in more detail how socio-spatial systems such as peri-urban areas and (urban) regions evolve. The concept expands the complex adaptive systems perspective by conceptualising that the emergence of structures – in our case the process of 'leisuring' – requires actors, decision-making and development processes, as well as requires regimes in different domains to interlock and reinforce one another. We use the insights that transition theory brings, amongst others, to discuss that the emergence of socio-spatial patterns relates to and depends on the interplay between spatial-economic, socio-spatial, organisational and institutional (sub)systems.

The combination of the analytical foci of this thesis, being complex adaptive systems and strategic spatial planning, provides leverage on guiding regions that are leisuring in their evolution. For this thesis, theories on complex adaptive systems provide a perspective that elaborates on mechanisms that enable systems to adapt to changing circumstances. It raises insights on the factors that provide for the ability to move towards a better fit. The focus on strategic spatial planning provides a perspective that dynamic situations and persistently changing planning objects come with far-reaching implications for planning. It raises the insight that strategic spatial planning is increasingly about shaping and governing the ways in which places evolve, focussing on conditions that enable regions to respond adaptively to changing circumstances.

Methodological approach and research focus

The research questions that are raised in this thesis are addressed by means of multiple research methods. Table 2 provides an overview of the methodological approaches used for each chapter and the research focus that served as a guide for the presented findings. Chapters 2 to 5 contain either a single case or multiple cases (Table 2). The case studies presented in chapters 2, 3 and 5 revolve around the analysis of development trajectories. This approach allows discussing the interactions and interrelations between regions that are leisuring and spatial planning over a period of time. Chapter 4 is largely a cross-section in time, as it focuses on the institutional framework put in place in the province of Friesland to stimulate spatial quality. The factor time is included, however, as we discuss the relevance of dynamic situations and how this may impact on the design of institutional frameworks. The approach to focus on development trajectories and include the factor time allows us to reveal the ways in which regions are leisuring and discuss the factors that influence how this process becomes spatially manifest. In this context, as table 1 highlights, the focus is particularly on the role of institutional factors (the planning system: laws, zoning plan, policies, routines and traditions, strategies and approaches, etc.) whereas chapter 4 on stimulating spatial quality and chapter 5 on storytelling also elaborate on organisational aspects. These chapters explicitly focus on planning strategies that aim to stimulate processes of leisuring.

The data to outline, explain and analyse the evolution of development trajectories is derived from reviewing academic literature about the case study areas, analysing documents, and using semi-structured, in-depth interviews with key informants. The review of academic literature serves the purpose of revealing a background on recent dynamics, emergent issues and tensions, and possible implications for spatial planning and development. This also provided the input to create an (preliminary) outline of a region its development trajectory. Document analyses were used to enrich the insights on forces driving spatial development and the ways in which these shape how places develop over time. These analyses included a range of documents that could provide information about the evolution of development trajectories, such as policy plans, laws, guidelines, advisory reports, press releases, etc. Interviews were used to supplement and cross check findings, but more importantly to examine transformations in governance and planning and to elaborate on planning issues and solutions. Interviewees for this research were selected on the basis of their knowledge about the development of the region under study and the underlying driving forces. The selection focussed on key informants or persons of significance that hold a comprehensive overview of developments and/or

could provide an in-depth perspective on a particular series of events, as a result of their position and/or the actions to which they have contributed to. Appendix A includes the list of interviewees for this research.

Chapter 6 is based on a literature review. A review of academic literature fits the research focus of this paper, as it aims to explore what insights complexity theories, and the concept of adaptive capacity in particular, raise for the spatial planning and development of regions that are leisuring (see Table 2). A literature review is selected as a means to reveal relevant insights and connect to recent discussions. Literature on complex adaptive systems was systematically analysed. First, principles, concepts and mechanism that relate to complex adaptive systems are systematically introduced, discussed and linked to the phenomenon of regions that are leisuring. Second, we examine transition management and adaptive (co)management, two main approaches that set out to deal with the dynamics of complex adaptive systems, to derive suggestions for planning and governance approaches.

CHAPTERS	METHODOLOGICAL APPROACH	RESEARCH FOCUS
Chapter 2: Towards managing nonlinear regional development trajectories	Case study research, semi-structured in-depth interviews, document analysis	What issues and implication for spatial planning and development accompany regions that are leisuring?
Chapter 3: Planning for peri-urban development: towards guiding dynamic peri-urban areas in their evolution	Multiple case study research, semi-structured in-depth interviews, document analysis	How do institutional interventions affect the evolution of peri-urban areas, as they increasingly become leisure landscapes?
Chapter 4: Stimulating spatial quality: unpacking the approach of the province of Friesland, the Netherlands	Case study research, semi-structured in-depth interviews, document analysis	What are conditions for institutional frameworks to stimulate spatial quality, and what are its governance implications?
Chapter 5: Strategic storytelling: a development catalyst for 'leisuring' regions?	Multiple case study research, semi-structured in-depth interviews, document analysis	How can storytelling serve as a transition catalyst for regions that are leisuring?
Chapter 6: Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity	Literature review	What insights do complexity theories raise for the spatial planning and development of regions that are leisuring?

Table 2: Overview of chapters and the methodological approach and research focus

Towards managing nonlinear regional development trajectories[2]

Abstract

Regions can become 'locked' into a spatial-economic development trajectory, thereby losing their capacity to adapt to spatial dynamics. This is in contrast to those regions that seem to be able to reinvent themselves by adapting to processes that drive spatial change, deviating from past development trajectories and giving rise to nonlinearity. This paper focuses on the influence that spatial planning has on stimulating as well as frustrating such nonlinear development. Based on an analysis of the development trajectory of the Wadden Sea Region, we clarify the relationship between spatial planning, lock-in situations and the coming about of nonlinear development trajectories. For conceptual support on nonlinearity, we turn to the complexity sciences. This assists us to reflect on planning strategies, and we discuss how spatial planning can contribute to managing emergent nonlinearity.

Keywords

Complexity theory, strategic planning, lock-in, adaptive capacity, Wadden Sea Region

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2.1

Introduction

Planners struggle continuously to try to understand the processes that drive spatial changes and the extent to which they are able to influence these processes. The emergence of a global economy (Amin & Thrift, 1995) and network society (Castells, 1996) has meant that the processes that drive spatial and economic change are increasingly interconnected and interact between multiple levels of scale. These processes are facilitated by innovations in, among other things, communication and transportation technology, reducing the time and costs to move people, goods, capital and ideas. Also, the development of trade blocks (e.g. EU, NAFTA) has led to an increase in cross-border interaction (Baldwin, 2006; McCann, 2008). Processes that influence spatial development are therefore not confined to the borders of nation states. The course that these developments take is influenced by international movements, and thus is often beyond the reach of local and regional planners. As such, prescriptive blueprint plans and top-down planning schemes focusing on control and manageability have been shown to be insufficiently effective (Healey, 2006; Faludi & Van der Valk, 1994).

Spatial changes driven by processes such as globalization and changing societal behaviour are often, from a local or regional perspective, inefficiently dealt with, considered as static manifestations and frozen in time by command-and-control planning. Globalizing trends nevertheless find their way to regional and local levels of development. Consequently, such macro processes *autonomously* drive shifts in spatial patterns and development trajectories at the local and regional level (Antrop 1998; Antrop, 2005; Andrews & Boyne, 2008). The extent to which such processes affect spatial and economic development differs between specific areas and regions, and relates, among other factors, to the degree to which planning constrains contextual influences affecting local and regional development. In this context, Martin & Sunley (2006, p. 395) argue that some "regional economies become locked into development paths that lose dynamism, whilst other regional economies seem able to avoid this danger and in effect are able to 'reinvent' themselves through successive new paths or phases of development". This paper contributes to this discussion by clarifying the role of strategic spatial planning in stimulating as well as frustrating reinvention. As such, it contributes to an enhanced understanding of managing emergent 'nonlinear' development trajectories.

The development trajectory of the Wadden Sea Region (WSR), situated in the northern part of the Netherlands (see figure 2), poses an interesting case for

this research. We provide insight into how the development trajectory towards a potential lock-in situation can be reinforced through planning. Moreover, we clarify how nonlinearity comes about and explore impacts on planning to discuss how planning can contribute to managing emergent nonlinearity. The WSR is a predominantly rural region and is characterized by a history of functional specialization in support of the development and revenues of the agricultural sector. Past and contemporary planning strategies in the Netherlands have been in favour of two strictly separated land uses, agricultural development and nature protection, limiting other types of land use. This has resulted in a relatively monotonous landscape, economically as well as morphologically, and provided incentives for migration especially among the youth (Van Wissen, 2009). Nowadays, the area lags behind in socio-economic development and is confronted with liveability issues. One example of these issues is population decline relating to factors such as impoverishment, vacant properties and the struggle to provide for public facilities. The rise of these issues provides incentives to reconsider planning strategies with regard to spatial development. So far, the planning regime has been rather restrictive towards alternative trajectories. However, there have been gradual developments that indicate that the region has potential for alternative activities in addition to production and protection (cf. Woods, 2007; Holmes, 2008). Leisure and tourism-related activities are a good example of these developments.

To understand the phenomena in the WSR more conceptually, the notions of lock-in and nonlinearity provide alternative and promising insights. Lock-in helps to explain high specialization and clustering, which result from functional, cognitive and political rigidity that tend to reinforce one another. In such situations, capabilities to adjust development trajectories to adapt to changing circumstances can become constrained, and may result in situations perceived as negative (Benneworth & Hospers, 2007). The concept can help to explain why developments are being constrained, as these are dynamic and nonlinear and are confronted with and framed by rather static institutional conditions. This perspective contributes to understanding why the WSR became highly specialized while alternative development trajectories are being suppressed, which eventually gives rise to socio-economic decline. The notion of lock-in has been developed mostly in industrial regions (Grabher, 1993; Martin and Sunley, 2007; Hassink, 2005; Hassink, 2010) but it has been applied to rural areas as well (Allison & Hobbs, 2004). Moreover, given the emergent issues in the WSR, the concept is considered to be useful in the context of the case study.

The notions of lock-in and nonlinearity, however, need more conceptual support when aiming to explain their emergence (also see Essletzbichler & Rigby, 2007)

in order to reflect on and develop planning strategies. In the context of regional development and anticipating contextual pressures, increasingly theories are explored that revolve around resilience (Hassink, 2010; Pendall et al., 2010) and complexity (Rauws & De Roo, 2011; De Roo & Silva, 2010; De Roo et al., 2012). Resilience theories generally adopt a dynamic equilibrium perspective describing how systems rebound in response to external perturbations, whereas complexity theory adopts an out-of-equilibrium perspective implying irreversible processes and the persistent creation of new, unique situations (see De Roo, 2012). Since spatial development processes are predominantly irreversible, complexity theories have a central place in this paper and we aim to contribute to the theoretical debate from this perspective. However, we do note that, very recently, debates in the context of regional development on resilience contest equilibrium perspectives as well (Hassink, 2010; Pike et al., 2010), and they explore more dynamic evolutionary perspectives (Simmie & Martin, 2010).

This paper extends contemporary debates in strategic planning literature that focus on dealing with dynamics and uncertainties. Whereas those debates have revolved around knowability and reducing uncertainty, this paper embraces nonlinearity and uncertainty. It further develops emergent ideas on regions being out of equilibrium to a greater or lesser extent (e.g. De Roo & Silva, 2010; De Roo et al., 2012), particularly by focusing on the mechanisms behind spatial dynamics. We take the perspective that processes driving spatial dynamics can be highly complex, and that the way development trajectories unfold is uncertain to a greater or lesser extent. The paper aims to enhance our understanding of planning co-evolving in response to a persistently dynamic object of planning (in this case, the WSR region).

This paper consists of four parts. The first part elaborates on nonlinear development trajectories in relation to spatial planning. The second part introduces the basic notions from complexity theory to better conceptualize nonlinearity. The concept of transitions is put forward to link the emergence of nonlinearity to spatial planning and decision-making. In the third part, the theoretical concepts are used to clarify the spatial development of the WSR. In the fourth part, we reflect on the introduced theoretical concepts to enhance our understanding about avoiding lock-in by means of adaptation in rural planning (agricultural areas in particular) and spatial planning in autonomously changing situations in general. The conclusions drawn in this paper will help regions to anticipate both the positive and the negative impacts of autonomous contextual changes.

2.2 Relating nonlinearity to spatial planning

In the realm of spatial development and planning, there is a growing sense of 'complexity' that can be related to the understanding that many spatial themes are interrelated and interconnected throughout different levels of scale. This is accentuated by the global network economy and cross-border political relationships (Urry, 2003). Antrop (1998) notes that spatial development and emergent landscape structures should therefore be interpreted as often being the result of "planning mixed with processes of autonomous development" (p. 158). How development trajectories unfold in the future is likely to involve uncertainties, because they are unpredictable to a greater or lesser extent. In this context, the prescriptive, comprehensive approaches based solely on sectoral planning and technical rationality have already been criticized for lacking effectiveness and the flexibility to cope adequately with changing circumstances (Healey, 2006; De Roo, 2003).

Planners are, as a consequence, no longer seen as objective experts able to fully understand planning issues in a reductionist manner and to come up with appropriate solutions (Allmendinger, 2002; Healey, 2006). Predictability and control, revolving around 'knowability', have been substituted partially by communicative approaches over the last two decades. This has resulted in the conception that multiple views and interpretations co-exist on spatial development, while also implying that consensus can be found (an 'agreed reality') that one can hold on to. We put forward an additional step proposing to incorporate and appreciate the emergence of nonlinearity and the importance of adaptation (Hartman et al., 2011). The decreasing confidence in command-and-control planning and recognition of autonomous processes provide arguments to take into account the potentialities that may emerge out of *nonlinearity*, referring to situations that cannot be interpreted as an exact continuation or extrapolation of past trajectories. The unfolding challenge for planners is to utilize existing autonomous dynamics and orient these dynamics to transition goals desired by society (Rotmans & Kemp, 2003).

In this context, the concept of 'lock-in' is coined to describe situations wherein spatial structures and political, institutional settings are adjusted in support of a single or limited number of options. As a result, regions may become highly specialized and potentially become less resilient (Simmie & Martin, 2010) and "victims of their earlier success" (Boschma & Lambooy, 1999, p. 416) especially when a spatial-functional lock-in is reinforced by a cognitive and/or political lock-in (Grabher, 1993; Hassink, 2005). The ability to deviate from a vested

development trajectory is then constrained by rigidly retaining traditional spatial patterns, policies, strategies and institutional settings that once supported economic growth in an area but do so no longer. Consequently, mismatches will emerge between entrepreneurial and societal desires and institutional settings, causing an inability to acquire other, perhaps better, suitable combinations of land uses and functions at a specific time and place (see also Arthur, 1995; Hassink, 2005). Consequently, over time a region may become confronted with lagging socio-economic development (Sharpley, 2004). Conversely, emergent self-organized initiatives by policy entrepreneurs may provide *windows of opportunity* (cf. Kingdon, 2002), meaning that indicators of alternative development trajectories are present (Geels & Schot, 2007).

2.3 A complexity perspective on nonlinear development

There is a growing awareness that spatial developments are affected by multiple interconnected and interrelated processes that take place at different levels of scale, allowing nonlinear development trajectories to emerge; this has led to the interest in exploring the scope of complexity theories in the realm of planning (Batty, 2005; Portugali, 2008; Urry, 2003; Byrne, 2005; De Roo & Silva, 2010). Complexity theories can offer a set of concepts to assist planning practitioners and theorists to enhance their understanding of interacting processes on multiple levels of scale.

The central issues in complexity theories, originally stemming from systems theory, chaos theory and evolutionary thinking (see Wolfram, 1984; Waldrop, 1992), are the dynamics and characteristics of *complex adaptive systems*. Complex adaptive systems develop neither in a predictable, linear manner, nor in a fully chaotic and unpredictable way. Instead, complex systems can be understood as continuously adapting, re-organizing and, through time, moving towards different and new equilibria (which will never be reached). Since new relatively stable states (near equilibrium) may differ fundamentally from stable states of the past, it is argued that complex systems develop in a nonlinear manner (Waldrop, 1992; Phelan, 1995).

The capacity to adapt producing nonlinear development is attributed to the process of *self-organization.* Self-organization is coined when constituents within a system creatively and spontaneously, without something or someone in control, rearrange themselves and their interactions in response to contextual dynamics and pressures (see also Kauffman, 1993; Kauffman, 1995; Heylighen,

2008; Garnsey & McGlade, 2006). Through feedback (learning, adapting) and feed forward loops (predicting, planning), complex systems are capable of constantly assessing the impact of local scale, self-organized changes on sustaining the adaptive performance of a system (Heylighen et al., 2007; Cilliers, 2005; Holland, 1995; Portugali, 2008).

Although these local, self-organized changes, brought about in response to contextual or environmental dynamics, tend to build on earlier developments – they are path-dependent – they do not necessarily imply a linear continuation of historical paths (Belussi, 1998; Van Notten et al., 2005). Patterns created in the past can be gradually changed and renewed as constituents 'adapt' their actions and activities to acquire a better 'fit' relative to one another and to take into account the possibilities and constraints stemming from the contextual environment (Holland, 1995; Cilliers, 1998; Folke, 2002). The ability to perform adaptive behaviour is a central property to deal with dynamics. Moreover, through reconfiguring and performing such nonlinear development, a complex system retains its adaptive capacities, needed for its 'survival' in the future. This implies a certain degree of restlessness resulting from a persistent process of *becoming* (De Roo et al., 2012).

2.4 Linking nonlinearity and lock-in to spatial planning and decision-making

Nonlinear development trajectories are produced through the adaptive behaviour in response to local and contextual dynamics; over time, the system transforms and moves from one relatively stable state to another. How nonlinear development trajectories unfold over time – the process of shifting from one state to another – has been further operationalized, in social contexts, under the heading of 'transitions' (Bridges, 1991; Rauws & De Roo, 2009 building on Nicolis & Prigogine, 1989; Kemp et al., 2007). A transition can be interpreted as "a set of interconnected changes, which reinforce each other but take place in different areas, such as technology, the economy, institutions, ecology, culture, behaviour and belief systems" as it is phrased by Rotmans & Kemp (2003, p. 9). Hence, transitions are driven by various interrelated processes that can take place at different levels of scale, and can vary in speed, intensity and effect (Rotmans et al., 2001). Transitions can therefore be understood as a confluence of processes occurring at multiple levels of scale, wherein patterns and relationships are changed fundamentally and irreversibly (Rauws & De Roo, 2011). As such, how development trajectories at

local and regional levels unfold towards the future is shaped partly by contextual processes that perturb in a relatively autonomous manner. This causes outcomes to become unpredictable to a greater or lesser extent, and trajectories to develop nonlinearly.

When actors adapt their behaviour, and processes interlock and reinforce one another, a particular development trajectory can gain momentum. Over time, this could give rise to structural, evolutionary or radical change. Such a transition becomes spatially manifest when new developments, land uses and concepts emerge that deviate from past trajectories. Emergent self-organized novelties represent an apparent move away from one state and towards an alternative state (which is possibly a more-or-less unknown), thereby also serving as indicators of how the development trajectory of a region may unfold in the future. However, when processes block one another, and adaptation or co-adaption is lacking, development may be constrained and transitions may be inhibited in their evolution (Martens & Rotmans, 2005).

Accepting that transitions happen relatively autonomously due to processes that cannot be fully understood and controlled, planners should also accept that transitions "cannot be managed in terms of command and control, they can be managed in terms of influencing and adjusting: a more subtle, evolutionary way of steering" (Loorbach and Rotmans, 2006, p. 5). Hence, planners are challenged to identify positive and negative 'trajectories and patterns in emergent tendencies' and are burdened with the task of "imagining ways to enhance or counteract them" (Healey, 2001, p. 153).

Stimulating the abilities to adapt and undergo transitions to manage perturbations, in the context of spatial development, is as such strongly related to the co-adaptation of spatial planning and the receptiveness in terms of politics and decision-making. Spatial development strategies can indeed hamper as well as foster nonlinearity. On the one hand, through spatial planning, room may be created for the emergence of self-organized novelties, facilitating the emergence of potential front-runners or 'weak signals' (Ansoff, 1975) of alternative trajectories in the near future. Additionally, planning strategies might be adapted as a means to generate positive feedback (Urry, 2007) or self-reinforcing feedback (Senge, 1990) to stimulate further development. On the other hand, to avoid negative impacts in retaining a particular vested development trajectory, alternative nascent trajectories may be avoided or suppressed. However, this process, also referred to as negative feedback (Urry, 2007), may result, perhaps unintentionally, in a negative lock-in situation (Arthur, 1995; Martin, 2010); here, negative externalities emerge and constraints

apply to the self-organizing behaviour of policy entrepreneurs trying to acquire a better fit given changed contextual circumstances and local characteristics.

This paper continues with an analysis of the development trajectory of the WSR to empirically illustrate the theoretical debate presented above. The analysis aims to clarify four aspects. First, the processes at play that autonomously drive spatial and economic patterns in the region to change, giving rise to societal urgencies and planning issues. Second, the circumstances in which planning contributes to lock-in. Third, the identification of self-organized novelties that indicate a potentially better fit with situations desired by society (business, civic, political). These could serve as indicators for a nascent transition and as representatives of a potential alternative trajectory that may guide planning and decision-making. Fourth, the conditions for newly emerging developments, leading to discussion about whether alternative planning strategies are needed to further foster novelties as a means to avoid negative lock-in situations. The theoretical propositions presented provide a framework of concepts that allows us to reflect on and rethink planning strategies for the WSR that are helpful to anticipate non linearity.

2.5 Development trajectory of the Wadden Sea Region

In the WSR – located in the northern part of the Netherlands, north of the cities of Groningen, Leeuwarden and Den Helder, reaching up to the Wadden Sea Islands and including one of Europe's largest tidal seas, the Wadden Sea (see figure 2) – the dynamisms of spatial and economic patterns show signs

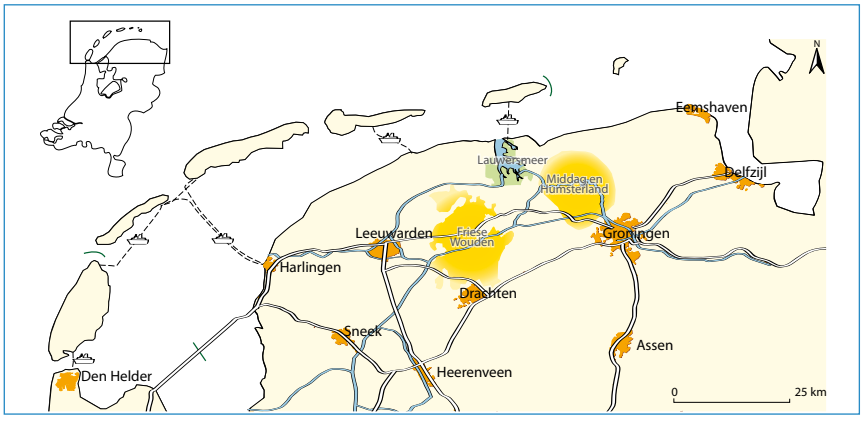

Figure 2: Overview of the northern Netherlands and the Wadden Sea Region

of fundamental change. For centuries the agricultural sector dominated the area, both spatially and economically. However, recently other land uses have emerged at the local level that revolve around quality of space, and are related mostly to leisure, recreation, healthcare and suburban and exurban living. By analyzing this transition-in-progress, we can clarify the relationship between spatial planning, lock-in and emergent nonlinearity. The analysis allows us to reflect on current planning strategies and comment on how to better manage largely autonomously emerging nonlinearity.

Local and regional dynamics in response to contextual change: nascent nonlinearity

From a nonlinear perspective, we could say that in the past the agricultural dominance in the region developed due to successful processes of self-organization receiving self-reinforcing (positive) feedback. The fertile clay soils of the coastal zone provided resources for viable farms and agribusinesses. Over time, bottom-up strategies have been applied to cultivate the area. For many centuries, people built houses on small man-made, artificial hills ('terpen' or 'wierden') as a defence mechanism against flooding, and claimed (or reclaimed) small tracts of land from the Wadden Sea to create additional land. Starting off with these local private, self-organized initiatives, the availability of advancing technologies such as mechanical pumps and the ability to construct large sea dykes allowed the reclamation of additional land. Increasing mechanization, to enable larger tracts of land to be worked with less manpower, and international competition requiring the scaling up of operations combined to provide incentives to create highly rationalized and efficient production landscapes with a rather monotonous spatial and economic character (Berkhout & Van Bruchem, 2007). In this period, spatial planning consisted mainly of landscape design to fit the conditions for development set by the agricultural sector.

The persistent focus on agriculture and the impact of radical transformations undertaken to rationalize landscapes and reclaim land has been increasingly criticized. At a contextual level, there was an increase in the societal awareness about the negative impacts of specialization and landscape rationalization on nature, ecology and landscape heritage. The 1974 Mazure and 1976 Staatsen advisory commissions illustrate this: they advocated the ecological and geomorphological uniqueness and societal importance of the tidal wetlands in the region. From the 1970s on, rules and regulations have been created by various governmental institutions to preserve the natural and ecological qualities of, in particular, the Wadden Sea, the Lauwersmeer and large parts of the Wadden Islands. The European Commission's Bird and Habitat guidelines,

and the Natura 2000 guidelines on the international level, are influential. On the national level, natural qualities are preserved through the institutionalization of 'National Landscapes' and what is known as the 'national ecological main structure'. Also some ministries have issued policy plans in response to the growing interest in nature, ecology, landscapes and heritage sites (see Nota Belvedère, Ministry of OC&W et al., 1999; Nota Ruimte, Ministry of VROM et al., 2006; Agenda Landschap, Ministry of LNV & VROM, 2008; Ministry of VROM et al, 2007). To comply with the rather top-down imposed policies aimed at protecting land uses, mainly agriculture and nature, land uses were spatially separated and enforced through strategic policy plans and zoning plans (Hartman & de Roo, 2009). Additional land reclamation became contested. Interactions were avoided as a means to mitigate environmental impacts on the one hand, and on the other hand to accommodate the interests of the agricultural sector as best as possible.

The adequacy of this approach, however, turned out to be temporary due to the impact of contextual dynamics and processes of self-organization. First, increasing international competition triggered farmers to develop bigger and highly mechanized businesses to increase efficiency. However, the possibilities for spatial transformations, such as rationalizing landscapes or reclaiming additional land to support further up-scaling to increase effectiveness, were restricted due to policies supporting land use claims related to nature and landscape heritage. As a result, the up-scaling processes through landscape transformation were inhibited in localities facing many different land use claims. Alternative sources of income gradually became necessary to sustain agribusinesses. Second, as up-scaling continued through mergers and acquisitions and mechanization increased, the number of farms and agribusinesses as well as employment in the sector declined (De Bont et al., 2007). Moreover, tensions started to emerge due to net migration to nearby cities, especially by the youth for education and employment opportunities (Van Wissen, 2009). The highly specialized localities in the region are nowadays subject to liveability issues such as population decline and vacant properties, and experience difficulties of scale to provide for public facilities (e.g. public transportation, primary schools) and to retain small enterprises.

Rigidly continuing the traditional development trajectory emphasizing two separate mono-functions, agriculture and nature, may amplify these negative effects. The perspective of a further lagging of socio-economic development of the region triggered the societal (and political) interest in alternative development trajectories. As such, development strategies that revolve around either protection (nature) or production (agriculture) became contested.

Potentialities for lock-in, and indicators for alternative development trajectories

Land uses other than agriculture and nature gradually became more important for local societies in terms of liveability and socio-economic development; however, they have been largely of marginal interest. In support of the agricultural sector, and later also to protect environmental qualities, alternative, deviating initiatives received 'negative feedback' through restrictive zoning plans and policies, kept in place by local politicians and the work of organizations (especially political lobby groups and vested-interest groups) affiliated to well-organized farmers' groups and nature protection agencies. As such, the spatial-functional development trajectory that proved successful in the past was reinforced (gaining positive feedback) politically and administratively. Given the perceived negative socio-economic externalities, rigidly holding on to vested planning strategies and continuing this trajectory of traditional development in a linear manner reinforces these effects. By not adapting to create room for novelties (self-organized or otherwise) and alternative development trajectories, conditions may be created that result in the region lapsing into a lock-in situation.

As this perspective slowly became reality, the receptivity towards alternative trajectories increased. Locally, entrepreneurs were able to convince and tempt authorities to introduce new types of novelties (self-organized or otherwise): from individuals starting bed and breakfasts or hotels to larger multinational organizations exploiting holiday villages. Also, the wide availability of the internet allows for home-based businesses related to art, IT, consultancy and other 'cottage industries'. Contextual developments such as the emergent societal interest in landscape heritage, nature and ecology as well as the increasing welfare levels, available free time and improved mobility changed lifestyles and opened up local opportunities for development related to leisure, recreation and tourism (cf. Phillipson et al., 2004). These initiatives were considered relatively compatible with heritage, nature and particular landscapes that originated in the past. The extent to which the initiatives find political support from local communities, however, varies strongly throughout the region.

On the islands in the Wadden Sea, the agricultural sector has not been as prominent as on the mainland; the potential of characteristics such as sandy beaches, picturesque villages, nature and ecology for tourism, leisure and recreation had been recognized for decades, and is nowadays providing the largest source of income (Raad voor de Wadden, 2008). In areas where multiple land use claims coincide, agriculture is unable to up-scale; in this

case, non-agricultural or semi-agricultural farmers as well as urbanites or ex-urbanites start businesses related not only to tourism, recreation, local produce and organic farming but also to health care, wellness, energy production and cottage industries (Overbeek et al., 2006, Berkhout & Van Bruchem, 2008). This is most manifest in the areas that have recently been declared National Landscapes, namely 'Middag en Humsterland' and the 'Friese Wouden' (see figure 2). Moreover, villages surrounding the larger towns, such as Winsum and Zuidhorn near Groningen, are increasingly perceived as attractive places for living, and experience an influx of urbanites (Van der Schuit et al., 2008). In the surrounding municipalities they find space, tranquillity and characteristic landscapes, villages and farm houses that allow them to adopt a more rural lifestyle (Hermans & De Roo 2006; Brouwer et al., 2007).

Although this indicates a fundamental difference compared to the traditional development trajectory of the region, especially on the mainland, exceptions to either nature or agriculture are still occasionally 'allowed' politically and administratively as a result of vested interests, planning strategies and routines. A transition is constrained in its development. The transformations around the Lauwersmeer (Lauwers Lake) illustrate this (see figure 2). Here, the availability of nature, characteristic landscapes, water, tranquillity and open space triggered developments related to leisure, recreation, living and healthcare, such as the Esonstad holiday village, the Lauwersee villa park and the care and recreational facilities of Lauwershage. To avoid negative impacts, developments are limited to a few locations, mainly on the fringes in between nature and agricultural areas. As a result, the density of buildings is relatively high and the connectivity with surrounding areas is deliberately limited. From a socio-economic perspective, some developments operate therefore as stand-alone entities. Esonstad, for example, came with a new restaurant, grocery store and several shops, whereas retailers in nearby villages, important as they are for local inhabitants, liveability and social life, struggle to keep businesses open.

The nascent nonlinear development trajectory gives rise to controversies in terms of spatial planning and decision-making. Promoting relatively monofunctional areas in the interest of nature protection and agricultural development through spatially separating land uses may limit the development options and potential for leisure-related developments. Promoting multifunctional land use, however, may impede the progress of the agricultural sector and have a negative impact on the services and amenities provided by landscapes and nature. Such controversies emerge when land uses are to some extent competitive and not fully compatible. Consequently, these situations

require decisions to be taken about the course of the development trajectory and the planning strategies applied.

Emergent nonlinearity, planning strategies and decision-making issues

Traditional forms of agricultural production and nature protection generally benefit from as little interference as possible from other types of land uses; however, different conditions for development apply to newly emerging land uses that revolve around a leisure-related usage of landscapes. As identified above, these rely on environmental and landscape amenities ('spatial qualities') such as characteristic landscapes, cultural heritage, nature, water and the sense of tranquillity. To retain these aspects, clearly both the viability of ecosystems as well as a viable agricultural sector are important. The latter is considered important to maintain local identity in terms of characteristic landscapes and cultural and built heritage (see Hubbard and Gorton, 2011), and subsidy schemes have been put in place to do so. Moreover, leisure-related activities rely not only on their presence but also on the quality and ability to experience and access these place-based qualities.

Controversially, when compared to traditional development trajectories and planning approaches, interaction and multifunctionality become increasingly of interest also to nature protection and agricultural development. For the agricultural sector, the possibilities for up-scaling have become limited. In response, farmers tend to take up organic and extensive farming to increase the quality of their produce (adding values) and are taking up secondary activities that are often related to tourism, recreation and leisure. Nature areas as stand-alone, monofunctional areas are also contested. First, there is a debate evolving about whether people to some extent 'should' have the possibilities to experience nature (compare this to the UK's 'freedom to roam'). Second, landscape and heritage have become economically exploitable assets, i.e. they have the capacity to generate income and employment. Third, due to the financial crisis and government cutbacks, alternative sources of income are needed to maintain heritage and ecosystem services.

Gradually, a transition is emerging, triggered by a set of interlocking processes (e.g. internationalization, environmental awareness, increasing welfare and free time, changing lifestyles, local self-organized innovations). In this context, leisure-related modes of occupancy become increasingly important, alongside production and protection, for the spatial and socio-economic development of the region. In terms of planning strategies, it is not so much a question of

whether the focus on either protection or production needs adaptation, but how to adapt to enhance positive effects and mitigate negative consequences.

Adapting planning strategies to manage nonlinearity

In the WSR, traditional planning strategies have provided the region with a certain 'degree of robustness' in relation to spatial development. Planning strategies, being reinforced politically and through the work of vested-interest organizations, stimulated almost solely agricultural development and the protection of nature. As such, the region became rather unreceptive to alternative development trajectories. Hence the danger for the region to lapse into a lock-in situation. However, the impact of contextual dynamics gave rise to tensions (environmental and later socio-economic); this revealed the need for a greater 'degree of flexibility' in spatial development and planning strategies to mitigate negative socio-economic externalities and manage nonlinearity. In response, receptivity for alternative developments increased, i.e. the awareness to be able (or to become able) to anticipate relatively autonomous contextual dynamics.

We have observed that emergent self-organized developments in the WSR increasingly revolve around 'spatial qualities' that provide localities with attractive features for tourism, recreation, leisure and living. If this represents a future development trajectory, it seems sensible to 'qualitatively embed' new development into a region: not only to mitigate as much as possible the negative impacts on the characteristics that represent the qualities of a place, but also to enhance these characteristics, ensuring that novelties avoid becoming stand-alone 'parasites' that live off these characteristics without any contribution.

This represents a fundamentally different planning approach to spatial development. The call for such approaches to spatial development is increasing. Some housing types are contested (referred to as 'white mould') because their design is too generic and monotonous, lacking identity and architectural finesse (Abrahamse, 2002). It is argued that this has a negative impact on the 'spatial quality' of a place, and hence liveability and a sense of place or belonging, but also property values, attractiveness for visitors, etc. Similarly, the term 'spatial cluttering' is used to refer to the negative impact of monotonous office buildings, industries and business parks. These examples illustrate the nascent development trajectory entailing new conditions for development. The consequences for planning are that new developments need to be assessed

not only on their functionality, effectiveness and contribution to employment but increasingly also on subjective aspects relating to spatial quality, such as their design, aesthetics, the impact on landscape design and local identity. For planning, this encompasses a transition from approaches that revolve around functionality per se to functions integrated well in their spatial environment in terms of quality.

2.6 Reflection

The WSR case illustrates the importance of at least some capability to manage nonlinearity. The analysis has shown that a combination of changing circumstances and socio-economic issues revealed a transition in progress, wherein planning strategies appeared to be too robust and inflexible. This is illustrated by the negative socio-economic effects resulting from the monotonous spatial and economic structures created to support the need for a highly effective, mechanized agricultural sector. Linearly continuing the development trajectory may create an even more monotonous and specialized landscape that becomes increasingly less suitable for alternative trajectories. As such, the region could lapse into a lock-in situation.

Furthermore, due to a relatively strong restrictive planning regime, developments that deviated from vested trajectories emerged generally not because of, but in spite of the regime (cf. Slee, 2005). This situation indicates a reactive approach to dealing with dynamics. A more proactive approach aimed at stimulating and assessing the potentialities of self-organized initiatives, however, could anticipate emergent nonlinearity. A transition process can then become more *fluid*; instead of a collapse, this could involve a gradual process of moving from one state to the other through iterative adaptation to changing circumstances.

The case of the WSR illustrates also that the ongoing transition encompasses both quantitative and qualitative change (cf. Hartman et al., 2011). Quantitative change refers to the declining importance of one type of land use (or sector) relative to others, which may increase in importance, in terms of spatial and socio-economic development. These fluctuations may come about relatively autonomously as contextual circumstances change and reorienting a development trajectory may be (or become) beneficial. For spatial planning this can be interpreted as not to fully specialize in a single trajectory but to keep multiple options open (for example specialized diversification [Pike et al., 2010];

smart specialization [McCann & Ortega-Argilés, 2011]; related and unrelated variety [Frenken et al., 2007]; pluripotency [Hartman et al., 2011]).

Qualitative change refers to differences in the characteristics of land uses, and differences in conditions for development that may apply. The case study results show that nature and agriculture generally benefit from sectoral approaches and minimal interaction with other types of land use. Connectivity with other functions is kept low, while this connectivity is a condition for emerging properties and developments. Usages such as tourism, recreation and suburban and exurban living tend to depend on and benefit from multifunctionality and integrative approaches that revolve around spatial quality. To anticipate such a shift requires alternative approaches to spatial development that are adaptive in character (cf. Hassink, 2010). Adaptivity, including adaptive planning strategies, calls for a combination of political receptivity (an open stance to change) and administrative reflexivity (reflecting on, assessing and adapting plans, strategies and institutional settings).

Emergent nonlinearity puts planners in the position of *transition managers* who aim to guide regions to go through transition processes by ensuring that those regions have the adaptive capacity to do so. During a transition, controversies are likely to emerge when land uses are not compatible or complementary, and decisions need to be taken about the course of the development trajectory. Planning strategies should therefore include a degree of robustness: protecting regions from negative impacts and undesirable consequences that may impede their development (a strategic vision may hereby provide a basis for assessment of self-organized novelties). Simultaneously a degree of flexibility is required: enabling regions to agilely shift their focus in order to benefit from emergent alternative development trajectories. Here, stimulating novelties can contribute to the diversity of a place, opening up multiple potential future paths. Thus, planners are burdened with the task of guarding the robustness of a region while simultaneously stimulating flexibility when changed circumstances require it (see also De Roo & Silva, 2010; De Roo et al., 2012; Kuindersma & Boonstra, 2010).

For both robustness and flexibility, deriving from the complexity perspective presented in this paper, it is crucial to monitor contextual dynamics (e.g. technology, economy, demography, climate, nature and ecology, politics), and assess their impact on the local and regional levels. Some contextual dynamics may be relatively slow moving (Geels, 2002) and can be 'trend watched' (e.g. demographics and climate change). At the same time, it is important to simulate and monitor self-organized bottom-up initiatives and assess whether

they represent an alternative trajectory that potentially has a better ‘fit’ with emergent trends and the present or future situation desired by society. The persistency of partly autonomous multi-level dynamics implies that balancing flexibility and robustness is a key challenge for planners, spatial designers and decision-makers to manage transitions, and as such avoid negative lock-in situations.

3

Planning for peri-urban development: towards guiding dynamic peri-urban areas in their evolution[3]

Abstract

This article aims to develop an enhanced understanding of the implications that dynamic peri-urban areas raise for peri-urban planning. A complexity perspective is introduced to analyse how peri-urban Vlietzone and Midden-Delfland develop to become integrated into the Greater Hague Region, the Netherlands. The case study shows that both peri-urban areas are in the process of changing fundamentally in terms of structure and function. Whereas strategic spatial planning strongly shapes development paths, peri-urban development is also shaped by the interplay of actors at multiple governance levels and processes at multiple spatial scales. From a planning perspective, many of these processes are difficult if not impossible to control completely and affect peri-urban development in a relatively 'autonomous' manner. The consequence is that guiding peri-urban areas in their evolution requires the co-evolution of strategic planning. In this context, the article draws attention towards the importance of developing a situational understanding of peri-urban dynamics.

Keywords

Complexity, peri-urban, strategic planning, urban region

3 Hartman, S. & De Roo, G., "Managing the peri-urban: towards a situational understanding of peri-urban development", submitted to an international journal.

3.1

Introduction

When the urban and rural intertwine, overarching urban regions emerge and clear demarcations between the traditional urban and rural tend to blur over time (Douglas, 2006; Hoggart, 2005). Improvements in terms of infrastructure, transportation and mobility enhance connectivity between localities and enable the dispersal of urban land uses over larger geographical scales (Hudalah et al., 2010). Rural areas within or near urban regions could provide natural and landscape amenities, and as a result experience an influx of additional land uses and activities related to recreation, tourism, leisure, care, wellness, and suburban and exurban living (Cadieux & Hurley, 2011; Gallent et al., 2004). The disappearing urban-rural dichotomies are often replaced by more irregular, fragmented landscape patterns known as peri-urban areas (Davoudi & Stead, 2002; Sieverts, 2003).

The peri-urban is characterized by a mixture of land uses associated with both the urban and the rural (Bryant, 1995; Friedmann, 1996; Hoggart, 2005; Overbeek & Vader, 2003). Moreover, peri-urban areas are dynamic areas, sometimes undergoing rapid transformations (Webster, 2002), where formerly predominantly rural areas change functionally, economically and socio-culturally because of altering relationships with nearby urban cores (Hidding & Teunissen, 2002). Qviström (2007) therefore describes the peri-urban as a transitional area with a mixture of urban and rural activities waiting to be integrated into the urban system (Zhao, 2013). However, the development paths of peri-urban areas – how places develop over time – do not necessarily progress in a gradual and uniform manner (Smith, 2014).

How peri-urban areas develop over time differs because of their diverse and dynamic nature, but also because the peri-urban is subjected to multiple diverging perceptions that relate to a variety of actors (Westerink et al., 2013; Rauws & Van Dijk, 2013). Consequently, it can contain a diversity of functions ranging from nature to housing, out-placed industries, agriculture, leisure and recreation facilities, and infrastructure (Allen, 2003; Hidding, 2006). These differences are the consequence of the varying intensity and speed of the processes driving the dynamics, and are shaped by path dependencies (cf. Markusen & Schrock, 2006), institutional structures (Mattingly, 1999) and governance frameworks (Webster, 2002). In this article, we further explore in-depth how strategic planning shapes peri-urban development. The purpose is to develop an enhanced understanding of the implications that dynamic

peri-urban areas raise for planning and governance, in order to better guide peri-urban areas in their evolution.

In the context of dynamic peri-urban areas, the adequacy of technical-comprehensive planning strategies which aim at the command-and-control of peri-urban development paths are contested (Allen, 2003; Gallent, 2006; Rauws & De Roo, 2011; Tacoli, 2003). In this article we therefore pursue an understanding that embraces the complexities and uncertainties inherent to the processes driving peri-urban development. To do so, we draw on strategic spatial planning perspectives which build on theories of complex adaptive systems (De Roo et al., 2012; Portugali, 2011). We adopt the perspective that planning objects such as cities, peri-urban areas or urban regions can develop nonlinearly: changing fundamentally over time in terms of (e.g. socio-economic, spatial-morphological) structure and function. This relates to the rise of new land uses and the attribution of alternative meanings and values to places (Hartman & De Roo, 2013). Insights from theories of complex adaptive systems are operationalized for peri-urban areas to analyse how these integrate into a larger urban region over a period of time. This conceptual framework is used to analyse the forces that drive the evolution of peri-urban areas, to examine how planning shapes peri-urban development paths, and finally to discuss the co-evolution of planning in response to peri-urban dynamics.

The urban region of The Hague, the Netherlands, provides interesting cases for this research. In this region cities, villages and their surrounding countryside interconnect in various and fuzzy ways. Peri-urban areas, for their part, are gradually integrating into the physical, organizational and institutional fabric of the wider Greater Hague Region. Our analysis focuses on peri-urban Midden-Delfland, which is evolving toward becoming a metropolitan 'leisure landscape', and peri-urban Vlietzone, which is on the brink of being urbanized. Since many planning authorities are confronted with dynamic peri-urban areas in the process of integrating into larger urban regions, the insights presented in this article can support these authorities in guiding peri-urban areas in their evolution.

The article consists of two main parts. In the first part, theories on complex adaptive systems are discussed and operationalized to assemble conceptual support for analysing peri-urban development. In the second part, the development paths are discussed of peri-urban Vlietzone and Midden-Delfland, located in the vicinity of the city of The Hague, the Netherlands. In particular we examine how planning shapes the development path of these peri-urban areas and elaborate on how planning co-evolves in response to peri-urban dynamics.

To conclude, we discuss implications for the governance and planning of dynamic peri-urban areas.

3.2 Peri-urban dynamics, complexity theories and development paths

The erosion of urban-rural dichotomies and the rise of peri-urban areas and urban regions are driven by in terlocking processes at multiple levels of scale (Hidding et al., 2000; Rauws & De Roo, 2011). These include globalizing processes, such as technological innovations in transportation and communication, which trigger the provision of infrastructure and stimulate mobility. This frees people from necessarily having to live near their place of work and enables people to distribute themselves over larger geographical areas. It thus stimulates suburban and exurban living immediately outside, but still in the vicinity of the urban workplace and urban facilities (Bruegmann, 2005; Fisher, 2003; Simon, 2008). Moreover, the combination of technological progress, globalization, and the increase in welfare and free time stimulates local land uses and activities related to tourism, leisure and recreation. These factors illustrate that peri-urban development is driven and shaped by a large number of actors, events and processes on multiple levels, which are constantly interacting and adapting to each other. As a result, peri-urban areas are persistently dynamic, on the basis of which we can develop the hypothesis that it is difficult for planning authorities to command and/or control their development paths.

In this context, theories of complex adaptive systems can offer conceptual support and provide an enhanced understanding of peri-urban dynamics. Complex adaptive systems theories are increasingly being related to dynamic socio-spatial systems such as peri-urban areas, cities and urban regions, as well as enhancing planning strategies (Allen, 1997; Batty 2005; Byrne, 1998; De Roo & Silva, 2010; De Roo et al., 2012; Marshall, 2009; Portugali, 2008, 2011; Shane, 2006). In complexity theories, the notion of complexity relates to the persistent interactions between the constituent parts which give rise to circular causality, whereby cause-and-effect relationships can be difficult to reveal. The consequence is that system dynamics cannot be understood in a reductionist manner or described in their entirety (Cilliers, 2005). This is distinct

from classical, Newtonian understandings of complexity, which assume that phenomena can be reduced to their simplest components and described in a complete, objective and deterministic manner (Heylighen, 2008). Accordingly, rather than focussing on or predicting the exact outcomes of system dynamics, complexity theories tend to address mechanisms that underlie their dynamic nature (O'Sullivan et al., 2006). Let us briefly discuss key insights from complexity theory and elaborate on how these are useful to peri-urban development and planning.

Complex adaptive systems are open systems because they are embedded in a dynamic contextual environment to which they constantly interact (De Roo, 2012). This could be seen, as Byrne (2005) explains, that complex adaptive systems "are nested in, have nested within them, and intersect with other complex systems' and emphasizes that this does not equal hierarchy because interaction 'runs in all possible directions, not just top down" (p. 205). For socio-spatial systems such as cities and peri-urban areas these include amongst others socio-cultural, technological, economic, institutional and political systems (Martens & Rotmans, 2005). Complex adaptive systems feature the capacity to persistently adapt to changing contextual circumstances. In turn, the notion co-evolution is used to describe the process when adaptation in one system triggers adaptation in another, and vice versa (Gerrits, 2008).

The adaptive capacity of complex systems relates to the ability of constituent parts/agents of a system to alter their characteristics, relationships and interdependencies over time (Cilliers, 2005; Heylighen, 2001; Garnsey & McGlade, 2006). Out of these local interactions and adaptive responses, macroscopic structures are produced, a development process for which it is difficult to tell whether something or someone is in complete control (Allen, 2012). The process of adaptation means that a system's structures and functions may alter and fundamentally transform over time (see Lash, 2003). Structures created in the past, however, do shape system characteristics and, in turn, enable and/or constrain particular paths into the future (Manson & O'Sullivan, 2006; Martin & Sunley, 2007). The development process of altering and transforming the structures of complex systems is also referred to as a transition, and is conceptualized as a shift from one relatively stable structure to another (Geels, 2010; Rotmans, 2001). In other words, the development paths of dynamic, adaptive systems can evolve nonlinearly, fundamentally changing in structure and function, as a result of their openness and the persistent interactions between their constituent parts (cf. Hartman & De Roo, 2013).

3.3

A complexity perspective on peri-urban development paths

In this section we argue that conceptualising peri-urban areas as complex adaptive socio-spatial systems can provide analytical leverage on the evolution of peri-urban development. First, peri-urban areas can be conceptualized as 'open' and 'nested'. Peri-urban areas are constantly interacting with their contextual environment. For instance, it is amongst others affected by (multilevel) systems of politics and institutions, global economic systems and the dynamics of larger scale socio-spatial systems such as the urban region of which they are part. Second, at the local peri-urban level individuals, organizations and institutions are constantly responding to changing circumstances. Changing circumstances can result in new development opportunities and urgencies to act, and therefore provide reasons to adapt and depart from the development paths of the past. When peri-urban development is affected by multiple actors, process and governance levels, it could be(come) difficult to tell whether someone or something is in complete control. Third, peri-urban areas may change over time in terms of structure and function (e.g. socio-economic, spatial-morphological), and thereby exhibit transitions. In other words, the peri-urban can shift from one relatively stable stage to another. Following the argument that peri-urban areas are waiting to be integrated into larger urban regions, developed in Qviström (2007), we can distinguish three stages: the urban-rural divide, the urban-rural connection and urban-rural integration (cf. Gieling & De Laat, 2004; Shane, 2005; 2006). This set of three consecutive stages of urban-rural relationships refers to the emergence of peri-urban areas and the subsequent process of blending them into urban regions. It highlights that the distinction between the urban and the rural becomes increasingly blurred over time, which helps us to characterize and analyse how peri-urban development paths evolve over time.

- The urban-rural divide concerns an unambiguous functional and morphological distinction between the urban and rural. This is most apparent, for example, in medieval cities with defence walls clearly demarcating the city from its surroundings or where densely populated urbanized areas and rural, agricultural areas alternate abruptly and develop largely back-to-back, independent of each other. In this case, a peri-urban is largely non-existent.
- The urban-rural connection relates to the expansion and sprawl of cities. This was fuelled by the industrial revolution, technological innovation, specialization and production efficiency, where employment clustered

in cities, which grew exponentially. Fostered by improvements to infrastructure, transportation and mobility, previously established urban-rural dichotomies or restrictions such as defence constructions were rendered obsolete. In this stage, the peri-urban contains multiple rural as well as urban-oriented functions.

- The urban-rural integration draws on the dispersal of functions and activities as well as cultures and lifestyles over large areas, well beyond the urban core. It refers to situations where cities and their nearby countryside become fused. This could include urban development, but could also result in a patchwork of distinct but interdependent places which functions more or less as a cohesive entity (Scott, 2004; Tacoli, 2003). Hartman et al. (2011) argue that, for instance when peri-urban areas are transformed into urban parks, a gradient from high to low dynamic urban places becomes a more valid distinction than the traditional urban versus rural.

These three stages seemingly suggest that all peri-urban areas will become integrated into the fabric of their surrounding urban regions at some point, due to the interplay of processes driving development. However, it is not a fixed model predicting specifically when integration will happen. And, it does not predict beforehand how the evolution of peri-urban development paths becomes spatially manifest. In this article, the set of stages mainly serves an analytical purpose. It structures our case study research – as is explained in the next section – and it allows us to discuss how the complexity theory perspective offers analytical leverage on peri-urban development. Because the set of stages is not bound to a particular scale of peri-urban area, being applicable to areas which differ in size (as is shown in section 4 and 5), it is therefore also useful for analysing peri-urban dynamics in different urban regions.

In the subsequent sections we discuss how the complexity framework presented above contributes to analysing processes that drive the evolution of peri-urban development paths. The complexity perspective provides conceptual support for understanding the mechanisms behind peri-urban areas integrating into larger urban regions. For instance, the notion of co-evolution is used to discuss the interactions between dynamic peri-urban areas (a socio-spatial system) and changes in (the system of) spatial planning. As our case study findings will show, spatial planning interventions may strongly shape peri-urban development paths but are at the same time unable to render peri-urban areas completely immune to dynamics due to the open, nested character of the peri-urban and the multilevel, complex nature of processes driving peri-urban development. In turn, forces driving peri-urban development may trigger actors to develop and/or adapt their strategic planning perspectives on spatial development. Finally, this

allows a discussion on the co-evolution between the development of peri-urban areas and spatial planning.

3.4 Analysing development paths of peri-urban areas in the GHR

The complexity perspective and the three stages (divided-connected-integrated) presented above served as a guide for analysing the forces driving the evolution of peri-urban development paths. As such, we analysed the evolution of peri-urban areas in time (examining the impact of path dependencies on the present and future), in context (interlinking events and adaptive responses at the local, the peri-urban system and the contextual environment), and considered the interplay between multiple dimensions (addressing spatial, organizational and institutional aspects) (cf. Hartman et al., 2011). This approach allows discussing the co-evolution of the development of peri-urban areas and spatial planning and, and articulate how this interplay shapes peri-urban development paths.

This article analyses peri-urban Vlietzone and Midden-Delfland, both situated within the administrative borders of the Greater Hague Region (GHR), the Netherlands (see Figure 3). The analysis focuses on forces driving the integration of the peri-urban areas into the wider GHR, and on factors that shape how this integration is becoming spatially manifest. The analyses cover the post-Second World War period from the 1950s and onwards. As such, the analyses are largely limited to the shift wherein urban-rural connections are enhanced and the state wherein the peri-urban areas are being extensively integrated into the GHR. Qualitative research methods were selected as these allowed us to clarify how and why interactions between peri-urban dynamics and spatial planning occur. This approach fit the paper's aim as it allows for a discussion on planning implications for guiding peri-urban areas in their evolution.

A document analysis was performed first, structured by the three stages (divided-connected-integrated), to identify key events and sketch the outlines of the peri-urban development paths of Vlietzone and Midden-Delfland (cf. Chell, 2004). This provided a detailed insight into the characteristics of the peri-urban areas and how these changed over time. Subsequently, 18 semi-structured interviews were conducted. On the one hand to cross-check and supplement findings in secondary sources and on the other hand to reflect on how spatial planning interventions shape peri-urban development paths, and to

Figure 3: The location of Vlietzone, Midden-Delfland and the administrative borders of the GHR

examine whether planning is co-evolving in response to peri-urban development. Interviewees were professionals in the field of planning and policymaking, local politicians, members of NGOs, real estate developers and social scientists. The interviewees were selected on the basis of their knowledge about or involvement in peri-urban development and planning interventions. Snowball sampling was also used to recruit interviewees who could provide in-depth and comprehensive insights. The research findings are discussed in the following sections.

3.5 Peri-urban Midden-Delfland integrating into the GHR

The peri-urban area Midden-Delfland is located between The Hague, Rotterdam and Delft (Figure 3) and nested within the Greather Hague Region (GHR). In contrast to surrounding areas, Midden-Delfland is not urbanized or otherwise built-up. However, it is gradually transforming from a predominantly rural, agricultural area to a leisure-oriented metropolitan park (cf. Hof van Delfland Raad, 2010). To date, it remains a distinct socio-spatial system nested in the larger system of the GHR. Over the last decades the area is more extensively integrating into the GHR, a process that is driven by changing contextual circumstances and local adaptive responses. As a result, it is gradually changing in terms of structure and function. In this section we analyse the forces driving and shaping this transition-in-progress.

Using the complexity perspective as a guide for analysing the evolution of Midden-Delfland, we identified how a range of factors at multiple governance levels, including spatial planning, affect development options and thereby shape the development path of peri-urban Midden-Delfland. This analysis brings us to the conclusion that planning for peri-urban development involves addressing (potentially) volatile situations to which planning needs to co-evolve. The findings are grouped in three phases, each marking a distinct period in the integration of Midden-Delfland into the GHR.

Phase 1: Urban growth and macro institutional interventions

The reconstruction period after the Second World War is illustrative for Midden-Delfland being nested within a multilevel socio-spatial system that includes other nearby areas and the larger GHR. Developments within this system affect the ways in which the development path of Midden-Delfland is evolving. Many areas within the GHR experienced rapid urban growth after the war. This process was reinforced by the affordability of cars, infrastructure development, and the enhanced (auto)mobility. Figure 4 shows the expansion of nearby urban cores and large-scale greenhouse development in the area surrounding Naaldwijk. However, the fact that Midden-Delfland is not urbanized, used for greenhouses or otherwise built-up, as has been the case in surrounding areas, relates to decisions that were made topdown in governance systems of national politics and institutions.

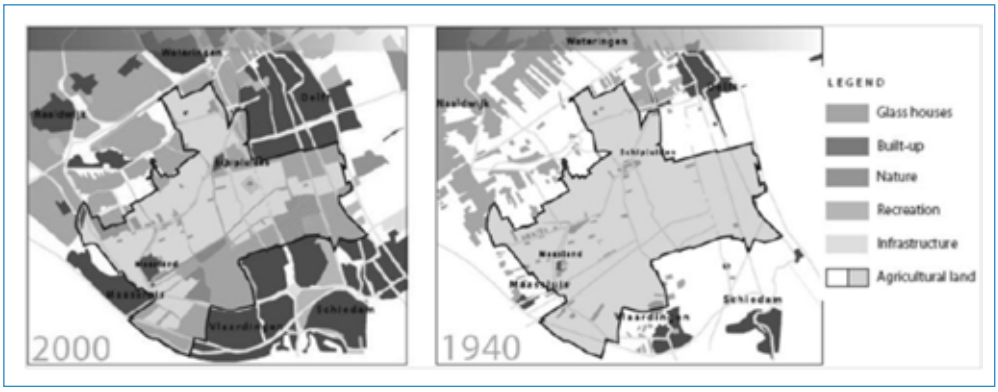

Figure 4: Dynamic spatial context of Midden-Delfland (Municipality of Midden-Delfland, 2005)

The development path of Midden-Delfland has considerably been shaped by a set of strategic planning interventions. Over time, in response to rapid urban growth –occurring throughout the Netherlands near large cities – a macro

institutional framework emerged that strongly shaped the spatial development of Midden-Delfland. It quite successfully prevented urbanization and greenhouse development and preserved a predominantly rural, agricultural area.

- First, in 1958 the 'Westen des Lands' committee of the Netherlands state planning agency proposed to establish 'buffer zones' (comparable to greenbelts) to curtail the potential of excessive urban sprawl. Accordingly, as a top-down intervention the Dutch national government declared Midden-Delfland a buffer zone to prevent The Hague, Delft and Rotterdam from merging and forming a monotonous urban field. In addition, the committee argued that a buffer zone would ensure open space for agricultural, recreational and leisure purposes.
- Second, the Dutch national government's spatial planning schemes of 1960 and 1966 required that several cities and villages throughout the Netherlands should be declared 'growth centres' to concentrate urbanization into predefined places. Zoetermeer in the GHR is one such centre (Figure 3). Growth centres permitted keeping the landscape open, meeting the demand for housing relatively quickly and controlling mobility by providing efficient public transportation.
- Third, in 1977 the national government enacted the 'Reconstruction of Midden-Delfland Act'. While the Act's force was limited to a period of 30 years, until 2008, it provided for this period the financial resources and legislative support to sustain the region's openness, to strengthen its agricultural sector, heritage and cultural-historical values, and to support recreational uses and touristic development (Van Rij et al., 2008).

This top-down approach to commanding and controlling development paths fits the technical-comprehensive tradition in Dutch planning, the dominant planning paradigm at that time (Faludi & Van der Valk, 1994). The financial, administrative, political and legislative support enabled privileging some land uses over others, preventing the urbanization of Midden-Delfland. These planning interventions would strongly shape the development path of Midden-Delfland. However, as is discussed below, these could not render the area immune to dynamics, due to the open and nested character of the peri-urban and the impact of contextual processes.

Phase 2: Forces that change the structure and function, and planning adaptation

Interviewees highlighted that major driving forces for the integration of Midden-Delfland into the GHR relate to the declining economic position of the

agricultural sector, the increasing societal relevance of urban green spaces and the emerging societal interest in the 'leisure economy' (tourism, recreation and leisure). These driving forces are development processes that take place amongst others in socio-cultural and economic systems that are part of the peri-urban system its contextual environment. Actors that are part of, or intend to govern, the peri-urban were unable to influence such processes, but because peri-urban areas are open systems these actors were confronted with implications to which they needed to adapt. As a result of these interactions, and in line with theories on complex adaptive systems, Midden-Delfland engaged in a transition process, gradually changing in socio-economic structure and serving a new function in the GHR.

First, the economic viability of the agricultural sector declined due to difficulties in acquiring a competitive position in international markets. The opportunities for land consolidation or expansion to generate economies of scale in Midden-Delfland were increasingly restricted in favour of preserving landscapes, cultural heritage and nature. As a result, farmers were to a certain extent forced to look for alternative sources of income. Second, the interest in tourism, leisure and recreation increased strongly in the Netherlands from the 1950s onwards, also because of the increase in welfare and free time (cf. Woestenberg, 2009). The openness and relative proximity to urban cores made Midden-Delfland suitable for leisure-related land uses and activities. The demand for the construction of recreation facilities put pressure on the urban-rural divide that characterized Midden-Delfland.

In this context, an emphasis solely on agriculture would not have been sustainable from economic or societal perspectives. Midden-Delfland its spatial structure (open, green and rural), however, also offered development opportunities, particularly in combination with the increasing societal interest in leisure-related land uses and activities. In turn, the emerging leisure economy offered opportunities for resolving planning issues related to the declining viability of the agricultural sector. Examples include the increasing pressure on maintaining characteristic buildings, landscapes, landscape elements, nature, and ecology. In response to this changing situation, farmers and other entrepreneurs (were allowed to) introduce (side-)activities in tourism, recreation, education and care.

The above highlights that the transition from an agricultural to a leisure-oriented economy is the result of the interplay between actors and processes in (sub)systems at multiple scales. It indicates that the development path of Midden-Delfland is in the process of evolving nonlinearly: from an (quantitative)

orientation on agricultural production to an (qualitative) orientation on landscape quality and the leisure-economy. This transition gained momentum partly due to entrepreneurs adapting to changing contextual circumstances and engaging in processes of self-organization, establishing businesses and activities relating to the leisure economy. Furthermore, this transition is reinforced by the following changes in systems of planning and institutions:

- Government agencies constructed recreation and leisure facilities such as football pitches and tennis courts – in line with Reconstruction Act and as a part of the reconstruction. The facilities were deliberately constructed close to the edges of nearby cities because ad hoc development could harm the area's characteristics and trigger further urbanization (cf. Bervaes, 2001).
- A landscape fund has been established to compensate farmers for the maintenance of nature and the provision of educational and recreational services.
- A coalition of municipalities, provinces and state ministries financially support the removal of scattered and outdated greenhouses.
- The municipality of Midden-Delfland has become part of the international 'Cítta Slow' network. The label 'Cítta Slow' reflects that actors within the region are committed to preserving and enhancing the area's small-scale and local environment, heritage, products and cultural qualities. This label is used for branding and marketing purposes.
- The municipal borders within the GHR were adjusted in 2004, which proved an important stimulus for avoiding urbanization. Areas with uniform spatial characteristics (urbanized, greenhouses or open) became institutionalized units, in this case municipalities, implicitly reconfirming as well as reinforcing their spatial differences.

On the one hand, these measures steer peri-urban development in the sense of privileging and supporting particular land uses (tourism, recreation, leisure, nature and agriculture) over others (industry, offices, housing and greenhouses). On the other hand, the policy attention towards the open, green, leisure function of Midden-Delfland indicates the co-evolution of planning in response to changed circumstances. The result is a further progressing integration of Midden-Delfland into the fabrics of the GHR. This is a complex process in which it is difficult, if not impossible, to tell whether something or someone is in control. The result is that Midden-Delfland is evolving gradually into a leisure-oriented metropolitan park as a result of a set of autonomous contextual changes, local impacts and a combination of planned interventions by institutions and self-organized responses by entrepreneurs.

Phase 3: Changing institutional framework and planning adaptation

The macro-institutional system is clearly shaping the spatial development of Midden-Delfland. Hence, the expiration of the temporary 1977 Reconstruction Act in 2008 could have had major consequences. The expiration meant a reduction of financial resources to invest in nature and leisure as well as in legislative support for avoiding urbanization and greenhouse development. Changing the institutional system could therefore alter development options and present new development paths to Midden-Delfland. In this context, interviewees highlighted that the expiring Reconstruction Act was accompanied by the concern that Midden-Delfland would not be further developed as a leisure-oriented area complementing the development of the predominantly urbanized GHR region. This concern relates to the underlying rationale that without the reconstruction Act, Midden-Delfland would be more exposed to market forces and would become urbanized due to the strategic location near urban cores and relatively low land prices.

The expiring Reconstruction Act and the ambition to retain the open character of Midden-Delfand triggered a series of adaptive response by local actors, that gave rise to the emergence of an alternative governance framework. The project 'Mooi en Vitaal Delfland' [Beautiful and Vital Delfland] was initiated, chaired by a local politician from the municipality of Midden-Delfland and the minister of Agriculture, Nature and Food Quality. This project builds on the legacy of the Reconstruction Act, by making use of institutional memory and the established actor network. It led to the municipal and provincial representatives being united in the Council of the 'Hof van Delfland' [Courtyard of Delfland]. The council aims to improve accessibility and enhance connections to regional infrastructure, nature and water networks. Enhancing connections between Midden-Delfland and other un-urbanized areas reduces fragmentation and contributes to a continuous nature and leisure-oriented zone which spans the GHR. In this process, the council operates as an organizational platform that aims to unite and mobilize public and private actors to further develop the area according to the area's published strategic vision (Hof van Delfland Raad, 2010). The name 'Hof van Delfland' is introduced to label the network of green spaces within the GHR of which Midden-Delfland is part, and is now also used as a brand to market the contiguous area. Clearly, the establishment of the 'Hof van Delfland' is a (self-organized) adaptive response to changing circumstances, which contributes to the further development and integration of Midden-Delfland into the GHR.

Whereas Midden-Delfland could integrate variously, for instance by becoming metropolitan parks or urban extensions, planning interventions strongly shaped the spatial form in which this process materialized. The chain of events discussed above suggests that Midden-Delfland is likely to be further developed as a metropolitan leisure-oriented landscape. It indicates the progressive integration of Midden-Delfland into the spatial, organizational and institutional fabric of the wider GHR, although the peri-urban remains a distinct socio-spatial system. The area the complementary to the largely urbanized GHR, contributing to liveability and attractiveness by providing nature, open space, leisure and recreation facilities – factors that are increasingly relevant to satisfying contemporary societal needs.

Reflection: how planning co-evolves to peri-urban dynamics

The case study shows how the development path of peri-urban Midden-Delfland is shaped by the interplay of processes at various governance levels. In this context, the complexity perspective offers analytical leverage: Midden-Delfland is engaged in a persistent process of adapting to changing circumstances. The interplay between actors and processes at multiple levels, including spatial planning, determines how the peri-urban area develops. Whereas the case study shows that Midden-Delfand has potentially multiple ways to integrate into the GHR, through strategic spatial planning some are privileged and supported (tourism, recreation, leisure, nature and agriculture) over others (industry, offices, housing and greenhouses). In this way, Midden-Delfland is complementary to the development of the larger GHR. Without planning the integration of Midden-Delfland would likely have involve urbanization and greenhouse development, as has been the case in surrounding areas. Avoiding the urbanization of Midden-Delfland, however, created a specific situation that came with its own dynamics. The combination of an urbanizing GHR, an emerging leisure economy and the preserved rural character of Midden-Delfland generated new land use claims and potential for uses related to recreation and leisure.

These changing circumstances triggered the co-evolution of planning strategies and governance frameworks, as reflected amongst others by the development of leisure facilities and a new governance structure ('Hof van Delfland'). These findings suggest that Midden-Delfland is moving toward a relatively stable state, becoming a leisure-oriented metropolitan park. However, both the case study and the complexity perspective highlight that development paths are continuously being renegotiated and are therefore peri-urban areas are likely to remain in flux. Hence, planners need to develop the capacity to co-evolve: adapt

when changing circumstances affect development options for peri-urban areas and reorient development paths.

3.6

The integration of peri-urban Vlietzone into the GHR

The peri-urban Vlietzone, located in the east of The Hague (Figure 3) is in the process of integrating into the GHR, transforming from a predominantly rural area to a highly multifunctional area. Whereas the area was nearly urbanized, recent events indicate that the area will be further developed as a leisure zone for, and between, relatively high dense neighbourhoods. This process of progressing integration is analysed in this section. On the basis of the complexity perspective we discuss how a range of factors at multiple governance levels, including spatial planning, affect development options and thereby shape the development path of peri-urban Vlietzone. The analysis brings us to the conclusion that planning for peri-urban development involves addressing (potentially) volatile situations to which planning needs to co-evolve. The findings are grouped in three phases, each marking a distinct period in the integration of Vlietzone into the GHR.

Phase 1: Forces driving urban growth and ad hoc planning responses

Until the 1960s, connections between Vlietzone and the GHR were scarce. The 'Vliet' canal marked the edge of the urban, although it featured historic estates which were built to overlook the Vliet canal and the reclaimed polder landscapes (Haags Milieucentrum, 2004). From the 1960s on the area gradually became peri-urban. A mixture of different types of land use was introduced, which increased the connections between the Vlietzone and the nearby cities of The Hague and Voorburg. This transition is driven by a series of events and processes at different governance levels, such as decisions made in the governance systems of national politics and state institutions.

The development path of Vlietzone changed dramatically due to contextual processes such as urban growth in the GHR, an increasing mobility demand by society, and the need for highways. In the 1940s the 'A12' highway from The Hague to Utrecht was constructed followed by the 'A4' highway from Leiden to Rotterdam via The Hague in the 1950s. This produced a zone between the highways and the Vliet canal that is now known as the Vlietzone. These events affected the development path of Vlietzone, which had until then been

dominated by agriculture. Entrepreneurs and local municipalities adapted to the changing circumstances, providing them with opportunities to further develop the area. Accordingly, in response to the topdown decision of the state to construct the 'A12' and 'A4' highway, a variety of land uses and activities was gradually established. These include agriculture, allotments, industry, housing, a golf course, football pitches, tennis courts, a small theme park, cycle tracks and parks.

In this phase the impact of planning on shaping the spatial development of the peri-urban area mainly consisted of permitting land use change. This occurred, however, in a relatively ad hoc manner. Vlietzone became a more multifunctional but also a rather fragmented peri-urban area lacking a clear identity and development direction. Nevertheless, it did enhance connections and thereby contributed to the process of further integrating Vlietzone into the fabrics of the wider GHR.

Phase 2: Macro institutional decisions triggering local adaptive responses

In the 1990s, a series of contextual events took place in the systems of politics and governments that affected the development path of Vlietzone. A major factor driving change was the Dutch House of Representatives adopting a resolution in 1997 to adjust municipal borders in the GHR (Verhoeven, 2007). The planned 'Forepark' business park and two large housing developments 'Leidschenveen' and 'Ypenburg' (for 20,000 and 30,000 inhabitants, respectively) would be integrated into the municipal borders of The Hague. As a part of the adjustment plan, Vlietzone would also be transferred from the municipal territories of Rijswijk and Leidschendam to The Hague. Interviewees argued that many actors thought that the border adjustments would severely change the development options of Vlietzone and thereby strongly shape its development trajectory. For instance, Vlietzone could be a potential site for housing and offices to increase employment and municipal revenues of the city of The Hague (Verhoeven, 2009). In response to the adjustment plan actors at the local and regional level engaged in debates about how to further integrate Vlietzone into the wider GHR.

Interviewees argued that the prospect of Vlietzone becoming extensively integrated ignited an 'emotional' debate about how this integration should be realized spatially, emphasizing the multiple ways for doing so. These debates and subsequent actions could be seen as part of adaptive responses, being triggered by autonomously changing circumstances and aimed at influencing

the peri-urban development path. Social movement organizations were established and various governmental authorities redirected their actions, all aiming to prevent the area from becoming largely built-up and aiming to exert influence on or to participate in the City Council of The Hague's decision-making process. A number of strategic spatial plans were drafted by various institutions, conceptualizing a range of perspectives on potential development paths from areas almost entirely dedicated to nature and recreation to densely built-up ones.

- The municipalities of Leidschendam, Nootdorp, Pijnacker, Rijswijk and Voorburg jointly drafted the 'Vliet and Hofland' plan in 1999. The plan proposed minimal construction and emphasized protecting nature and cultural-historic values, since these represent important features for the quality and liveability of the surrounding, largely urbanized areas (Municipality of Rijswijk, 2001).
- Stadsgewest Haaglanden, a cooperative body of nine municipalities within the GHR, drafted a Regional Structure Plan in 2002 and a detailed development plan for Vlietzone in 2005. Both plans contained a similar description to the 'Vliet and Hofland' plan (Greater Hague Region, 2005).
- The province of Zuid-Holland issued a strategic spatial vision in 2003, acknowledging the area's potential for urban development but also adding that the area should be connected to region-wide networks of water and nature (Province of Zuid-Holland, 2003).
- The municipality of The Hague issued a strategic plan for Vlietzone in 2005, which formed a strong contrast to what had been expected by surrounding municipalities. Inspired by the strategic location of Vlietzone, offering opportunities for urban development, the plan included 7350 houses, offices and industrial and service developments (Municipality of The Hague, 2005a; 2005b).

The Municipality of The Hague's plan reflects a fundamentally different conceptualization of the integration of Vlietzone into the GHR, compared to the other strategic plans. Local municipalities, social movement organizations and inhabitants disagreed with the strategic plan (Municipality of The Hague, 2005c; 2005d). Concerns were stressed about cultural-historical and natural elements, the importance of the area for recreation and leisure activities, and the role of Vlietzone as a buffer between the existing and the planned neighbourhoods of Leidschenveen and Ypenburg.

In response to the largely self-organized adaptive responses by local actors, governments operating at the regional level co-evolved, in turn, by adapting their plans. Subsequent plans indicate that compromises have been made, as is discussed below. Nevertheless, a social movement organization has recently published a strategic vision to resist urbanization, aiming to trigger further co-evolutionary responses by local and regional planning authorities.

- The municipality of The Hague drafted a detailed plan for the Vliet/A4-highway in 2006 which displays compromise in paying more attention to recreation and connecting nature and water to regional networks. In the plan, high density developments are still considered desirable to benefit from Vlietzone's strategic location and essential for the financial viability of the proposed plan (Municipality of The Hague, 2006).
- The second Regional Structure Plan issued in 2008 by the regional cooperation body 'Stadsgewest Haaglanden' contains a similar compromise (Greater Hague Region, 2008). The plan argues that the location characteristics of Vlietzone generate potential for high density developments and promotes the better integration of existing waterways and nature areas into the fabric of the wider GHR to support recreational purposes. It adds that (out-placed) industrial developments should not be allocated because they do not harmonize with the area's amenity values.
- The social movement organisation 'Houdt Vlietrand Groen' [Keep Vlietzone Green] published the 'Groenvisie Vlietzone/A4' [Green vision Vlietzone/A4-highway] in 2012 to articulate the complementary value of an open, relatively un-urbanized area in a predominantly urbanized region. The plan aims to extend the complementary value of Vlietzone to a wider region, by further developing the area as a robust green zone that is well connected to nearby urban areas.

The first two phases indicate that the integration of Vlietzone is driven by a range of factors at multiple governance levels, but also that its development path is shaped by strategic plans, the controversies these produce, and the ways in which planning authorities co-evolve to local responses. Furthermore, also the financial crisis since 2008 affects the peri-urban development path in an autonomous manner, and triggers a chain of adaptive responses at the local and regional level.

Phase 3: The impacts the financial crisis

The financial crisis reveals that the plans proposing to extensively urbanize Vlietzone were too ambitious. The crisis severely affects the market for housing and office projects. The process of integrating Vlietzone further into the fabric of the GHR has come to a relative standstill. This situation was reinforced in 2011 when the Municipality of The Hague decided in the context of its urban development programme to suspend large investments in Vlietzone for at least ten years (Municipality of The Hague, 2011). Moreover, the Municipality adopted an ordinance in 2011 to regulate land use change. Enforced by the ordinance, the current state of affairs is preserved as it constrains major land use change, and conditions for development have been introduced through its declaration of Vlietzone as a historic estate zone. The financial crisis underlines that peri-urban development is situation dependent, and that peri-urban planning addresses potentially volatile peri-urban development processes to which it needs to co-evolve.

Reflection: how planning co-evolves to peri-urban dynamics

The case study shows how the development of Vlietzone is affected by multiple coexisting and conflicting perspectives on how the peri-urban 'fits best' into the wider GHR. Furthermore, the findings emphasize that its development depends on the dynamics of the multiscalar and multidimensional (spatial-morphological, organizational and institutional) situation in which it is found. For instance, urban expansion and border adjustment accelerated integration, while the financial crisis and institutional fragmentation have tended to inhibit it. This implies that there is not someone or something in complete control of peri-urban dynamics, similar to complex adaptive systems. Accordingly, peri-urban planning could address potentially volatile situations, and planning need the capacity to co-evolve to respond to forces affecting peri-urban dynamics. At the moment, the area is situated on the brink of being further integrated into the fabric of the GHR. Due to the impact of the financial crisis, it remains to be seen how and when – or even if – it will be urbanized. On the basis of recent events, the emphasis is put on leisure and nature, whereby Vlietzone remains a distinct socio-spatial system nested within the GHR that serves as a buffer zone between nearby densely built-up neighbourhoods.

3.7 Discussion

The aim of this article is stated as developing an enhanced understanding of the implications that dynamic peri-urban areas raise for peri-urban planning, to better guide peri-urban areas in their evolution. Theories of complex adaptive systems were operationalized to develop an analytical framework for examining how peri-urban development paths evolve and how planning shapes peri-urban development. It draws attention towards developing a situational understanding, analysing the development of a specific peri-urban area in time, in context and taking into account multiple dimensions (spatial-morphological, organizational and institutional). The complexity framework is used to discuss the factors that drive the integration of peri-urban Midden-Delfand and Vlietzone and the factors that shape their development paths.

The case studies elaborate on how peri-urban development paths are shaped by the interplay between planning interventions and development processes at multiple governance levels and spatial scales. This interplay brings peri-urban areas in the process of evolving from the stage urban-rural connections to a stage where the peri-urban is more extensively integrated into the spatial-morphologic, organizational and institutional fabric of the GHR. It produces forces that trigger actors at the local and regional level to adapt land uses, physical structures, functional patterns, usages and values, as well as local and regional relationships. For Midden-Delfland, this results in a shift from a predominantly rural area towards a metropolitan leisure-oriented landscape. Vlietzone, this has resulted in a somewhat fragmented, multifunctional area that could, due to the impact of the financial crisis, become further developed as a green and leisure-oriented buffer zone between relatively densely built-up neighbourhoods.

On the basis of the case studies, the following insights can be distinguished that are important when aiming to guide peri-urban areas in their evolution. First, peri-urban areas are open and nested socio-spatial systems that constantly interact with and adaptively respond to a dynamic contextual environment. Some processes driving peri-urban development occur autonomously from a planning perspective. Some of these enable development and drive peri-urban integration such as urban growth in the GHR and the emergent leisure economy, while others inhibit dynamics such as the financial crisis. Hence, situations are persistently changing, which makes the speed, intensity and character of peri-urban development variable. Second, because peri-urban areas are open

and nested systems and development paths may alter over time, planners are challenged to adaptively respond to the persistently changing options for peri-urban development. The case studies have provided several examples of how actors and institutions reflect on, learn from and adapt to factors such as urban growth, the emerging leisure economy, and institutional changes. As such, the case studies highlight that planners and planning authorities are challenged to co-evolve to the dynamics of peri-urban systems. In this context, this article draws attention towards the benefits of developing a situational understanding, as is done for the peri-urban areas in this article. This approach can contribute to an enhanced understanding of forces driving peri-urban development, and the ways in which peri-urban development paths may evolve (and to which to co-evolve to).

4

Stimulating spatial quality? unpacking the approach of the province of Friesland, the Netherlands[4]

Abstract

The article introduces the concepts of robustness and flexibility into the discussion on spatial quality to unpack the approach adopted by the Dutch province of Friesland in pursuit of their ambition to stimulate spatial quality. The analysis of how robustness and flexibility are manifested in Friesland, respectively the capacity to counteract negative impacts on spatial quality and the capacity to progress to more enhanced forms of spatial quality, reveals a multi-component, dynamic and selective approach. Multi-component refers to the combination of regulations, the building of purposeful organisations and teams, and deliberate actions to influence spatial development projects and plans. It is dynamic because the approach is adapted to the dynamics of the multilevel governance system wherein the province and its actions are embedded. It is selective because spatial quality is reduced to a limited set of factors, decision-making is done by a selected set of actors and some measures tend to address a limited set of themes. The findings suggest that stimulating spatial quality strongly depends on how spatial quality is conceptualized and formalized in the arena of politics and planning, negotiated in multilevel decision-making processes alongside decisions on whether to make resources available for this purpose.

Keywords

Spatial quality, robust, flexible, governance, decision-making

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4.1 Introduction

Many rural regions in Europe are encouraging spatial transformations to meet the demands of recreational activities, tourism and residents. This spatial development process, described as 'leisuring' by Bunce (2008), becomes manifest through land use changes that favour recreation, tourism, leisure and amenity migration. As a result, rural areas are undergoing a transition from productivism to post-productivism, shifting from being areas of production to areas of consumption (Marsden, 1999; Slee, 2005; Wilson, 2008). For authors such as McCarthy (2005), rural areas are becoming more 'multifunctional', although the extent of this multifunctionality varies geographically and therefore remains a subject of debate (see Mather et al., 2006; Lowe & Ward, 2007). A similar leisuring shift can be observed in cities that people visit for their history, heritage and built environment, as well as for their atmosphere, liveability and the availability of events, festivals and museums. Cities and rural areas can then also be regarded as places to consume leisure experiences that are appreciated for their uniqueness and memorability (Southworth, 2003; Therkildsen, 2009).

The leisuring process leads to a more diversified use of space and entails the attribution of new meanings and values to landscapes (Florida, 2002; Pine & Gilmore, 1999). Aesthetics, identity, authenticity, perceptions, memories, sense of place and belonging (Tuan, 1977, 1990; Relph, 1976; Ashworth et al., 2007) are fundamental for the creation and recreation of experiences that make places worth visiting, living in or starting a tourism-related business in (Kloosterman & Trip, 2011; Stephenson, 2010; Trip, 2007; Parra, 2012). From this perspective, spatial quality is considered a very important factor for the development of tourism/leisure places (Buijs et al., 2006; Kloosterman & Trip, 2011). As a means to foster leisuring processes, the ambition to stimulate spatial quality has appeared on several societal and political agendas, notably in the Netherlands (VROMraad, 2011). In the Dutch context, planning and decision-making regarding spatial quality are deeply woven into the realm of government and politics. Many public authorities at multiple spatial levels express the need to stimulate and bring quality to space. Nevertheless, spatial quality cannot be defined univocally as it means something different to each individual. Spatial quality is perceived and understood differently according to the great variety of lenses through which individuals interpret space. As a result, the governance of and decision-making about stimulating spatial quality can be problematic or at least challenging as further discussed in the following sections of this article.

This article looks into the process of stimulating spatial quality in the Netherlands from the perspective of the role of the Dutch provincial government. The overall aim is to unpack the approach of the provincial government of Friesland regarding the ambition to stimulate spatial quality. As such, this article furthers knowledge of the role of state actors in shaping institutional frameworks that bring quality to space, and the governance implications that accompany these frameworks. Institutional frameworks are defined as the ensemble of formal rules (laws, regulations and procedures), policies and informal constraints (norms and codes of conduct) that circumscribe the range of actions of the plurality of actors involved in decision-making and implementation (North, 1990; Hajer, 2003; Affolderbach & Parra, 2012). Governance refers to the ways in which "associational networks of private (market), civil society (usually NGO) and state actors" engage "in rule-making, rule-setting and rule implementation at a variety of geographical scales" (Swyngedouw, 2005, p. 1992). Accordingly, the term governance implications is used in the context of how institutional frameworks affect the ways in which actors engage in making, setting and implementing approaches geared towards stimulating spatial quality.

In order to unpack and discuss the approach of state actors in their quest for spatial quality, this article brings in theories of spatial quality and the concepts robustness and flexibility that emanate from theories of complex adaptive systems. As a first step, the concept of spatial quality is discussed through a set of ontological perspectives allowing a more clearly expressed characterisation and understanding of spatial quality in practice. As a second step, the concepts of robustness and flexibility are introduced to go deeper in the conceptualisation of spatial quality and in its analysis in planning practice. Robust relates to the capacity to counteract negative effects of perturbations caused by development plans and projects. Flexible refers to the capacity to open up to development projects and utilize these to progress to more enhanced forms. While contributions on spatial quality highlight the vagueness of this concept (Porter & De Roo, 2007) and its relational meaning (Moulaert el al., 2013), the concepts of robustness and flexibility allow for a more systematic analysis of practice and provide analytical leverage on planning practices (Portugali et al., 2012; Gershenson, 2007). We use these concepts to conceptualize stimulating spatial quality as a process of development and improvement – towards a state that reflects a 'higher' quality – which comes with the challenge of being simultaneously robust and flexible (cf. Heylighen, 2008). Moreover, these concepts are used in the case study analysis to examine how robustness and flexibility are manifested in the approach of the province of Friesland. In doing so, it is taken into account that institutional frameworks are constantly

renegotiated and reorganized (cf. Jessop, 2005; 2008) and understandings of and measures for spatial quality can change over time. Such dynamics could drive the need for the province of Friesland to adapt its approach in order to persist in stimulating spatial quality.

Spatial quality is important to Friesland's growing interest in the 'leisure economy'[5]. The provincial government of Friesland has become very active in the pursuit of spatial quality at the service of the development of tourism, recreation and all leisure economy-related activities. The analysis focuses on the provincial level because it plays a key role in linking higher (nation state, EU) and lower government tiers (municipalities). The contribution of this article is therefore twofold. First, it offers a grounded understanding of contemporary approaches and strategies aiming at stimulating spatial quality in the Netherlands, of potential use for planning practitioners. Second, the article contributes to the theoretical debate by introducing the concepts of robustness and flexibility into the discussion on spatial quality, offering a framework to grasp the important steps contained within the ambition to stimulate spatial quality and its underlying governance implications. Taken together, the findings of this research could be useful for other regions facing similar socio-spatial dynamics and challenges related to quality of place, competitiveness, leisure and sustainable spatial development.

In a nutshell, the main argument of this article states as follows: stimulating spatial quality involves a plurality of actors and institutions in dynamic interaction which are expected to be capable of providing robustness by counteracting negative impacts on spatial quality, on the one hand, and supporting flexibility by leaving room to enable transformations that may enhance spatial quality, on the other hand. Section two discusses the concept of spatial quality and the challenges associated with the societal ambition of stimulating spatial quality. Section three elaborates on the concepts of robustness and flexibility and discusses how these can be applied in the analysis of the Friesland case. Section four examines how robustness and flexibility are manifested in the spatial planning approach adopted by the province of Friesland to stimulate spatial quality. The final section concludes that stimulating spatial quality strongly depends on how spatial quality is

5 Leisure economy is an umbrella term used in Dutch planning practice to refer to an economic subsector including tourism, recreation, leisure, wellness, and exurban living and working (Hartman, 2013).

conceptualized and formalized in the political arena, negotiated in multilevel decision-making processes alongside decisions on whether to make resources available for this purpose.

4.2 Examining the ambition to stimulate spatial quality

The ambition to stimulate spatial quality touches upon the question of what constitutes spatial quality. Answering this question is problematic because spatial quality is loaded with multiple meanings, understandings and interpretations (Porter & De Roo, 2007). Interpretations of spatial quality are considered to be highly context dependent, inter-subjective, normative and therefore quite impossible to generalise or define objectively, and difficult to operationalize (Van Assche & Jacobs, 2002; Goethals & Schreurs, 2011; Stephenson, 2010; Albrechts, 2006). As such, spatial quality can be defined as a dynamic social construct that is produced, reproduced and adapted over time by changing assemblages of actors, actions, interpretations and (power) relationships. In this context, we should be aware that actors may adopt different ontological perspectives to conceptualize spatial quality. De Roo (2012) distinguishes four perspectives on how the world around us can be perceived and understood, which he considers particularly relevant within the context of spatial planning and development. These four perspectives are also useful for analysing spatial quality as is discussed below, although for reasons of theoretical accuracy and application in the context of spatial quality we discuss a positivist perspective instead of a realist perspective that is discussed by De Roo (2012).

- First, from a positivist perspective there is an unambiguous, factual landscape that can be understood objectively (Buijs et al., 2006). Spatial quality from this perspective is a characteristic attributed or permanently fixed to objects, and can be determined for example by experts.
- Second, from a relativist perspective, common understandings and models of reality are generated through the exchange of viewpoints and values. Spatial quality can be attributed to any object as it is understood as a socially mediated construct and the result of agreements (cf. Goethals & Schreurs, 2011).
- Third, a relational perspective concerns how objects, values and processes acquire meaning through their relationships with an ensemble of other objects, values and processes (De Roo, 2012, cf. Rapoport, 1970; Moulaert et al., 2013; Van den Broeck et al., 2013). Spatial quality is considered as

'situated'. This implies that spatial transformations are valued on how they affect relationships and meanings, and on whether actors consider that they fit the specific local situation. There are similarities between the relational and relativist perspectives, both emphasising the relevance of interactions and agreements. The relational perspective adds that objects are part of an ensemble, and that this ensemble is relevant to determining the values or qualities of individual objects and vice versa.

- Fourth, from an idealist perspective, the key is not how the world is, but a normative understanding of how it could or should be. Spatial quality is something to achieve, and it is defined through creative visioning processes that explore desired future situations. In dynamic contexts these explorations are likely to be on-going processes. This should inspire caution in planners about fixed end-states, blueprint plans or immutable utopias with respect to spatial quality (De Roo, 2012).

In the literature on spatial quality and sense of place there is an emphasis on relativist perspectives that focus on social constructions and inter-subjectivities. These contributions emphasize that subjective aspects and experiences also matter, in addition to objects (Tuan, 1977, 1990; Relph, 1976; Ashworth et al., 2007). It is argued that spatial quality concerns values derived from or attached to sets of tangible/'hard' and intangible/'soft' factors (Florida, 2002; Kloosterman & Trip, 2011; Stephenson, 2010; Trip, 2007), and refers to the interrelatedness of structures, functions and values (Parris, 2004; Selman, 2009). Recently, an interest in relational understandings and approaches has also emerged. For instance, Khan et al. (2013, p. 294) argue that "space and spatial quality are produced as a result of collective place-shaping efforts", involving various actors and factors "in different relations of power through subjectivation, organisation, and practices of signification". Hartman and De Roo (2013), for their part, add the relevance of 'qualitatively embedded' functions in landscapes and societies as an alternative to approaches that neglect how developments fit into local contexts in terms of design, aesthetics and identity. These insights are used in the case study analysis, to show how different aspects of the approach of Friesland relate to different ontological perspectives, and also to discuss potential benefits and issues that may arise from such a composite approach.

Clearly, there are different perspectives on understanding spatial quality. The ambition to stimulate spatial quality, however, calls for an agreement on what constitutes spatial quality. This is needed to inform decisions about development processes to ensure that those which stimulate quality are prioritized. Given that there are multiple possible interpretations, making

choices about spatial quality raises questions about who decides and whose quality is pursued. Choices made regarding the use and operationalisation of spatial quality might not fit all ontological perspectives, and might be contested if actors perceive such interpretations as overly selective readings of space. Clearly, decisions are inevitably influenced by the beliefs, understandings and preferences of actors with power in decision-making. Furthermore, concrete matters related to the availability and allocation of financial and human resources act as enablers or blockers of decisions. For example, a positivist perspective on spatial quality could be mainly a technical exercise executed by experts, whereas a relativist approach would involve multiple actors in dynamic interaction. The more actors and goals included, the more appropriate collaborative, communicative approaches become compared to technical-comprehensive approaches, but also the more complex planning processes become (De Roo, 2003).

To summarize, decision-making on spatial quality is value-laden and its outcomes could be considered as being selective readings of space. In the Dutch context, government authorities play an active and leading role in framing and pursuing the complex ambition of bringing quality to space. This does not mean that other actors, institutions and agency are less important but on the contrary: for regions in the process of leisuring it matters greatly how places are perceived by all the individuals converging on them, including those outside the governmental arena, and whether the place qualities are good enough to attract visitors, new settlers and leisure investors. Against the backdrop of the complexities contained in the concept of spatial quality, the following section turns to the analysis of approaches addressing the challenge of stimulating spatial quality.

4.3 Analysing approaches to stimulate spatial quality

This section digs deeper into the challenges associated with the conceptualisation and analysis of spatial quality and its governance. This is done with the help of complex adaptive systems theory, and notably the concepts *robustness* and *flexibility*. In the last few years, there has been increasing interest in applying complexity theories to examining transformations and development in cities and urban regions. These complexity lenses offer the capacity to highlight how urban and regional change is driven by the dynamic interplay between various systems and subsystems at multiple levels (Portugali, 2012; Rauws & De Roo, 2011; De Roo et al., 2012a; Chattiparamb, 2013; Gerrits,

2012, Innes & Booher, 2010; Hartman & De Roo, 2013). These contributions elaborate on the adaptive capacity of complex systems that enables them to deal with perturbations and to move to enhanced forms of organisation and performance (Holland, 1995; Kauffman, 1993; Axelrod & Cohen, 2000). Among other properties, complex adaptive systems are able to do so by means of mechanisms that make them "robust and flexible at the same time" (De Roo, 2012, p. 135; Heylighen, 2001; Bertolini, 2010).

An approach combining robustness and flexibility matches the analytical considerations that are important for getting a grasp of the challenges that accompany the ambition of stimulating spatial quality. On the one hand, mechanisms are needed to protect existing qualities from disruptive effects of spatial development projects. This relates to the concept of *robustness*, which refers to the capacity to counteract perturbations (Heylighen, 2001). On the other hand, mechanisms are needed to engage in processes of spatial development, aimed at creating an environment that reflects a 'higher' quality. This relates to *flexibility*, or the ability of agents to adapt their behaviour and actions so that the systems of which they are part can transition towards a more enhanced state (Axelrod & Cohen, 2000). Below we further examine mechanisms that contribute to robustness and flexibility and elaborate on how these offer analytical support in the context of spatial quality. By doing so, robustness and flexibility become useful for the case study analysis, enabling a discussion on how these are manifested in the spatial quality approach of Friesland.

Mechanisms for flexibility relate to the capacities of agents to adapt the structures and functions of a system. According to Heylighen (2008, p. 9), systems in order to transition towards enhanced states require that "agents are organized and coordinated in their actions so as to maximize their synergy". Organisation and coordination can be understood as having "to obey new rules, determining which actions are allowed, and which are not" (ibid, p.9). This reduces the freedom of agents and is considered essential to turn a collection of initially independent agents into an organized, cohesive and goal-directed whole (Heylighen, 2008). In the context of stimulating spatial quality, it is also crucial that agents initiate spatial development projects in order to adapt places and reach a state that reflects a 'higher' quality. But if the organisation and coordination amongst agents is weak or absent, influencing such projects becomes a daunting challenge, as this affects their impact on spatial quality. This situation can be considered positive because it provides freedom for actors to pursue their individual goals, yet it can also become problematic when plans and projects act against collective views on spatial quality. Encouraging synergies between development initiatives and spatial quality may therefore

require the organisation and coordination of the actions of agents with the help of planning laws, procedures or other instruments. These could target adding and embedding features into existing landscapes or supporting processes of restructuration and transformation that bring new features (Hartman, 2013). Moreover, idealist perspectives such as strategic visions and future scenarios could provide the goals needed to (re)direct collectives of agents towards a particular, desirable future situation.

Mechanisms for robustness relate to the ability to counteract perturbations that disrupt spatial quality. First, systems can cope with perturbations when small scale transformations within a system are free of consequences (Gershenson, 2007). This is the case when spatial quality is plentiful and well-distributed. To achieve such a situation benefits from positive feedback: the support and amplification of effects of actions that reinforce spatial quality. Second, systems can counteract or suppress disruptive effects by means of negative feedback. This supposes that governing structures in place have the capacity to "privilege some actors, some identities, some strategies, some spatial and temporal horizons, some actions over others" (Jessop, 2008, p. 236). In complexity theories, these are conceptualized as 'emergent structures', as they stem from interactions between actors over a period of time, and have the capacity to steer and shape the behaviour of individual agents (Heylighen, 2008). As observed in the case of Friesland, structures supporting spatial quality are currently emerging as a response to the growing societal concern for quality of life and the interest on the development potential of leisure (Hartman, 2013; Urry, 2002; 2005). Moreover, governments at multiple tiers introduce strategic visions, planning procedures and sets of norms to influence building activities. These may function as negative feedback mechanisms and counteract spatial development plans and projects that hold a potential negative impact on qualities.

The analysis of the spatial quality approach of the province of Friesland will follow two main categories obtained from the theoretical discussion above:

i. analysing how robustness and flexibility are manifested in the spatial quality approach of Friesland.

Robustness and flexibility both assume that supportive forms of coordination and organisation are in place, which act as governing structures and influence the behaviour of individual agents. Hence, the focus of the analysis includes, on the one hand, institutional measures for robustness that are aimed at counteracting negative impacts of plans and projects to protect existing qualities and; on the other, measures for flexibility that encourage synergies

between development projects and spatial quality. The ontological perspectives on spatial quality are used to further examine, categorize and discuss the approach of the province of Friesland.

ii. analysing adjustments to the spatial quality approach of the province of Friesland.

Spatial quality is a dynamic social construct because views on how places should develop, understandings of spatial quality and approaches to stimulating spatial quality tend to change over time. Strategic (policy) changes on higher and lower governmental tiers and changing societal views on spatial development may impact on the successful pursuit of robustness and flexibility and could trigger adjustments in the approach. Finding the appropriate ways and scales for acts of coordination and organisation to stimulate spatial quality is an ongoing negotiation, and is therefore included in our analysis.

4.4 Unpacking the spatial quality approach of Friesland[6]

Friesland is a rural province located in the north of the Netherlands. Leeuwarden, its capital city, hosts a population of almost 100.000 inhabitants. Spatial quality is an important aspect of the tourism and leisure popularity of Friesland, characterized by the presence of the islands and mud-flats of the Wadden Sea area (since 2009 on UNESCO's World Heritage list), the Frisian lake district, the National Parks and Landscapes, and several historic cities. Already for several years, the provincial government of Friesland has been taking spatial quality seriously. This is reflected in the 2007 strategic spatial plan entitled 'Om de kwaliteit fan de Romte' [For the quality of space] and in the ongoing aim to stimulate spatial quality.

6 The data for this research was obtained from ten semi-structured interviews. Respondents were selected on the basis of their professional involvement in relation to the approach of Friesland i.e. planners and policy advisors from the province of Friesland, independent policy advisors, landscape architects, and architects. Data for this research also builds on the analysis of secondary sources, including key policy documents in the context of spatial quality: the provincial strategic plan for spatial development (Province of Friesland, 2007), the provincial ordinances that deal with the formal, legal implementation of the strategic plan (Province of Friesland 2011; 2014b) and the thematic strategic plan 'Grutsk op 'e Romte' [proud of our environment] that specifically outlines the vision spatial quality (Province of Friesland, 2014a). These documents were considered for the analysis of how robustness and flexibility are manifested in the approach of the province.

The case study analysis of how robustness and flexibility are manifested in Friesland reveals a multi-component, dynamic and selective approach to spatial quality. Multi-component refers to the combination of regulations, the establishment of purposeful teams and organisations, and deliberate actions to influence spatial development project and plans. It is dynamic in the sense that Friesland adapts its spatial quality approach according the dynamics and challenges stemming from the multilevel governance system wherein the province and its actions are embedded. It is selective because the approach reduces spatial quality to a limited set of factors, decision-making is in the hands of a selected set of actors, and some measures tend to address a limited set of themes. Nevertheless, the spatial quality approach touches upon all four ontological perspectives discussed in section 2. The following sections elaborate on these findings in detail

A multi-component approach: regulations for robustness to counteract perturbations

The provincial strategic spatial plan (2007) and its accompanying provincial ordinance (2010) are key factors regarding the protection of spatial quality and contribution to robustness. The strategic spatial plan contains the provincial perspective on spatial development for the middle-long term, and serves as a guideline for development plans and municipal zoning plans. The ordinance is the formal implementation of the provincial strategic plan, and elaborates the principles and prescriptions for project plans and municipal zoning plans. Together these documents guide provincial and lower spatial government tiers, and make reactive interventions by the provincial government legally possible in the event that municipal plans or project development plans do not align.

These two documents define spatial quality in two categories: 'environmental quality' and 'core qualities'. These categories provide the basis for decision-making about developments that do not contribute to spatial quality, and developments that could harmonize and eventually also stimulate spatial quality. On the one hand, these categories act as a negative feedback mechanism, counteracting perturbations and thereby contributing to robustness; on the other, they serve as a positive feedback mechanism for fostering spatial quality, privileging certain plans and projects over others.

The 'environmental quality' category relates to norms for water, soil and air quality, for noise, odours and light impairment, and for risk management and safety, all of which must be taken into account in development plans. These are mostly enforced by the state and imposed on the provincial level. The norms

are generally expressed in quantitative values and standardized technical-instrumental measurement and assessment methods. On the whole, these norms are generic, fixed and quantitative. More detailed context-specific approaches are possible for specific urban circumstances and under strict conditions (discussed in detail in De Roo, 2003).

The 'core qualities' category is subdivided into landscape types, cultural historical elements and structures, and archaeological sites. Each of these aspects is geographically listed on a map and their most relevant characteristics are documented (Table 3). The selection of core qualities is influenced by national laws and international treaties which require provinces and municipalities to account for archaeological sites and structures (2007 Law on Archaeological Monuments), cultural historical monuments (1988 Monument Law), and nature and ecology (1988 Nature Protection Law; 2002 Law

CORE QUALITIES	INDICATORS	ASSESSMENT FRAMEWORK
Landscape	29 landscape types *	• Provincial ordinance (appendix): landscape typology map • Provincial ordinance (appendix): description of structures, functions and their values
Cultural history	23 categories of elements and structures **	• Cultural historical map (CHK2) • Website fryslan.nl/chk: description of characteristics
Archaeology	Archaeological sites related to two periods (< 800 B.C. and > 800B.C.)	• Frisian archaeological monuments map FAMKE). A digital and regularly updated, and therefore 'dynamic' map • Website fryslan.nl/famke: description of characteristics

* Beaches and sandbars, moraine landscapes, dunes, inner-dune areas, forest reclamation areas, steam valley landscapes, reclaimed lands, summer polders, salt marshes, old sea polders, young sea polders, young sea polders/tidal flats, tidal flats, clay-on-peat areas, mound landscapes, salt meadows, salt marsh embankments, peatland areas, peat reclamation areas, moorland reclamation areas, moorlands, heath reclamation areas, heath reclamation (rational) areas, heath reclamation villages, 'essen' landscapes, heath afforestation areas, moorland reclamation (rational) areas, estate zones, peat polders.

** Geomorphology, geologically valuable areas, historic farms, parcelling patterns, settlement forms, churches, medieval monasteries, granges, estates, fortifications, waterways, dykes, duck decoy structures, rail and tram lines, provincial bordermarkers, architecture (1850-1940), areas and sites with extraordinary value, post-WO II reconstruction works (neighbourhoods), pottery ('Delfts Rood'), dairy factories, state monuments, protected country estates, protected cityscapes and townscapes.

Table 3: 'Core qualities' of Friesland (source: Province of Friesland, 2007; 2011)

on Flora and Fauna). The core qualities category affects spatial development because it functions as an obligatory 'process requirement'. This means that municipal zoning plans must demonstrate how core qualities are respected, and development plans proposing urban expansion or rural transformations should explain how core qualities are considered in a special 'spatial quality paragraph'. The strategic spatial plan and the ordinance also introduce the principles of *bundling* and *careful use of space*. These spatial planning and development principles have a twofold purpose in the context of spatial quality. First, they contribute to robustness because spatial developments become subject to strict conditions, thus preventing haphazard developments which negatively impact on views on spatial quality. Second, the principles contribute to flexibility by introducing a set of exceptions that open up space in policies for spatial development.

- *Bundling* is explained as restricting urban development outside predefined urban boundaries to prevent the distortive impacts of uncontrolled sprawl. For the leisure sector, clustering is pursued in predefined urban, regional or recreational centres. Exceptions are allowed under strict conditions to create opportunities for enhancing places and preventing excessive rigidity from causing negative lock-in. For example, projects can be allowed when new developments replace visually unattractive objects and buildings or are combined with investments in landscape design. Table 4 provides an overview of exceptions and assessment criteria. This table shows that some are measurable and assessable, whilst others are less clearly defined and could therefore also be explained variously.
- *Careful use of space* refers to the planning instrument known as the 'ladder for sustainable urbanisation', which applies to the development of business parks, office buildings, housing, and urban facilities. Since 2012, this instrument has been a mandatory requirement of Dutch national law. It implies that the following three aspects need to be explained in planning and development processes: i) there should be evidence of the demand for new developments; ii) opportunities for restructuring or reusing existing urban areas and buildings should be assessed; and iii) if greenfield development is considered necessary, optimal integration into the existing landscape and intermodal accessibility should be achieved.

The planning principles and spatial quality categories contribute to an institutional framework that enables the province to counteract perturbations to what is understood as spatial quality. Whereas the room in the policies for developments contributes to flexibility, additional measures are taken to encourage synergies between spatial development projects and spatial quality.

General conditions and exceptions	**Exceptions to the principles of bundling apply when developments involve:** • reuse, restructure or replacing obsolete (agricultural) buildings for recreation, living, care, culture, arts, education, businesses with low environmental impact (cat. 1, cat. 2); • strengthening historic housing patterns; • establishing 'rural housing clusters' or new estates that include large public spaces and feature 1:1 investments in new landscape and natural elements ('quality arrangements'); • replacing (obsolete) buildings; • building new properties when decayed, abandoned or scattered agriculture-related buildings or greenhouses are removed, known as the 'space-for-space arrangement';
Recreation and tourism: conditions and exceptions	**Leisure-related developments are subject to the following conditions:** • in or adjacent to urban, regional or recreational centres; • a maximum of 200 pitches for tents, 50 holiday bungalows, 250 yacht moorings, 100.000 visitors on annual basis (same for expanding existing businesses in rural areas); • a maximum or 15 pitches or bungalows at a farm, company or house; • group accommodation only within existing buildings. **Exceptions in terms of location and size, by decision of provincial executives.** **Conditions are:** • developments must be spatially embedded; • contribute to variety and/or quality of the existing stock; • greenfield development and upgrading campsites are subject to adding 1:1 new landscape and natural elements and 3:1 within a buffer of 3 kilometers around National Parks.
Agriculture: conditions and exceptions	**Secondary activities are supported when developments involve:** • retail trade of local products; • health care (incl. animals); • upkeep of nature and landscapes; • businesses with low environmental impact (cat. 1, cat 2 such as whole sale, office, riding school, bakery); • small scale hotel, restaurant, café, day time recreation, holiday accommodation.

Table 4: Exceptions and conditions for development projects (source: based on Province of Friesland, 2007; 2011)

A multi-component approach: measures for flexibility to encourage improvement

The 'process requirements' that oblige initiators to explain in plans how proposed developments and core qualities harmonize could enhance spatial

quality. An interviewee explains, however, this is not that straightforward: "process requirements are the lowest rung in enforcement. While they require it [the list of 'core qualities'] to be taken into account, they do not offer a basis for actually rejecting something" (interview policy advisor, Province of Friesland). Process requirements define what must be done but are less specific about the exact procedure that needs to be taken. This approach is deliberate, however, because further formalizing procedures requires a higher level of detail in terms of defining spatial quality and could overly reduce the room in policies for development initiatives (cf. Province of Friesland, 2012). Doing so could also interfere with the responsibilities of municipalities, as stressed by interviewees. The impact of process requirements on spatial quality therefore relies on the commitment of actors and their willingness and ability to embed perspectives on spatial quality into the design of project plans, municipal zoning plans, and municipal guidelines on land use and construction (cf. Province of Friesland, 2011, p. 47). Place-shaping efforts by project developers will have higher chances to enhance spatial quality if these perspectives are 'incorporated into the planning process…that is where it stands or fails' (interview policy advisor, Province of Friesland). Crucial is therefore to deepen relationships and strengthen communication between the concerned individuals, companies, institutions, and societal organisations of the governance system.

Accordingly, the province aims to be involved since the early phases of a given development plan or project to encourage that spatial quality is considered as an integral part of the planning processes. For this purpose, Friesland gives special attention to the relations between the province, municipalities and the actors engaged in project development, and has taken the following measures to achieve this aim:

- On a politico-administrative level, provincial and municipal authorities draft collaborative agendas, and along with the sub-provincial institutions ('Plattelânsprojekten') create development plans to implement parts of the provincial spatial policies. This reflects a focus on aligning ambitions and interests at various spatial levels.
- From 2008 and onwards, Friesland is financially supporting the organisation 'ARK Fryslân'. This organisation has the goal to raise awareness about the societal importance of architecture and spatial quality. ARK FRyslân aims to connect and share information between inhabitants of the province, firms, organisations, institutions and governments. It does so by organising seminars, fieldtrips, workshops, conferences and other activities about, for instance, the conservation and reuse of heritage buildings such as vacant churches.

- The province created in 2008 its 'Core Quality Team', a multidisciplinary group of government officials operating across governmental institutions. The team advises on how to incorporate the core qualities category into spatial plans, zoning plans and development projects. Examples include the project 'Moai Fryslân' [Beautiful Friesland] on the sustainable maintenance of landscape features (table 4) as well as initiatives incorporating investments in spatial quality into housing and road infrastructure projects. The team actively invests in building relationships with project initiators which keep the flow of information about projects and plans active, and which serve as a means to participate in and influence the early stages of planning processes. In 2012 the team drafted the policy document 'Grutsk op 'e romte', meaning 'Proud of our environment', to assist and inspire municipalities to integrate the core qualities into plans and projects. In 2014 the document acquired the formal status of 'structure vision' which obliges initiators to motivate the impact of projects and plans on the defined core qualities (Province of Friesland, 2014a).
- In 2008, the province also established the organisation 'Atelier Fryslân', an independent design studio offering solicited and unsolicited advice on a variety of spatial quality-related issues. These include, for instance, projects to generate scarcity on peri-urban business parks as a strategy to stimulate investments in the quality of existing parks, as well as advice on the location of turbines for wind energy parks with reduced impact on spatial quality. Another example is the creation of a toolkit for waterfront redevelopment projects which has been used in 28 localities. This toolkit has stimulated collaboration among local and regional actors, on the one hand, and it has improved waterfronts in a number of villages, increasing their tourism, recreation and residential values, on the other. This studio's goals are to inspire more idealist perspectives on spatial quality, disseminate them more firmly into communities and urge their systematic incorporation into the political arena, decision-making and planning practices at the local and provincial levels.
- In 2010, the province initiated the project 'Nije Pleats' [New farmyard] to support farmers in their efforts to renew and upscale their businesses. 'Nije Pleats' revolves around a method in which a team of experts functions as mediators and help accommodate the interests of farmers. The team consists of a landscape architect, a policy advisor on spatial quality and representatives from departments of a local municipality. The team gets involved at an early stage in planning processes and can thereby influence place-shaping efforts through building aesthetics, landscape design, the removal of old buildings, etc. It aims to incorporate functions into their surrounding landscapes, in line with a relational understanding of

spatial quality. As a result of its function as a catalyst and its proactive development-oriented nature, the province is transferring the strategy underlying the 'Nije Pleats' project to the sector of recreation and tourism (Province of Friesland, 2014b).

Friesland has worked towards the creation of an institutional framework that promotes spatial quality in various ways. This framework consists of rules and planning principles that, together, contribute to robustness and flexibility at the same time. In addition, the province of Friesland has invested in collaborative and communicative planning processes to stimulate discussion and awareness about spatial quality, to gain actor commitment and to enhance their capacity to influence initiators of development projects to take core qualities into account.

A dynamic approach: responding to adjustments in multilevel governance systems

The case study also shows that the province and its actions are part of a system of governance which is multilevel and multi-actor (Parra, 2010). For example, national laws and international treaties have an influence on the selection of core qualities amongst others. Changes on higher and lowers levels within this system can therefore have an effect on the spatial quality ambition of the province of Friesland. The case study draws attention to adjustments in laws and policies of higher government levels and changes in strategic and zoning plans of municipalities. Such dynamics are potential triggers to adapt approaches and (re)introduce (additional) measures for robustness or flexibility.

First, challenges emerge when there is less freedom for development projects. The 'Nije Pleats' project was initiated to address a complex of laws, rules, procedures and process requirements operating at different spatial levels. It is a response to the bureaucratic difficulties encountered by farmers in their efforts to renew and upscale their businesses. More precisely, it addresses the excessive regulation and multiple permits required by different government agencies and departments. Moreover, the aim of the project is to respect spatial quality by incorporating functions into its surrounding landscape.

Second, greater freedom for development projects opens the door to new spatial challenges. In the Netherlands there is a tendency towards deregulation to enable local development initiatives and towards decentralising responsibilities to achieve a better match with local contexts (De Roo et al., 2012b). Whereas the underlying rationale is to allow for greater flexibility at local levels, in practice this could prompt actors to pool resources and establish new support

institutions to maintain the level of robustness. This process is happening in Friesland in the context of 'welstand' [aesthetics of the built environment] and granting building permits. In the Netherlands municipalities are authorized by national law to draft memoranda on architectural and spatial quality which contain the object-oriented and area-oriented prescriptions to guide architectural and spatial design, e.g. size, shape, colours, materials, building orientation and area characteristics. The strictness of these memoranda varies from one municipality to another (Ten Cate, 2010). There are memoranda which allocate zones free of prescriptions and which can cover an entire municipality. There are also memoranda with detailed prescriptions for the granting of building permits. These detailed memoranda require personnel and expertise that can be difficult for small municipalities to organize. In Friesland the provincial centre of expertise 'Hûs en Hiem' was established to provide advice to municipalities on the assessment of plans for housing projects. Similar situations are emerging in the context of heritage conservation and permits for building activities. The modernisation of policies on heritage conservation is a national government project that started in 2009 and seeks to focus less on conservation and more on development. The aim is to reduce the number of protected sites and ease the procedures for rezoning and the granting of construction and regeneration permits. Also the 2010 national law on general provisions for the environment ('WABO') was adopted to reduce the regulatory burden. The law integrates permits for construction and regeneration, housing, monuments, nature and environment into a single permit (Gerrits et al., 2012). Permits are no longer required for small projects unless explicitly requested by a municipality. The rationale behind both examples is to transfer responsibilities and allow policies at the local level. This greater freedom implies less control over outcomes. Whereas greater freedom enables individuals to pursue their own (idealist) perspectives on spatial quality, it could come at the expense of collective views on spatial quality. As such, this greater freedom can exert pressure on the available resources (finance and expertise) at the local level to develop approaches that guide initiatives and encourage enhancing spatial quality. Potentially, forms of coordination and organisation (similar to 'Hûs en Hiem') may need to be introduced at the regional/provincial level for reasons of efficiency and control.

Summarizing, the previous discussion shows how the reorganisation of institutional frameworks brings changes to governance systems. The approach of Friesland is not static but in a constant state of being reproduced and transformed over time. Changes are implemented on the levels of the national government (e.g. the WABO and heritage policies), by the provincial authority itself (e.g. the 'Nije Pleats' project, articulating core qualities) but also by

municipalities (e.g. memoranda on architectural and spatial quality). This multilevel and multi-actor governance system requires the ability to adapt approaches. This system is dynamic in terms of ambitions and mechanisms to stimulate spatial quality which are in constant (re)negotiation vis-à-vis other spatial development priorities, political interests, and institutional effectiveness. An example is the winding up of Atelier Fryslân in late 2012 because of budgetary reasons and overlap with the approaches of ARK Fryslân (interview landscape architect, independent advisor). Approaches should therefore not become too static or rigid but should constantly be evaluated and adjusted. On the one hand, some mechanisms may disappear to avoid overlap of tasks and responsibilities or to address budget restrictions; on the other, new mechanisms that contribute in different ways to spatial quality can be introduced, as is the case of the ARK Fryslân or the Quality Team.

A selective approach: choices in decision-making processes

The analysis of how robustness and flexibility are manifested in the approach of Friesland reveals a selective approach to spatial quality. First, spatial quality is reduced to a limited set of factors. The articulation of core qualities refers mainly to tangible factors (see Table 3). Second, spatial quality is defined by a selected set of actors with different degrees of power. According to our interviewees, there is a more or less informal consensus within the province, its municipalities and their institutional relations regarding the category of 'core qualities' reflecting spatial quality. However, an interviewee clarified that 'although some municipalities were consulted, it [the list of core qualities] was not jointly drafted. Indeed, they [the core qualities] represent the provincial interest' (interview policy advisor, Province of Friesland). Societal actors and leisure entrepreneurs are hardly involved in decision and policymaking: at best informally and therefore indirectly. Third, some measures tend to address a limited set of themes. Atelier Fryslân focussed on a selection of topics and the 'Nije Pleats' project thus far concerns only agriculture related issues yet plans are made to transfer the strategy to the sector of tourism and recreation.

In their pursuit of what Trip (2007, p. 19) calls "favourable conditions for quality of space to develop", the province actually selected a mix of ontological perspectives. Their strategy touches upon all four ontological perspectives on spatial quality. Selecting core qualities by provincial experts and their focus on tangible factors hint at a positivist perspective on spatial quality. The Atelier Fryslân addressing how things could or should be in the future produces more idealist perspectives on spatial quality. Consulting municipalities and supporting ARK Fryslân reveals a closer alignment to relativist and relational

perspectives on spatial quality. The 'Nije Pleats' project, for its part, tries to embed functions into landscapes to respect and contribute to views on spatial quality, exhibiting an explicit relational understanding and approach to spatial quality. Whereas this approach successfully garners results, a major challenge remains to connect closely to what society as a whole considers important qualities as there as multiple possible perspectives on understanding and conceptualising spatial quality and multiple approaches to enhance spatial quality. The approach taken by the province of Friesland can be easily contested in this respect. It is selective in terms of the aspects that are considered as bringing spatial quality, the selection of mechanisms, and the involvement of (non-governmental) actors in decision-making processes.

The province does, however, take an important responsibility from a societal perspective as spatial quality is an important factor for socio-cultural and socioeconomic development in the region. In turn, the selective approach relates to a sense of restraint towards an institutional framework that is too comprehensive and prescriptive. Furthermore, even though the conceptualisation of spatial quality by the province of Friesland can seem selective or partial, this does not necessarily mean that other aspects are considered irrelevant. These are often viewed as the responsibility of municipalities, communities or developers to further negotiate and specify. All in all, selectivity can create room in policies for initiatives that stimulate spatial quality (contributing to flexibility), as well as to protect selected qualities from perturbations (contributing to robustness). It can therefore be part of strategies for implementing the ambition to stimulate spatial quality by fostering regions being robust and flexible at the same time.

4.5 Conclusions and discussion

The road towards spatial quality is a multilevel governance ambition which sets a complex and dynamic agenda. It includes agreements and decisions of a normative, political and pragmatic nature on situations to avoid and situations to achieve. How spatial qualities should unfold in the future is, therefore, subject to a variety of understandings, interpretations and interests, which can coexist, compete and conflict. This article discussed spatial quality as a social construct that is situationally defined (cf. Van Assche & Jacobs, 2002; Moulaert et al., 2013; Goethals & Schreurs, 2011). This implies that spatial quality is shaped by an ensemble of actors and their perceptions of how sets of tangible and intangible factors relate to each other, as well as

by these actors' interwoven actions and power relationships. Because these ensembles are dynamic, perceptions on and definitions of spatial quality are constantly produced and reshaped over time. At the same time, what is conceptualized and enforced as spatial quality relates to choices made in decision-making processes which are influenced by politics, authority and power relationships.

The Friesland case shows that there are actors who create relatively stable understandings of spatial quality which serve as "temporary fixities in the on-going flows of reality" (Hillier, 2007, p. 226; also see Healey, 2007). These are relevant to sustaining an institutional framework which contributes to robustness and flexibility: for instance, fostering both spatial and socioeconomic development by introducing conditions to harmonize place-shaping efforts with perspectives on spatial quality. The case study shows how spatial quality in the Netherlands is produced and negotiated in a multilevel governance system. It shows that the province of Friesland tries not to develop a comprehensive institutional framework but focuses on a selection of aspects related to the preservation of cultural-historical, archaeological and geological objects, sites and spatial structures. On the one hand, the resulting institutional framework brings robustness by favouring "some spatial and temporal horizons, some actions over others" (Jessop, 2005, p. 48). On the other hand, the selectivity brings flexibility in the sense that there is room in policies for developments and more place-specific approaches that better suit local and regional contexts and needs. In Friesland, this has resulted in an institutional framework that consists of a set of generic norms on environmental quality, process requirements including planning principles and the obligation to account for core qualities, and planning strategies revolving around connecting actors on various governance levels and spatial scales.

Furthermore, the case study shows how the urge to stimulate spatial quality prompts the introduction of new approaches to spatial development and planning. Reactive and prescriptive approaches to improve the quality of places, through for example the assessment of plans and the granting of permits, are supplemented with more development-oriented and collaborative planning approaches (e.g. the 'Nije Pleats' project). Initiators are proactively guided to realize developments and at the same time respect and enhance qualities by the qualitative embedding of functions into landscapes. Efforts of this kind generate momentum to enhance spatial qualities. These could become increasingly important. Declining public budgets could inspire planners to become more proactive in looking for, inviting or even tempting public and/or private actors to develop plans and projects to enhance spatial quality.

Strategic storytelling: a development catalyst for 'leisuring' regions? [7]

Abstract

This article connects contributions of storytelling and transitions for the case study analysis of two projects wherein storytelling is used strategically to foster the 'leisuring' of the Hondsrug and Friese Meren regions, the Netherlands. The research shows that stories that reinforce ties and establish new ties between actors can effectively mobilize and unite public and private actors on multiple governance levels and result in actions and projects that contribute to regional development. Moreover, it identifies that using storytelling in the context of long-term spatial transformation processes requires an adaptive approach of continually evaluating and adjusting stories to reinforce actor commitment.

Keywords

Storytelling, strategic planning, leisure, transitions, regional development

7 Hartman, S., Parra, C., & De Roo, G., "Strategic storytelling: a development catalyst for 'leisuring' regions?", *submitted to an international journal*

5.1

Introduction

Storytelling is gaining attention in the field of spatial planning and development (Throgmorton, 1996; Sandercock, 2003; Van Hulst, 2012; Van der Stoep & Aarts, 2012; Bulkens, 2014). Storytelling can be defined as the normative, discursive and political process of creating a story; it articulates what is wrong, how it can be resolved, and how to convince or persuade actors to agree, unite and engage in a collective action process (Van, Dijk 2011). It is about framing a situation in a deliberate and selective manner to prepare for the future (Throgmorton, 2003; Dormans, 2008; Van Hulst, 2012). The interest in storytelling fits in with in discourses and approaches in planning theory and practice that address inter-subjectivities, uncertainties and complexities inscribed in the relational processes driving spatial change (Healey, 2003; Innes & Booher, 2010). These take on board that there are multiple and potentially conflicting perspectives on reality related to a variety of ambitions, interests and opinions regarding spatial quality and development. Moreover, actors' preferences and perceptions of reality usually change over time (Zuidema, 2011; De Roo, 2012). Storytelling, in this context, has been considered as a promising planning tool for sense-making and fostering collective action towards a certain direction (Mandelbaum, 1991; Van Dijk, 2011).

In the Netherlands, the capacity of storytelling to act as a catalyst for regional development is also recognized (VROMraad, 2006). In several projects both public and private actors have chosen to use storytelling to foster the 'leisuring' of regions: the on-going socio-spatial transformations triggered by the influx of activities and development projects related to tourism, recreation and leisure (cf. Bunce, 2008). In this context there are high expectations of strategic applications of storytelling. It is seen as a goal-oriented planning tool that is able to foster this leisuring process by bringing people together, connecting perspectives, synergizing resources and instigating development projects. However, 'leisuring' is a complex and long term process of gradually transitioning from areas of production to areas of consumption (Hartman & De Roo, 2013; Hartman, 2013). Stimulating this process requires the congregation of a variety of stakeholders and their different ambitions, interests and worldviews (Getz, 2008). The question addressed in this article is whether the expectations of storytelling are justified in the context of the complexity of fostering regions that are leisuring.

The article therefore examines whether current Dutch practices of strategic storytelling actually serve as a development catalyst for the leisuring of regions. Contributions on storytelling and transitions are brought together for conceptual and analytical support. Literature on storytelling is used to discuss the capacity of storytelling to change actors' priorities and decisions. We examine how storytelling can be used strategically to persuade actors to engage in a particular collective action (Throgmorton, 1996; 2003; Beauregard, 2003; Gunder & Hillier, 2009; Van Dijk, 2011; Van Hulst, 2012). Literature on transitions and transition management is used to discuss that the leisuring of regions involves engaging in a long term, multi-actor and multi-level transition process (Rotmans et al., 2001; Loorbach, 2007).

The combination of theories on transitions and (strategic) storytelling provides several analytical dimensions which are applied in case study research. These are used to analyse how strategic storytelling contributes – as a development catalyst – to areas transitioning from areas of production to areas of consumption. The projects 'Friese Meren' and 'Hondsrug' were selected in which storytelling has deliberately been used as a strategic tool with the intention to foster the leisuring of these regions. The former is a privately initiated project by a group of entrepreneurs whilst the latter is initiated by governmental officials. By analysing these projects this article also expands the still limited number of contributions examining practices of strategic storytelling that are deliberately initiated to stimulate spatial development at the regional level (Mossberg, 2008; Olsson et al., 2013).

The article has the following structure. Section two presents a framework for the analysis of the development catalyst function of SST by bringing together contributions on storytelling and transitions. Section three and four examine how SST is applied in the cases of Friese Meren and Hondsrug and assess whether it acts as a development catalyst. The final section concludes that using SST to stimulate the leisuring of regions concerns engaging in a potentially long term transition process. Moreover, it explores how an adaptive approach to storytelling can stenghthen its function as a catalyst for regions that are leisuring.

5.2

Towards a framework for examining the catalyst function of SST

The strategic application of storytelling

Storytelling is a tool to transfer knowledge whereby stories help people to share experiences or viewpoints, and to learn about and from the experiences and viewpoints of others (Mandelbaum, 1991; Myers & Kitsuse, 2000). When storytelling is applied as a strategic tool, stories are used not only to inform, share or learn but also to persuade. Stories in strategic storytelling are deliberately produced and used to 'persuade one another about what the future should and can bring, as well as convince others to agree on and engage in a trajectory of actions' (Van Dijk, 2011, 124). It is about effectively persuading others to adopt a different or new perspective or vision but also to alter ways of doing and acting (Throgmorton, 2003; Van den Brink, 2009). Whether stories are effective in doing so depends on the following factors that contribute to their 'mobilising capacity' (Benford & Snow, 2000, 620):

- *Actions of signifying agents*. Signifying agents are key persons or groups that take initiative and actively pursue storytelling and are fundamental 'to mobilize potential adherents and constituents, to garner bystander support' (Snow & Benford, 1988, 198). Stories can serve a bonding function by reinforcing ties between actors and a bridging function by establishing new ties between actors (cf. Putnam, 2000).
- *Credible and salient stories*. Credibility includes empirical credibility, credibility of articulators or claims-makers, and consistency between beliefs, claims and actions. Salience concerns whether ideas or visions presented through stories are essential and meaningful to the concerned actors i.e. if they offer solutions to daily life issues (Benford & Snow, 2000).
- *Strategically selective stories*. Stories are often selective or partial in order to comply with particular believes or to captivate (Salmon, 2010). This is used to emphasize and engage in a (by the initiator) desirable development path. However, when stories are too selective or specific they may exclude particular actors, ideas and perspectives and become contested and distrusted (Polletta 2009, xi). Stories then lose credibility and salience (Sandercock, 2003; Shove & Walker, 2007).

Using storytelling to stimulate the leisuring of regions is not straightforward. Whether regions are leisuring depends on the actions of many firms, societal organisations and institutions that are dispersed over multiple governance levels

and often have different ambitions, interests and worldviews regarding issues at stake (Milne & Ateljevic, 2001; Urry, 2002; Getz, 2008; Parra, 2010; Hartman & De Roo, 2013). As such, aligning actors on different governance levels and connecting existing land uses with the large variety of tourism, recreation and leisure forms is a complex, gradual process that usually takes time and covers several phases (Bunce, 2008). Bearing this in mind, we bring on aboard theories of transitions and transition management to show that applying SST to foster the leisuring of regions involves a long term, multi-actor and multi-level process of transitioning from areas of production to areas of consumption. Moreover, it allows us to draw attention to several analytical dimensions which are useful to apply in case study research to examine whether strategic storytelling functions as a development catalyst.

Transitions theories to examine the development catalyst function of SST

Transitions are understood as processes of gradual change which result in the transformation of the structures, institutions, cultures and practices of a society (Loorbach, 2007; Dewulf, 2009). The concept of transitions is used today in several settings, for instance to describe changes in socio-technical systems of energy and transportation (Geels, 2010), and to examine how the structures and functions of urban regions and socio-spatial systems evolve (e.g. Rauws & De Roo, 2011; Hartman & De Roo, 2013). In this article we adopt the perspective that regions that are leisuring are exhibiting a transition, shifting from areas of production to areas of consumption (Slee, 2005; Bunce, 2008). For transitions to become manifest factors need to interlock and mutually reinforce in multiple systems or domains such as the economy, culture, life styles, institutions, technology, ecology, and belief systems (Rotmans et al. ,2001; Kemp & Loorbach, 2006; Geels & Schot, 2007; Loorbach, 2007). Transitions theory makes use of a multi-level perspective (MLP) to conceptualize that the emergence of transitions relate to interplays between events at a macro, meso and micro level:

- The macro (or 'landscape') level consist of often slow changing factors such as global trends, the macro economy, socio-technical systems, demography and the natural environment (Dewulf, 2009). These include factors that enable the leisuring of regions such as economic growth and an increase of welfare, income and free time to travel as well as innovations in technology, transportation and mobility ease travel. Also for rural places the industry cluster of leisure, tourism and recreation is getting increasingly important for liveability and development in the context of demographic shrinkage, clustering of services in cities and the mechanisation of agriculture (Hartman & De Roo, 2013)

- The meso (or 'regime') level concerns the dominant physical and immaterial infrastructures in combination with actor-networks and institutions (Kemp & Loorbach, 2006). Systems of governance and planning may support developments related to tourism, recreation and leisure. Systems of politics, governance and planning can also be inhibiting forces when the development potential of leisuring is not recognized or not considered compatible with ecological systems, heritage, industries, agriculture, etc. Loorbach (2007) and Dewulf (2009) stress that regimes at the meso level have the capacity to inhibit early stage transitions, but may transform over time to enablers when successful niche-innovations arise.

- The micro level involves individual or small groups of actors and local practices that produce innovations in niches. Successful innovations in niches of tourism and leisure may work their way up to larger scales and over time change the structures and functions of concerned systems. This process is what we refer to as leisuring and drives the transition of areas of production to areas of consumption.

The MLP is a way to show that transitions depend on a large set of interrelated forces. On the one hand, it emphases that transitions can be inhibited for instance by vested interests, constraining forms of regulations, and political preferences that constrain the possibility to deviate from development trajectories of the past (Hartman & Roo, 2013). Transitions are therefore generally complex as they do not come about easily and may take multiple decades (Geels, 2010; Loorbach, 2007). On the other hand, the MLP draws attention to how transitions gain momentum (Loorbach, 2010). Macro-level pressures lead to tensions and open windows of opportunity, paving the way for niche-innovations (cf. Hajer, 2003 on institutional voids; Geels, 2010). The increasing competition for attracting visitors to places and the interest of macro-scale governmental institutions in storytelling are examples of these pressures – discussed in more detail below. These open windows of opportunity for the introduction of strategic storytelling and for innovations in niches of the industry cluster of tourism, recreation and leisure.

The complexity of transitions means that these processes cannot be managed in terms of command and control (Rotmans et al., 2001). Instead, managing transitions involves a subtle process of influencing and adjusting. Contributions to transition management elaborate on strategies to influence the speed and direction of transitions (Kemp & Loorbach, 2006). This is of course also the aim of initiators of strategic storytelling projects: to stimulate the shift from areas of production to areas of consumption. From contributions to managing and

governing transitions we have derived six stages to stimulate transitions (Quinn & Cameron, 1983; Caffyn, 2000; Lowndes & Skelcher, 2002; Kemp & Loorbach, 2006; Loorbach, 2010; Voss & Bornemann, 2011; Foster & Barnes, 2012):

- Stage 1: establish a small actor network of frontrunners;
- Stage 2: draft a transition agenda that serves as a policy frame for collective action;
- Stage 3: mobilize resources;
- Stage 4: execute development projects;
- Stage 5: enhance regional and external connectedness;
- Stage 6: establish the adaptive capacity to revisit stage one to five through monitoring and evaluating progression and by revisiting and reorganising actor networks, transition agendas, projects, and mobilising additional resources.

The combination of theories of transitions and storytelling draws attention to several important dimensions that we include in the analysis of storytelling projects. These dimensions are used to structure our case study research as follows:

- *The development function of SST*. The set of six 'transition stages' discussed above is used to examine whether SST acts as a development catalyst.
- *The actions of 'signifying agents'*. We identified and interviewed key actors to examine their roles and strategies in relation to initiating and executing projects that involve SST to stimulate the leisuring of regions.
- *The factors that influence the 'mobilising capacity' of SST*. We examine how the mobilisation of actors and resources relates to the strategically selectivity, credibility and salience of stories.
- *The contextual developments that pave the way for SST*. The MLP draws attention to the interplays between macro, meso and micro levels affect transition pathways. This dimension emphasizes to analyse storytelling projects 'in context' (include multiple levels and include the past and present) to identify enabling factors for introducing and using SST for the leisuring of regions.

These dimensions enable us to examine how strategic storytelling contributes to the leisuring of the Hondsrug and Friese Meren regions. The following section first elaborates on how contextual developments on the macro level and the meso level of regimes open a window of opportunity for introducing SST to stimulate the leisuring of regions. The case study analyses also reflect the use of the dimensions. After introducing the storytelling project, the subsequent parts

reflect on the contextual development that paved the way for SST, analyse how signifying agents use stories, and examine whether storytelling can serve as a development catalyst.

5.3 Strategic storytelling to stimulate regional development in the Netherlands

The interest in combining storytelling and leisure relates to macro-level forces that drive the importance and development of the 'leisure economy' – a container concept used in the Netherlands to refer to the growing industry cluster of tourism, recreation, leisure, wellness and exurban living (Hartman et al., 2011). On the one hand, the leisure economy gains importance in contemporary society and brings new development opportunities. For rural areas, such as our case-studies, the leisure economy appears as a socio-economic alternative to a declining of job opportunities in agriculture and manufacturing. On the other hand, it has evolved into a globally interconnected and differentiated economy. Consumers enjoy the ability of selecting from a wide variety of travel options, destinations and activities. In response, actors from the rural world direct efforts to enhance regional cohesion, regional profiling and destination management as a means to develop and brand localities, activities, the routes connecting them, and their socio-cultural and landscape (hi)stories (Buhalis, 2000; Hall, 2008; Olsson et al., 2013). The characteristics of the leisure economy call for cooperation among stakeholders, sharing of ideas, and alignment of worldviews and actions. Strategic storytelling, as further examined through the case-studies of Friese Meren and Hondsrug, might play a positive role in the creation of this cohesion.

The emergence of planning projects that revolve around strategic storytelling is also strongly inspired by the meso level of regimes. In 2006, the VROMraad – a leading and respected governmental advisory board – drew attention to the potential of storytelling to stimulate development at the interface of spatial quality and the leisure economy (VROMraad, 2006). In 2008, the 'Toerisme Brief' [Letter on tourism development] by the state secretary of economic affairs urged provincial authorities to explore the potentials of storytelling and announced public support for storytelling through an innovation program. The government agency 'IPO' [inter-provincial agency for coordination] held meetings to inform provincial authorities about storytelling and selected six pilot projects for the state innovation program. In 2009, the organisation 'STIRR' [Foundation for innovation, recreation and spatial development] was created to facilitate

initiatives combining tourism, recreation and spatial development[8]. For the period 2010 to 2012, the state commissioned STIRR to execute an innovation program on storytelling supporting the six pilot projects selected by the IPO.

These contextual developments at the macro and meso level open a window of opportunity at local levels, enabling government agencies, coalitions of entrepreneurs and public-private partnerships to introduce and use SST to stimulate the development of Hondsrug and Friese Meren. The following sections examine whether SST successfully functions as a catalyst for regional development. Data for the empirical study is the result of a document analysis from which we derived key processes and events on various levels, and semi-structured in-depth interviews with ten key persons such as initiators and project stakeholders who are or where actively involved in initiating or executing the planning projects that involve strategic storytelling. Respondents were entrepreneurs, planners and policy advisors from the province of Drenthe and Friesland, independent policy advisors and landscape architects, and representatives of societal organisations and entrepreneurial associations.

5.4 Strategic storytelling to develop the 'Hondsrug' region

In the Hondsrug project SST is used to develop the Hondsrug region, located in the Dutch province of Drenthe. The name Hondsrug refers to a moraine, a ridge in the landscape that is formed during an ice age, and is characterized by prehistoric megalithic tombs. A coalition of local and regional governments and governmental agencies selected storytelling as a strategic tool to raise awareness about the Hondsrug's heritage and to utilize the potentials of historic features for recreational and tourism development. The project includes the ambition to acquire the status of 'Geopark[9]' and therefore features framing the region as Geopark Hondrug. The project was executed between early 2011 to early 2014 with a total budget of 2.27 million euro.

8 Inspiration to do so relates to the report 'Kansen voor het Platteland' [Opportunities for rural areas] published in 2005 by an advisory commission for socio-economic affairs and the 'Manifest van Hattem' [Manifesto of Hattem] published in 2006 by a group of pioneering entrepreneurs.

9 'Geopark' is a status awarded by the European Geopark Network (EGN) that operates under the auspices of UNESCO to areas that include geological heritage and a sustainable (tourism) development strategy.

Paving the way for storytelling

The transition perspective makes us aware that the catalyst function of SST should be considered in the context of developments of the past. In the pre-development phase of the Hondsrug project we can identify the stages of establishing actor networks, agenda setting and mobilising in-region resources (transition stage 1 to 3). Initiators of the project build on these developments of the past, which thereby had a major effect on paving the way to select and pursue storytelling.

The project start-up relates to the work of two thematic 'working groups' on tourism, and heritage and geology. These would later in time unify and provide the signifying agents that advocated the use of SST for regional development. The heritage and geology group explored the concept of Geoparks and by doing so identified how stories can be used to raise awareness about the uniqueness and importance of geological elements. This group was created in 2006 in the context of heritage gaining a more dominant position in European, Dutch national and provincial policies on spatial development. The tourism group identified that, on study trips to the regions Verdun, France and Ruhr, Germany how local histories supply place based spatial qualities that can be used in stories to create tourism experiences. This group was created in 2009 in the context of the leisure economy becoming an increasingly important contributor to liveability in the Hondsrug region in terms of sustaining employment, maintaining public facilities, retail, and infrastructure. Several members of both of the working groups took part in interprovincial networks and attended meetings on storytelling by STIRR and IPO. These organisations were among the Dutch national institutions emphasising the potential of strategic storytelling for the development of tourism and recreation. A call for project proposals by a regional subsidy program formed a major stimulus for the members to join forces, collaborate and write a substantive and integrative project proposal to increase their chances of success.

Articulating stories became a major part of the project design as it could strike a chord between the ambitions of preserving heritage and developing the leisure economy. Funding for the proposal was granted because of the following factors. First, the project pursues synergies between spatial qualities and socio-economic development, being in line with provincial policy documents on spatial development and heritage. Second, the stories were supported for being (pre)defined in consultation with credible experts and for covering the region from a historical and geographical perspective. The latter was included deliberately to meet the interests of the various project stakeholders. Third,

the use of storytelling was endorsed because credible institutions (VROMraad, IPO) were actively drawing attention to the potential of the approach and its similarities with successful strategies encountered abroad. Fourth, the Geopark status and the EGN and UNESCO offer internationally renowned brands and platforms for marketing purposes and raising awareness. Fifth, the two provincial representatives that are politically responsible for environmental and economic affairs committed themselves to the idea of Geopark Hondsrug and operated as intermediaries by chairing meetings with local municipalities and societal organisations to garner (co-financial) support for the project. These factors contributed to the start of the project 'Geopark Hondsrug' early 2011 with a budget of 2.27 million euro.

These factors show the complexity of introducing storytelling. It requires amongst others knowledge of storytelling to be widely disseminate, resource availability, political support, actions by signifying agents, well-crafted and credible stories and salient project outcomes (more tourists, linkages to international brands and platforms). Moreover, mobilising (governmental) actors and (public) resources for strategic storytelling requires organising capacity and benefits from ideas that fit in with governmental policies and political ambitions. When this is the case the actions of actors in different domains may interlock and reinforce one another, thereby stimulating the transition of regions that are leisuring

How signifying agents strategically use stories and contribute to regional development

The Hondsrug project mainly revolves around articulating a set of eleven stories[10] (transition stage 4) and enhancing regional and external connectedness (transition stage 5). Articulating stories contribute to regional development in a variety of ways, for instance by means of signage, landscape art, landscape design and infrastructure development. When articulated, each story tells the tale of a specific part of the area's past (e.g. Ice Age) and ties together a set of sites, histories, expositions, activities, events and facilities. Geographically, every story is connected to either a museum or visitor centre that serves as the main node in a local network of places of interest. The stories are therefore used as *products* to enhance societal awareness about heritage values and to attract

10 Stories and year of completion: Ice ages, 2012; Peat, 2012; Prehistory, 2012; Farmers, 2013; War and peace, 2013; Forestry, 2013; Nature and landscape, 2013; Artists, 2013; Water, 2013; Belief and disbelief, 2014; Folk culture, 2015.

recreationists from the region and the (inter)national tourism community. Stories are also used as *tools in a process* to trigger local communities, entrepreneurs and their associations, governmental institutions and organisations at different levels to adopt the idea of Geopark Hondsrug and contribute to its development.

A small project agency was made responsible for elaborating the eleven stories and entrusted with the task to unite actors and persuade them to further develop the area as Geopark. The agency could start immediately because its members were involved in writing the project proposal. This made them knowledgeable about the project, familiar with the region, its origin and history, and well embedded in the organisational and institutional fabrics of the region. Moreover, the content for three stories largely pre-existed (Ice Age, Peat and Prehistory). Results could therefore be generated and communicated in an early phase of the project. The stories are used strategically for the purpose of bridging and bonding (cf. Putnam, 2000).

The strategy of bonding concerns using storytelling to reinforce the existing connectivity between actors. Politicians and governmental officials are invited periodically for events or study trips such as to other Geoparks. A partner network has been established to strengthen the ties with entrepreneurs and societal organisations. The project agency interacts frequently with societal organisations and entrepreneurial associations and uses various media channels for information dissemination. The purpose of these efforts is to inspire and enthuse actors in order to reproduce commitment, mobilize additional resources and trigger leisure developments. As such, the project agency operates as an intermediary organization that reinforces connections between various actors, organizations and institutions at different governance levels.

- The creation of a corporate identity to link actions and activities to the Geopark Hondsrug concept.
- The dissemination of information through websites, traditional and social media, an application for mobile devices, augmented reality technology, brochures, signage, events, expositions, public media database.
- The installation of the Hondsrug Academy to offer lectures and courses related to the stories.
- The commissioning of (public) art to (re)produce awareness and generate (media) attention. Examples are the display of recovered monoliths from the ice age in public spaces throughout the region and an art project consisting of adding new polished stones to various places in the landscape.
- The organization of yearly events: a 'geology week', a symposium to present and reflect on (prospective) achievements, revealing (newly discovered) geological monuments.

Table 5: Strategies for information dissemination and raising awareness (source: based on interview with initiators)

The strategy of bridging concerns using stories to establish new connections. First, stories are disseminated via different strategies (table 5) to provide information to inhabitants and visitors about the regions' unique histories and characteristics, for reasons of preservation and to display leisure activities. Second, the project agency seeks frequent interaction with entrepreneurs and societal organisation to discuss the Geopark concept and progress of the project to inform, enthuse and invite these actors to use the stories and link their activities to the stories and the Geopark concept to contribute to the goals of the agency. A representative from the agency mentioned that it remains difficult because entrepreneurs active in the leisure industry tend to focus on operational matters at the business level over strategic planning at the regional level. Third, the agency tries to use other projects that relate to geology and spatial development to enrich the contents of the stories and generate publicity. Examples are the EU Leader project 'HINT' (Heritage Interpretation using New Technologies) and the development of the 'Veenvaart' (a new canal crossing the moraine). Fourth, the stories were successfully used as part of a plan to apply for the Geopark status. The status was awarded in September 2013 and allows the use of an internationally renowned label (Geopark) and offers connections to new networks (EGN, UNESCO). These are important platforms for raising awareness and branding, and reinforce both the bridging and bonding function of storytelling.

Sustaining the impact of SST on regional development

The transition perspective also draws attention to iteratively revisiting the transition stages and developing an adaptive approach to storytelling (transition stage 6). In the Hondsrug case we found that stages are revisited. Already during the project stories are used to reinforce actor networks and garner support for the project's aims. This strategy contributed to the decision of local and regional governmental agencies to continue the Hondsrug project and provide funds until 2016. Moreover, the organizational structure will be revised after the project period to better include representatives of entrepreneurs and inhabitants in an advisory board, and to install a scientific committee to continuously enrich, renew and expand the stories.

Such an adaptive approach is also important to manage the dynamic environment wherein storytelling takes place. For instance, the institution at which the Hondsrug project was formally registered was disbanded during the project period which created financial insecurity and delayed the project. Also subsidy cuts are prospected in the cultural sector for museums and visitor centres. This may affect the project outcomes as the storytelling strategy

draws on the viability of various cultural facilities that are used as main nodes in a network of places of interest. Losing the Geopark status could also inhibit the leisuring of the Hondsrug region. Potentially, the status could be repealed which might negatively affect resource allocation and development momentum. Furthermore, articulating captivating stories and garnering support needs to be organized and funded. An interviewee sees that entrepreneurs in the leisure industry are unable to do so on their own, and argues that "*in the long term I see a need for governments, for public funding, especially to sustain the project agency and organisational networking*" (interview, employee Hondsrug project agency).

5.5

Strategic storytelling to develop the 'Friese Meren' region

In the Friese Meren project SST is used to develop the 'Friese Meren' area, situated in the province of Friesland, the Netherlands. Friese Meren is a lake district and is known as a hub for water sports. A coalition of leisure entrepreneurs introduced storytelling as a strategic tool to stimulate investments that enhance Friese Meren as a destination for tourism and recreation. Their aim is to develop a shared and enhanced understanding of the leisure economy and to highlight a sense of urgency to act and improve the region its competitive position. The project was executed between early 2010 and early 2011with a total budget of 0.15 million euro commissioned by the province of Friesland as part of a large scale water infrastructure program. The use of strategic storytelling revolves around the process of defining stories, which contrasts to the Hondsrug case where stories were largely predefined prior to the start of the project.

Paving the way for strategic storytelling

The transition perspective makes us aware that the catalyst function of SST should be considered in the context of developments of the past. In the pre-development phase of the Friese Meren project we can identify efforts aimed at establishing actor networks, agenda setting and mobilising in-region resources (transition stage 1 to 3). These allowed the initiators of the project to build on and benefit from a set of developments of the past and had a major effect on paving the way to select and pursue storytelling.

The selection of storytelling is the result of a sequence of actions by an actor network of leisure entrepreneurs, operating as signifying agents. A key moment in the formation of this actor network was a regional marketing project for the lake district, supported by local municipalities and executed between 2005 and 2008. An interviewee argued that in hindsight the project was important because it '*hugely expanded and broadened everyone's network*'. Moreover, it made entrepreneurs recognize that '*the region was a comfortable size and scale for cooperation*' and revealed that '*we had too little knowledge of the region as well as of leisure as a phenomenon*' (interview, entrepreneur leisure industry). Subsequently, to expand their knowledge about regional development and to explore the potentials of storytelling, the entrepreneurs contacted the authors of the 2006 VROMraad report on storytelling (see section 3) – one was involved in the preparation of the report and became inspired. Multiple meetings and a study trip to 'Heuvelland' (cf. Boelens, 2010) motivated the entrepreneurs to further pursue storytelling and search for partners and resources to do so.

Partners and resources were found largely within the realm of governments. Multiple factors were important for a public-private coalition to agree on and select storytelling as a strategy to stimulate leisuring processes. First, entrepreneurs experienced the potential of storytelling in practice during study trips. Second, Dutch national institutions emphasized the potential of storytelling (see section 2). Third, the idea of storytelling found resonance in the context of an investment program in the water infrastructure of the province of Friesland. The aim of this program, redeveloping waterfronts and improving connections between the water and the mainland, offered opportunities to mobilize (public) resources for a storytelling project. Moreover, the board of the water infrastructure program was knowledgeable about storytelling, as it represented the province of Friesland in the interprovincial coordination body (IPO). In this position, board members successfully suggested the Friese Meren project as one of the pilot cases to be included in a state supported innovation program on storytelling (see section 2).

The actions of state institutions, local entrepreneurs and board members of the provincial investment program linked local, regional and national governance levels, and paved the way for a storytelling project. Nevertheless, a key event that strongly increased momentum took place in 2009. Again, the leisure entrepreneurs contacted the authors of the 2006 VROMraad report, this time inviting them to the region to explain to regional stakeholders that storytelling could be concretized in a project and result in a set of feasible business concepts. Amongst these stakeholders were leisure entrepreneurs from the region, governmental officials, and the provincial representative responsible

for recreation and tourism. The event motivated this actor network to pursue storytelling, pool resources and commission a 0.15 million euro project.

These findings reveal, in line with the Hondsrug case, the complexity of introducing storytelling. It requires knowledge of storytelling to be widely disseminate, resource availability, political support, actions by signifying agents, networking activities, etc. It once more stresses that mobilising (governmental) actors and (public) resources requires organising capacity and fitting in with governmental policies and political ambitions. Then, the actions of actors in different domains may interlock and reinforce one another, thereby stimulating the transition of regions that are leisuring.

How signifying agents strategically use stories and contribute to regional development

The Friese Meren project uses mainly on the process of defining credible and salient stories about desirable future situations to inspire leisure entrepreneurs and governments to further stimulate the leisuring of the region. In doing so the emphasis is on establishing a regional actor network (transition stage 1) and defining a set of project plans and business concepts to influence development agendas (transition stage 2). A project group was created to execute the project in the period between early 2010 and early 2011. A coalition of high-end, credible consultants designed the process of articulating stories. One entrepreneur and a governmental official from the province of Friesland related a large scale water infrastructure program were included to operate as intermediaries between the consultants and a broader group of entrepreneurs, politicians and governmental agencies. This composition was deliberately chosen to stimulate a multi-actor, collaborative process and to ensure that outcomes would be considered salient and credible by the various parties. The design of the process included the following steps:

- First, an area analysis was executed by the consultants to articulate competitive elements and relevant stakeholders, using as a point of departure a prior analysis of the regional agency for rural projects [‘Plattelânsprojekten’]. “There were good ideas” but some findings were less credible for being “too distant from the region” (interview, entrepreneur leisure industry).
- Second, a strategic meeting was held with a mixture of public and private actors from within the region. The meeting enhanced mutual awareness about agendas for socio-economic and spatial development and revealed that many actors found themselves in a common enterprise.

- Third, multiple thematic workshops were held with entrepreneurs from different sectors and from within and outside the region as means to elaborate stories and feasible business concepts to stimulate leisuring processes. These workshops yielded two stories: 'Sailing School of Europe' and 'Clean and Pure'. The stories found resonance for portraying desirable outlooks on the future and for building on regional characteristics such as the lake district, water sports, and distinctive spatial and socio-cultural factors that provide for a sense of authenticity and emphasize quality of life.
- The action plan 'Nieuwe Markten Zuidwest Fryslân' [New Markets for southwest Friesland] published early 2011 marked the end of the project. The plan distinguishes thirty project plans and business concepts to stimulate the process of leisuring. The action plan also recognizes the importance to further invest in knowledge development, in enhancing connectedness through entrepreneurial networks that contribute to organizing capacity, and in regional partnerships that tie together public and private actors and resources. As such, the plan suggests a set of follow-up steps that may persuade actors to initiate projects and contribute to the leisuring of the region.

The contribution of SST is mainly on an organisational level, contributing to the formation of regional actor networks and agenda setting. The process of generating stories serves a bridging purpose of reaching out to more external stakeholders and a bonding purpose of strengthening in-region ties and institutionalising entrepreneurial networks. These steps concern stage 1 and 2 of stimulating transitions, and provide a foundation for follow-up actions that relate to stages of mobilising in-region resources, executing projects and furthering regional connectedness (stage 3 to 5). The project could be seen as an intermediate step in a larger, longer term transition process

Sustaining the impact of SST on regional development

The transition perspective draws attention to the importance of iteratively revisiting the transition stages and developing an adaptive approach to storytelling. In the Friese Meren case the contours are emerging of an organisational structure that could grow out to become a regional governance system that is capable to revisit and reproduce stories, actor networks, transition agendas, development projects, and mobilize resources (transition stage 6). After the formal end of the project, involved entrepreneurs established the entrepreneurial association 'Fries Merenland' to operate more cohesively and cooperate more extensively to strengthen their organising capacity. The association allows governments to better connect to what entrepreneurs find

salient. This has led to the municipality Súdwest Fryslân adopting large parts of the action plan in their strategic vision on tourism development, published in March 2013. So far, the association took action to start a feasibility study for a regional visitor centre and implement a rental system for electric bicycles. It also co-organizes workshops with public and private actors from within and outside of the region, in the context of the state innovation program on storytelling, to share experiences, stimulate in-region knowledge development and ultimately stimulate development projects.

Reinforcing connectedness between actors to mobilize and pool resources (time, people, knowledge, finances) in order to enhance the organising capacity remains problematic, however. The leisure economy consists of many small scale businesses that lack the time, personnel and finances to invest in such connections. An intermediary project agency could take this role, and coordinate and stimulate projects, as is the case for Geopark Hondsrug. In the case of Friese Meren entrepreneurs feel that funding for such an agency needs to come from governments. This inhibits further development because "*[t]he province contributes when municipalities do. That is where it stalls. Municipalities were not well involved from the beginning of the process. That is what we find out now*." (STIRR, 2012, p. 3-4, translation by authors).

5.6 Discussion: strategic storytelling as a development catalyst?

The case studies show that strategic storytelling (SST) can act as a development catalyst for regions that are leisuring. However, this catalyst function is situational as it yields different effects for different regions. Development may manifest itself in terms of spatial development but outcomes could also be less visually perceptible, such as an enhanced connectivity and cooperation between actors within a region. The Friese Meren project is in a relatively early stage, revolving around forming actor partnerships, pursuing agenda setting, and aiming to mobilize resources to execute development projects. More advanced is the Hondsrug project, which is successful in mobilising resources, executing projects, furthering connectedness, and establishing a more permanent organisation to sustain storytelling in the future. The analysis of these projects also draws attention to the following more general factors that contribute to the catalyst function of SST.

Ensure that the potential contribution of storytelling to regions that are leisuring is known by actors on multiple levels. In the Netherlands, various governmental institutions emphasize the potentials of storytelling to stimulate the leisuring of regions. The result is that potential initiators ('signifying agents') with a capacity to mobilize resources for storytelling projects become knowledgeable about the potentials and applications of storytelling. Storytelling could then be selected as a strategy at the moment local and regional development issues arise that open up room for new policy proposals.

Use stories to create bridges and reinforce bonds between actors. The bridging function refers to the use of stories to forge new linkages between actors. Stories could be used for awareness raising, marketing and branding purposes to interest, attract and bind visitors, inhabitants and leisure-related businesses from within and outside of the region. Stories can also be used to other public and/or private development projects and programs and to organisations and institutions that operate on larger governance levels, such as in our cases provincial governments, IPO, STIRR and EGN. The bonding function refers to the use of stories (and the process of articulating stories) as instruments to reinforce existing linkages between actors and contribute to more cohesive actor networks. The formation of actor networks stimulates organising capacity by easing information dissemination, reinforcing commitment and mobilising resources. The combination of bridging and bonding contributes to uniting actors, persuading them to mobilize resources, and initiate development plans and projects.

Actively produce, materialize and disseminate stories. The cases show that strategic storytelling also includes investments in organisational capacity and the materialisation of stories. Critical are intermediary actors or agencies that actively produce and use stories to interlink entrepreneurs, societal organisations, business associations, and (semi-)government agencies and persuade these actors to commit to a course of action that underlie the stories. The materialisation of stories concerns for instance infrastructure development, landscape art and all other aspects listed in table 5. These actions have the capacity to enrich as well as revise stories.

Evaluate and adjust stories and supportive organisational structures. Revising stories is needed to reinforce their salience and credibility in the face of changes in for instance the economy, technology, demography, and politics. These can alter situations and change actors their preferences, interests, intentions, and courses of action. When stories become interpreted as too selective or specific by excluding particular actors, ideas and perspectives regions that

are leisuring can be inhibited in their transition. In addition, as is shown by the Hondsrug case, adapting systems of governance could be necessary to attract and include new or other actors and resources that are relevant for continuing storytelling. Part of strategic storytelling is the capacity to evaluate and adapt the organizational (infra)structure (transition stage 6).

Including theories on transitions into the analysis of the projects offered the perspective that using strategic storytelling to stimulate the leisuring of regions is about engaging in a potentially long term process of socio-economic and spatial transformation. These theories help to show that the emergence, design and execution of storytelling projects are influenced by a combination of prior events on multiple governance levels. Furthermore, the set of transition stages were useful to examine and discuss the contribution of strategic storytelling to regional development. In doing so the research learns (future) users of strategic storytelling to carefully consider the particular context of the target region as this can greatly affect how SST can be used and which outcomes can be expected. The research also identifies that using SST in the context of transitions requires an adaptive approach to storytelling in order to maintain and improve its mobilizing capacity.


6

CHAPTER 6

Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity [11]

Abstract

Tourism area development is affected by the competitive global tourism industry and the complex, multilevel dynamics of the contemporary network society. The strategic planning and governance challenge is stimulating tourism areas to become adaptive areas, being capable of responding to changing contexts in order to maintain or improve the performance of these areas as competitive tourism destinations. This article examines conditions for "adaptive tourism areas". It does so on the basis of a complex adaptive system (CAS) perspective on tourism area development. The perspective is used to conceptualize tourism areas as complex and potentially adaptive systems, and to discuss how tourism area development can be understood as a multilevel, co-evolutionary and path dependent process. Furthermore, the CAS perspective is used to draw attention to the importance of a degree of diversity in terms of tourism products, experiences and firms. Encouraging a degree of diversity requires among other things interconnectivity among actors to ease communication and coordination, (policy) experimentation for niche-innovations, learning and reflexivity. The article ends with a discussion on the potential of, and constraints on, pursuing adaptive tourism areas from a strategic planning and governance point of view.

Keywords

complex adaptive system, tourism area, strategic planning, governance, diversity

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6.1 Introduction

Many areas around the world are witnessing development processes that are designed to foster recreational and touristic demands (Bunce, 2008). This relates to the emergence of the "leisure economy" a container concept used in Dutch planning practice to describe land uses and activities related to tourism, recreation, leisure, wellness and such amenity migration as ex-urban living and working (Hartman et al., 2011). Underlying driving forces include an increase of welfare, available income and free time, altering lifestyles and cultures, changing demographics and migration patterns, innovations in technology, transportation, mobility, communication, as well as shifts in governance and policy (Gillespie, 2007; Hall, 2008; Williams & Shaw, 2009). As a result many people have an increasing capability to spend their resources on tourism and leisure-related activities, such as travel, recreation, sport and wellness. The emerging leisure economy generates potentials for spatial and socio-economic development at local and regional levels. The potential of the leisure economy is widely recognized and it drives development processes in many places worldwide. It has evolved into an interconnected and competitive global economy (Urry, 2002; 2005). Because new tourism products and leisure activities are developed continually, visitors can select from an extensive variety of destinations and a dynamic set of experiences (Butler, 2011). As a result, competition for visitors takes place between individual businesses, regions and countries. Milne & Ateljevic (2001, p. 371) argue, therefore, that "it is essential to look carefully at how interactions between the global and the local shape development outcomes for individuals, households, communities and regions". In the context of the dynamic and complex nature of processes driving tourism area development, this article emphasizes the importance of "adaptive tourism areas". Adaptive refers to the capacity to respond and adjust to market changes as a means to maintain or improve the performance of these areas as competitive tourism destinations (Axelrod & Cohen, 2000; Heylighen, 2008). This article draws attention to key conditions for encouraging the adaptive capacity of tourism areas. Moreover, it highlights that pursuing adaptive tourism areas comes with various governance issues. Developing adaptive capacity has the potential to contribute to a more sustainable tourism industry in terms of profit (e.g. attractiveness, competitiveness), planet (e.g. create more room for sustainable and eco-tourism, limit waste of resources associated with prior investment in tourism) and people (e.g. career opportunities, community-based tourism).

In order to uncover conditions for adaptive tourism areas, this article examines contributions to literature that use theories of complex adaptive systems (CASs) to analyse and manage the dynamics of areas or places. These include applications of CAS theories by tourism scholars to analyse tourism area development (Baggio et al., 2010; Farrell & Twining-Ward, 2004; McDonald, 2009; Russell & Faulkner, 1999). CAS theories are also a major theoretical framework for evolutionary economic geography (Brouder & Eriksson, 2013), which is recently gaining attention to better understand and analyse how tourism areas evolve over time (Brouder, 2014; Ma & Hassink, 2013). We also connect to scholars in the field of urban and regional planning and governance using CAS theories to manage dynamic areas (De Roo et al., 2012; Portugali et al., 2012). Moreover, we examine literature on transition management (TM) and adaptive management (AM) which specifically elaborates on strategies for managing CASs (Foxon et al., 2008; Van der Brugge & Van Raak, 2007; Voss & Bornemann, 2011).

Theories of CAS offer a set of concepts and elaborate on mechanisms that relate to the capacity of a complex system to adapt to its persistently changing contextual environment (Manson & O'Sullivan, 2006). These insights are used in this article to conceptualize tourism areas as complex systems that have the potential to be adaptive. Furthermore, literature on TM and AM is used to further elaborate on conditions for adaptive tourism areas and their implications for strategic planning and governance. In doing so, the purpose of the article is to contribute to a more sustainable, resilient development model that revolves around tourism areas retaining the capacity to adapt to persistently changing situations. The underlying idea is that adaptive capacity contributes to the ability of tourism areas to avoid negative and potentially large fluctuations in terms of local and regional development potential and competitiveness (Pastras & Bramwell, 2013).

This article consists of the following parts, wherein the argument is developed that adaptive capacity for tourism areas strongly relates to a degree of diversity in terms of tourism and leisure products, experiences and firms. In Section 2, theories of CAS are used to conceptualize tourism areas as complex systems that have the potential to be adaptive. Section 3 draws attention to the importance of a degree of diversity for the capacity to adapt. Section 4 examines AM and AM, highlighting that important conditions for maintaining a degree of diversity for the purpose of the capacity to adapt include interconnectivity, interaction, (policy) experimentation and niche innovations, learning and reflexivity. Section 5 reflects on governance issues that relate to pursuing adaptive tourism areas, on the basis of which conclusions are drawn in the final section.

6.2

A complexity perspective on adaptive tourism areas

The paper's introduction emphasized that tourism areas are dynamic, partly because these areas are embedded in a dynamic contextual environment. It highlighted how tourism area development is driven by multilevel and multi-actor processes (Milne & Ateljevic, 2001). The consequence for tourism area development is that on the one hand, global-to-local interactions present development opportunities at local and regional levels, and on the other hand, an urgency to respond and adapt in order to retain competitiveness (Urry, 2003). The capacity to adapt tourism areas to changing situations is, therefore, a crucial property to sustain spatial and socio-economic development. To identify conditions that encourage the adaptive capacity of tourism areas, we introduce a complex adaptive systems (CAS) perspective on tourism area development. This CAS perspective allows us to connect to literature about adaptive capacity and to further elaborate on conditions for adaptive tourism areas (Sections 3 and 4).

Conceptualising tourism areas as complex adaptive systems

Tourism areas can be understood as cohesive systems, as systems can be defined as elements, agents and their actions that are tied very closely to other elements, agents and their actions (Axelrod & Cohen, 2000). This system perspective is adopted by Ma & Hassink (2013), who argue that tourism areas consist of interrelated products, sectors and institutions and their mutual interactions. Brouder & Eriksson (2013, p.373) also see "multiple levels of agent interaction in the form of labour, firms, networks, technologies and institutions", and they regard tourism areas as a "bundle of many sources of evolutionary change". Similarly, Baggio et al. (2010), taking a network perspective, argue that tourism areas consist of interrelated stakeholders that jointly meet visitor needs and produce experiences that visitors consume. The actions of actors define system boundaries, but we must be aware that changes in actions may result in the renegotiation of these boundaries (Byrne, 2005; Cilliers, 2001).

Systems are considered complex when interactions between components result in circular cause-and-effect relations. This means that "change in the first component is fed back via its effects on the other components to the first component itself" (Heylighen, 2001, p.10). It is argued that tourism areas feature such complexity (Farrell & Twining- Ward, 2004; McDonald, 2009), which makes it difficult or even impossible to predict the exact outcomes of system dynamics in the future (Cilliers, 1998). Complexity suggests that one

should be modest about aiming to fully control the development paths of places (Urry, 2003). As such, complexity inspires the pursuit of adaptive, incremental approaches to tourism area development to deal with changing circumstances and uncertainties, next to the more traditional large-scale blue-print plans and end-state projects.

When changing system components results in maintaining or improving the system's performance, it is called adaptation (Axelrod & Cohen, 2000). Entrepreneurs, firms and institutions that engage in tourism (area) development eventually all seek adaptation, aiming for competitive advantages and improved performances by adjusting or developing new tourism products and experiences. In complexity sciences, the process of self-organisation is considered a key aspect of adaptation. Self-organisation concerns the ability of agents to change systems spontaneously without one single agent controlling the entire process (Heylighen, 2008). Self-organisation in the context of tourism areas can be related to the entrepreneurial behaviour of individuals, firms and institutions and their pursuit of the development of new, innovative products and experiences as a means to maintain or improve the performance of businesses as well as the tourism area of which these are a part. Adaptation in the context of tourism areas is, therefore, likely to include (multiple) public and private actors and to involve governance issues relating to room in policy frameworks, decision-making and power, or to top down versus bottom-up approaches.

A CAS perspective on tourism area development

Next to conceptualising tourism areas as complex and potentially adaptive systems, we can use theories of CAS to show how tourism area development can be understood as a multilevel, co-evolutionary and path-dependent process. These insights are useful to further elaborate on the adaptive capacity of tourism areas, as is explained below. Multilevel implies that CASs are affected on the one hand by small-scale, micro-level developments and local characteristics and on the other hand by macro-scale trends and events (Byrne, 2000). Often local development is shaped by macro-scale changes e.g. in welfare, technology, policies or societal demand. But whereas, for instance, global awareness about sustainability is affecting tourism development plans and projects, how sustainability is incorporated still very much depends on the local context. Nevertheless, the structures and functions of places may fundamentally change when innovative micro-scale projects are amplified and grow out to larger transformative processes and affect wider (geographic) scales and higher (governance) levels (Hartman & De Roo, 2013; Kemp & Loorbach, 2006; Rauws & De Roo, 2011). This has occurred in many coastal areas. For

instance, in the Mediterranean, where once small-scale and regionally oriented agricultural or fishing communities have gradually been transformed into large-scale international tourist destinations. The perspective that tourism area development is a multilevel process closely relates to the concept of co-evolution that describes the interactions between different systems.

Co-evolution means that adaptation in one system triggers adaptive responses in another and vice versa, and it occurs because systems constantly interact (Gerrits, 2012; Portugali et al., 2012). Tourism areas are nowadays connected in a global economic system, which drives processes of co-evolution between areas in order to retain competitiveness. Moreover, tourism area development is shaped by impacts that come from economic, ecological, socio-cultural, political-institutional and socio-technical systems (Farrell & Twining-Ward, 2004). For example, we are witnessing how tourism development is affected by the impacts of climate change and crises in financial systems. In contrast, tourism development may also affect these systems. It may perturb ecosystems or trigger supportive changes in systems of spatial planning when entrepreneurs introduce new products that require room in policy frameworks. In line, evolutionary economic geography uses co-evolution to refer to the interplay between firms, industries and institutions (Boschma & Martin, 2010). On the one hand, co-evolution implies that tourism areas are subjected to processes of evolutionary change, which impact on development paths in a rather autonomous manner. On the other hand, co-evolution implies the adaptation of, among other systems, systems of planning and governance. However, it can be difficult to adapt systems due to path dependencies (see below). Hence, there is a need for active change management in relation to processes of evolutionary change.

Path dependency means that events and choices in the past shape future development paths (Bertollini, 2010). This is also the case for tourism areas as their evolution is shaped by factors such as pre-existing cultural, natural or human resources, adventurers' experience, locational advantage or the economic base (Ma & Hassink, 2013). Also, planning systems or institutional frameworks can influence development paths, being capable of favouring some plans and projects over others (Hartman & De Roo, 2013). These characteristics make systems path dependent. The past can be supportive, such as when it provides areas with cultural or built heritage or landscape qualities, but it can also inhibit tourism development. As a result of path dependency, some areas and systems adapt faster than others as well as evolve in different ways (Folke et al., 2010; Gunderson & Holling, 2002).

Are all tourism areas complex adaptive systems?

In the literature on tourism area development, there seems to be a growing consensus that tourism areas are more or less cohesive entities, being increasingly conceptualized as systems and networks. The adaptive capacity of tourism areas, however, can vary greatly. Some areas rejuvenate, while others reach a phase of stagnation or decline (cf. Butler, 1980). This relates to path dependencies, which can be a limiting factor but also an enabler. Moreover, in some areas firms and institutions are more able and willing to open up and respond to dynamics driven by the co-evolution and multilevel interaction between systems. Within this context, it is not the intention of this article to use the CAS perspective to argue that all tourism areas are CASs or must be seen as such. Instead, it is used to argue that adopting a complexity perspective may contribute to tourism areas becoming more adaptive areas, and hence contribute to a sustainable approach to tourism area development. In the context of sustainable tourism, the CAS perspective could for instance help to avoid decline and the loss of resources invested in tourism infrastructures as well as stimulate the pursuit of innovations by (young) entrepreneurs in promising niches such as eco-tourism, sustainable tourism and community-based tourism as is discussed below in more detail. In the remainder of this article, the perspective is, therefore, used as follows: to conceptualize tourism areas as complex systems that have the potential to be adaptive. The next sections further examine conditions to encourage the adaptive capacity of tourism areas.

6.3 The importance of diversity for adaptation

The CAS perspective highlights several important aspects of tourism area development. First, tourism areas are caught up in a persistent state of becoming due to their interactions with other areas and systems (De Roo, 2010). Second, the complexity of interactions within and between systems makes development paths towards the future at least partly uncertain (Albrechts, 2006; De Roo & Silva, 2010; Healey, 2007). Third, structures and functions can be fundamentally transformed over time (Hartman & De Roo, 2013). In this context, the CAS perspective draws attention to the importance of adaptive capacity. Adaptive capacity is for a large part dependent on a diverse range of tourism firms, products and experiences. In essence, such diversity means more options to select from, and more chances of finding, development paths that result in maintaining or enhancing the performance of a tourism area.

Duit et al. (2010, p. 365) argue that the perspective that "diversity is the most effective way to cope with complexity" is becoming a wide-spread notion in contemporary literature[12]. Diversification and differentiation is also discussed in contributions to tourism area development, for instance for Cyprus, Valencia, Spain and highly specialized Mediterranean "Costas" (Buhalis 2000; Sharpley, 2002).

Neglecting diversity may cause areas to become fixated on a particular development path and to lose dynamism (Carpenter & Brock, 2008; Hartman & De Roo, 2013; Hassink, 2010). Martin & Sunley (2006) see that some areas lose dynamism over time but that others are able to avoid this danger by reinventing themselves through the successive creation of new development paths (Garud & Karnøe, 2001; Martin & Sunley, 2010). In the absence of reinvention, however, the danger of a negative lock-in situation increases (Grabher 1993; Martin, 2010). Lock-ins emerges over time after a period of positive feedback: driven by increasing returns, the physical, organisational and institutional structures interlock to support a particular development path (Hartman & De Roo, 2013). Lock-ins become negative when new niche-innovations are not recognized, being only weak signals, and suppressed in favour of vested interests or activities that have proven themselves in the past (Bertolini, 2010; Geels, 2005). Areas become "victims of their earlier success" (Boschma & Lambooy, 1999, p. 416) when traditional spatial patterns, policies, strategies and institutional settings are rigidly retained, that once supported economic growth but do so no longer under changing contextual circumstances (Grabher,1993; Hassink, 2010). This could result in highly specialized destinations that are fixated in a particular development path. This makes such regions less resilient to global as well as local perturbations (Simmie & Martin, 2010). For instance, Buhalis (2000) argues that this situation applies to the Mediterranean "Costas".

Nevertheless, an overemphasis on diversity may also constrain tourism area development. Some types of tourism have a large impact on ecosystems and landscapes, can gentrify communities and may hamper, for instance, ecotourism or community-based tourism. Diversity may also be coupled with inefficiencies (Folke et al., 2005), including policy inconsistencies in marketing and branding

12 Jacobs (1961) is well known for emphasising the importance of diversity. Other notions are also used to draw attention to diversity, such as requisite variety (Ashby, 1958; Jessop, 2003), redundancy (Low et al., 2002), variation (Axelrod & Cohen, 2000), institutional thickness (Amin & Thrift, 1994), polycentrism (Folke et al., 2005), smart specialisation (McCann & Ortega-Argilés, 2011), specialised diversification (Pike et al. 2010), pluripotency (Hartman et al., 2011), related and unrelated variety (Frenken et al. 2007).

campaigns, and high transaction costs for involving and coordinating large numbers of actors. Duit et al. (2010, p. 366) add that "it might be that a governance system consisting of large number of diverse semi-independent networks and organizations (...) will have, among them, a larger set of viable action alternatives. But it might also be the case that such a governance system, through its lack of coordination, fragmented communication, and limited stock of accumulated resources has a more constricted repertoire of action". Hence, diversity can potentially limit the performance of a tourism area.

Elaborating on the importance of diversity, De Roo (2012) proposes a model that is also helpful for tourism area development (see Figure 5). The model clarifies that adaptive capacity involves diversity on the one hand and coherence on the other. These factors are further elaborated as follows. Diversity is important for competition and compatibility. Competition between businesses is relevant for tourism areas to encourage innovation, stimulate renewal and to become noticed by visitors. Compatibility implies that different tourism firms can co-exist because they offer different products, services or target different visitor groups. Moreover, due to diversity areas do not completely collapse in a case where some activities or businesses disappear. This makes areas more resilient, giving it time to restore its diversity. Coherence is important for complementarity and cohesion. Complementarity assumes that cooperation on the basis of mutual benefits may foster synergies, for instance by jointly offering arrangements of different types. Cohesion is important to avoid fragmentation and inefficiencies. This can be relevant to, among other things, the marketing and branding of tourism areas instead of the marketing of individual businesses. Benur & Bramwell (2015) discuss a similar logic. On the one hand, they identify parallel diversification where there is no synergy, cooperation or complementary such as in the case of "geographically separate high quality resort enclaves" for well-off international tourists "located at a geographical distance from tourist areas for domestic tourists and less well-off international tourists" (Benur & Bramwell, 2015, p. 218). On the other hand, they identify integrative diversification where there are synergies and complementary linkages between (dis)similar firms, product and experiences, such as in the cases of connections between heritage tourism and coastal resort tourism, between mass tourism and ecotourism, and between tourism and local produce (e.g. wine) by means of routes (Benur & Bramwell, 2015).

De Roo (2012) concludes that finding a degree of diversity makes areas both robust and dynamic at the same time. A degree of diversity contributes robustness (Heylighen, 2008), because areas do not collapse when some products, businesses or organisations go bankrupt or are replaced. This enables

tourism areas to endure perturbations stemming from economic crises, changes in demand, the enhanced competitiveness of other destinations, etc. A degree of diversity also fosters dynamics as it involves new niche-innovations and it allows for shifting between different development paths (Loorbach, 2007). However, as is discussed above, for tourism area development both neglect of the importance of diversity as well as an overemphasis on diversity may be counterproductive for adaptive capacity. Hence, a major challenge is governing diversity.

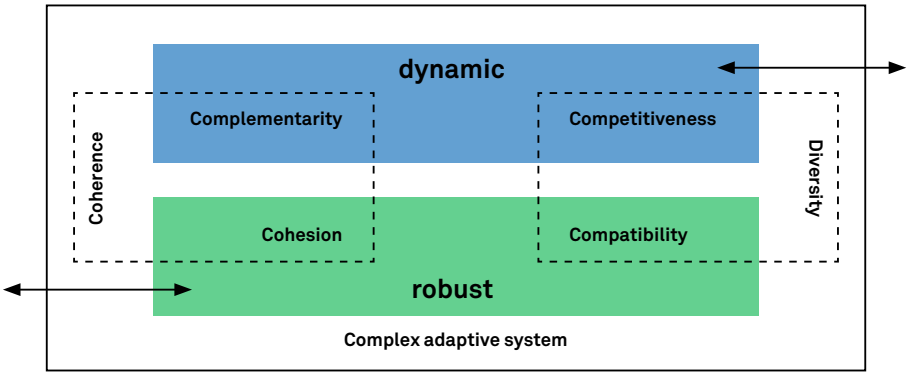

Figure 5: Aspects for adaptive capacity (source: De Roo, 2012, p. 168)

Finding a degree of diversity implies not merely facilitating tourism development but also supporting some plans and projects over others. To March (1991, p. 71) this goes to the heart of a fundamental tension between efforts seeking "variation, risk taking, experimentation, play, flexibility, discovery, innovation" and the opposite efforts of seeking choice, refinement and selection. March continues by stating that between these there are efforts directed at "maintaining an appropriate balance...[which is] is a primacy factor in system survival and prosperity" (March, 1991, p. 71). This means it is important to encourage diversity whilst at the same time have selection mechanisms in place to avoid the negative effects of an overemphasis on diversity.

6.4 Encouraging a degree of diversity: conditions for adaptive capacity

Whereas the previous section highlights that a degree of diversity is important for adaptive capacity, this section examines how such a degree of diversity can be achieved. Two major approaches that

specifically put forward strategies to manage CASs are TM and AM. This section examines TM and AM, with a specific focus on identifying conditions that are important to encourage diversity for the purpose of stimulating the adaptive capacity of tourism areas.

Transition management (TM) on stimulating diversity

TM takes the position that development paths of complex systems cannot be completely enforced or commanded by one single agent (Rotmans et al., 2001). It therefore, emphasizes the importance of collective efforts to progress. The focus of TM is hence on "enabling the processes that occur at different levels in a more systemic and evolutionary way, which leaves room for variation and selection mechanisms and innovation" (Kemp & Loorbach, 2006, p. 109). Central to this approach are niche-innovations.

In the context of tourism area development, niche-innovations can be understood as new tourism products and experiences or leisure activities that captivate the interest of consumers. Niche-innovations are important for adaptation and bridging gaps between demand and supply, and they are generally geared towards improving systems' performance (cf. Reed, 1999). As a strategy to foster niche-innovations, TM indicates that the following phases must be systematically revisited (Kemp & Loorbach, 2006; Loorbach, 2007; Rotmans & Loorbach, 2009):

- Promote the development of visions of the potential futures of tourism areas, such as visions about how to achieve a more sustainable tourism industry (Gössling et al., 2012). First, visions can act as attractors and trigger niche-innovations. Frontrunners of industries or sectors are typically amongst the involved actors for their innovative ideas and potential impact on other entrepreneurs and decision-makers. Governments can support visioning by bringing actors together in regional innovation platforms or think tanks (Dewulf et al., 2009). Second, visions can inspire strategic plans and policies of governments. These are often introduced as selection mechanisms to support some plans and projects over others.
- Seek coalitions of actors to further operationalize visions and conceptualize niche-innovations in detail. This phase concerns the assessment of ideas and selection of a (potentially) viable set of niche-innovations. This approach could contribute to a diverse tourism area. For instance, as is discussed by Benur & Bramwell (2015), diversifying beach tourism to include outdoor and indoor water sports and spas or by connecting beach resorts with new tourism niches such as wildlife safaris and cultural tourism. The potential

negative effects of lock-in situations should inspire actors to be open to initiatives that do not necessarily correspond to development paths of the past.

- Mobilize governance arrangements to initiate real-life projects and (temporary) experiments (Schot & Geels, 2008). The underlying idea is to test ideas and explore whether ideas have a real chance to become permanent or break through more widely. It requires entrepreneurs and firms to take investment risks and governments to provide room in policy frameworks.
- Develop feedback mechanism to monitor, evaluate and learn about the performance of niche-innovations. Institutions are needed to monitor and evaluate, such as for the (non-)appearance and disappearance of niches in relation to systems of economy and governance. Networks are needed that connect firms and institutions to keep information flowing. In relation to stimulating niche-innovations, these mechanisms can reveal the need to adjust actor coalitions, and to update visions and agendas as a means to realize projects more effectively or to identify new niches.

TM shows that adaptation requires governance arrangements that consist of interacting and collaborating public and private actors and that are geared towards identifying and initiating niche-innovations (Rotmans et al., 2001; Schot & Geels, 2008). Governance arrangements are likely to differ from place to place and may lead to differences in effective actor coalitions and the improvement of destination performance (Baggio et al., 2010). Moreover, Voss & Bornemann (2011) rightly point out that uneven distributions of power and "nasty politics" (power struggles, tactical games) may strongly affect whether niche-innovations emerge. Elsewhere, it is also noted that niche-innovations break through more widely when e.g. sociocultural, economic, institutional systems interlock, but that they are inhibited when these frustrate each other (Martens & Rotmans, 2005; Ruhanen, 2013). In this context, revisiting the phases of TM serves multiple purposes, including the involvement of new actors, avoiding exclusion, or updating visions to incorporate new insights or deal with changed circumstances.

Adaptive management (AM) on stimulating diversity

AM also focuses on adaptation as a key property of systems to deal with changing circumstances that negatively perturb their performance (Gupta et al., 2010; Van der Brugge & Van Raak, 2011). To address adaptation, AM builds on the evolutionary process that includes diversity, competition and selection (Walker et al. 2004). On the one hand, when there is diversity in a system, its overall performance remains generally the same when a few elements

disappear. When there is a diverse range of tourism products, a tourism area is more likely to retain visitor flows and will not completely collapse when consumers lose interest in some tourism products or when some firms disappear. On the other hand, increasing diversity means more options to select from and more chances of enhancing system performance. A lack of diversity and dynamics may "trap" a system and reduce its adaptive capacity (Carpenter & Brock, 2008). Similar to TM, AM, therefore, emphasizes the importance of (policy) experimentation and creating opportunities for self-organisation to foster niche-innovations and stimulate learning (Duit, 2012).

AM emphasizes that increasing diversity to enable adaptation requires a high degree of interconnectivity within a system (Dietz et al., 2003). Olsson et al. (2006, p. 19) stress the need for "polycentric institutional arrangements that are nested, quasiautonomous decision-making units operating at multiple scales". Within these arrangements, vertical linkages connect actors on different spatial scales or governance levels and support a balance between centralized and decentralized control. Horizontal linkages support experimentation and diversity by connecting public and private actors and institutions from different sectors and policy domains across a spatial scale or governance level (Folke et al., 2005). Intermediaries or bridging organisations fulfill the important role of establishing and maintaining these linkages (Dewulf et al., 2009). These networks and arrangements can be both formal and informal, and are important to build trust among actors, ease communication and coordination, foster exchange of views and stimulate effective collaboration.

Learning and reflexivity

Insights from AM and TM show that stimulating a degree of diversity may benefit from individual actors, organisations and public institutions engaging in, or fostering, self-organisation, niche-innovations and (policy) experimentation. These efforts serve the purpose of identifying opportunities as well as exploring boundaries for development (Argyris & Schön, 1978; Folke et al., 2005; Pahl-Wostl, 2009). In essence, this is a step-by-step process of collective learning. In a dynamic tourism industry, learning is important to identify the impacts of changes in visitor demand, new technologies, emerging destinations, niche-innovations, etc. On the basis of conceptualising tourism area development as a multilevel process, learning can be approached systematically. Different strategies can be applied to monitor and interpret trends and developments at different levels. At a macrolevel, scanning the contextual environment is relevant for understanding macro-scale processes and the ways these affect the tourism industry in general and area development

in particular (Geels, 2010). It can yield information about the impacts of climate change, technological innovations, economic crises or political instability on tourism area development. Analysing lifestyle changes and demographic dynamics may draw attention to emerging types of tourism and leisure activities and inspire new business concepts. At a meso level, comparative research can be used to identify emerging issues in other regions as well as solutions that have already been invented and applied elsewhere (Rauws & De Roo, 2011). At a micro-level, niche-innovations can act as "early warning signals". These can help to identify early signs of adaptation and uncover promising (new) development paths (Ansoff, 1975).

Learning is a major contributor to reflexivity, which concerns the ability to "reflect on and confront not only the self-induced problems (...) but also the approaches, structures and systems that reproduce them" (Hendriks & Grin, 2007, p. 335). Reflexivity can make actors aware of path dependencies and routines within their practices which may cause negative lock-institutions. It may help actors to oversee that tourism areas do not become too specialized and uniform or too diverse and fragmented. Lissandrello & Grin (2011) emphasize that reflexivity should also address actor networks and governance systems. These should not become static entities, but should be open to new actors, perspectives, strategies or policies. Reorganising actor networks and redefining governance systems is a form of co-evolution, and it is needed to adapt to a dynamic environment (Duit et al., 2010, p. 367; Gunderson et al., 2006). Collecting, interpreting and disseminating information for the purpose of learning and reflexivity is a major challenge. The tourism industry consists of many small and medium-size enterprizes that often lack the time and resources to do so. Governance arrangements are, therefore, necessary that link and foster interaction between a range of individuals, firms, organisations and institutions on and between multiple governance levels and policy domains (Pahl-Wostl, 2009). Establishing arrangements and keeping information flowing requires that some actors take the initiative to establish connections and build trust, and therefore it involves leadership (Gunderson et al., 2006). Overall, it takes a rather comprehensive set of conditions to encourage adaptive capacity. Pursuing adaptive tourism areas, therefore, comes with potentials and constraints from the point o view of strategic (spatial) planning and governance.

6.5 Pursuing adaptive tourism areas and governance implications

The CAS perspective highlight that tourism areas can be seen as complex systems that have the potential to be adaptive. The advantages of pursuing adaptive tourism areas are multiple. It ensures that tourism area development involves a gradual, fluid development path instead of a dramatic process of collapse and recovery (Hassink, 2010). A degree of diversity enhances the ability to deal with, and recover from, perturbations that negatively affect the performance of an area as a competitive tourism destination. The underlying idea is to proactively avoid lock-in situations instead of reactively having to respond when the damage has already been done. Moreover, an emphasis on renewal, innovation and self-organisation fosters the capacity to adapt to multilevel dynamics and benefit from emerging development opportunities. However, on the basis of the previous sections, various inhibiting governance issues can be identified.

- First, pursuing adaptive tourism areas involves a shift in planning thought and practice. Planning authorities and destination management organisations need to adopt the perspective that development paths cannot be governed by means of command-and-control approaches. These need to acknowledge the importance of adaptive capacity and deal with the accompanying implications for planning and governance. Couclelis (2006, p. 1361) warns not to "underestimate the inertia of institutions, infrastructures, and social practices". A shift could involve an institutional transition processes that may take decades because it is difficult to change organisational and institutional routines and cultures.
- Second, supporting interconnectivity and interaction among actors involves an extensive governance system. For instance, Dietz et al. (2003, p. 1910) state that "arrangements must be complex, redundant, and nested in many layers". This could be costly to establish and difficult to coordinate.

- Third, Low (2002) argues that whether diversity arises or disappears depends on its benefits and costs to different actors. Actors are requested to acknowledge the benefits and mobilize resources, as stimulating diversity may require coordinated action or strategic planning (e.g. visioning, identifying niche-innovations, creating room in policy frameworks, using intermediaries and bridging organisations to link actors and create governance arrangements). Moreover, uneven distributions of power and "nasty politics" (power struggles, tactical games) can inhibit the emergence

of niche-innovations and learning processes (Ruhanen, 2013; Voss & Bornemann, 2011).
- Fourth, policy experiments and niche-innovations that aim to enhance diversity may fail, produce negative effects, and generate resistance. This means that "safe-to-fail" approaches are needed to make actors more open and tolerant to failure (Ahern, 2011; Gunderson et al., 2006)..

6.6 Conclusions and discussion

Adaptive capacity is increasingly important for tourism areas as these areas are embedded in a globally competitive economy and affected by the complex, multilevel dynamics of the contemporary network society. Tourism areas are, therefore, conceptualized in this article as complex systems that constantly interact with their contextual environment, being shaped by other regions as well as by events at different spatial scales and governance tiers. In this context, tourism areas are challenged to become adaptive tourism areas. Adaptive implies that tourism areas must be dynamic entities, always in a state of becoming, engaging in a persistent process of renewal and reorganisation to maintain or improve their performance. Encouraging adaptive capacity is closely linked to sustainable tourism development as it can result for instance in more room (in policies) for innovative forms of more sustainable forms of tourism, avoid decline, promote the (re)use of prior investments in tourism and offer career opportunities. In pursuit of adaptive tourism areas, the CAS perspective highlights that the following aspects are conditional:

- First, enhancing diversity. Consumers constantly change their demands and desires. Some tourism products become obsolete and potentially some businesses go bankrupt as a result. When there is a diverse range of tourism firms, products and experiences, there are more options to select from and more chances of finding development paths that result in maintaining or enhancing the performance of a tourism area. Conditions for enhancing diversity include interconnectivity to ease communication and coordination, visioning to identify and select potential niche innovations, room in policies to foster experimentation, resources to initiate projects.
- Second, pursuing a degree of diversity. A low degree of diversity may result in monotonous places that lack resilience and are, therefore, relatively vulnerable in case of changing visitor demands. An overemphasis on diversity may, for instance, result in uncoordinated development, give rise

to fragmentation, limit synergies or reduce visibility from an international tourist perspective.

- Third, governing a degree of diversity. Governing diversity means that within tourism areas, there is a degree of competition, cohesion, complementarity and compatibility between businesses and their products (Figure 5). A balance is relevant for making regions robust and flexible at the same time. Learning and reflexivity are conditions to observe and respond when tourism areas become too specialized and uniform or too diverse and fragmented.

The issues that relate to the pursuit of adaptive tourism areas highlight that perceiving and acting upon tourism areas as CASs is very much a governance and (political) decision-making issue. Alternatively stated, this means that we must be aware that multiple development paths are possible. Benur & Bramwell (2015), for instance, draw attention to five options for tourism area development that differ in terms of diversification (low/high) and intensification (low/high), ranging from concentrated mass tourism and concentrated niche tourism to diversified parallel/integrative mass and niche tourism. Moreover, we must also be aware that often there is a gap between what should be done and what can be done in a particular area when pursuing adaptive tourism areas. The availability of (human) resources is critical, as is the capacity of actors within a region to stimulate and (reflexively) organize diversity. This could broaden the discussion on adaptive capacity that mainly revolves around what should be done. It could open a discussion on adaptive capability: what can be done on the basis of place specific characteristics and the particular situation wherein it is embedded, and what to prioritize in order to gradually enhance its adaptive capacity over time.

7

Conclusions and discussion

"...planning must continuously reinvent itself as circumstances change." Friedman (2005, p. 29)

Cities, urban regions, rural territories are all dynamic entities to a greater or lesser extent. They perpetually change, being subjected to the dynamics of and interactions between socio-cultural, economic, and institutional processes that take place at multiple spatial scales and governance levels. For instance as a response to the rise of a leisure economy[13] we encounter regions that are 'leisuring', experiencing on-going transformative processes that are designed to foster touristic, recreational and residential demands. These dynamics relate to our globalized economy and network society, are complex, and make development trajectories – places evolving over time – which are nonlinear, are open to change and are uncertain. It is possible, however, to observe patterns that emerge, to examine directions in which places evolve, to distinguish transitions, and to develop adaptive planning strategies and reflexive governance approaches to guide places in their evolution in a meaningful way. Taking such a nonlinear perspective, strategic spatial planning increasingly involves a focus on adaptive capacity of places so to navigate (themselves) through a contextual environment that is changing continually[14.]

13 Leisure economy is an umbrella term used in this thesis as well as in Dutch planning practice to refer to an industrial subsector including tourism, recreation, leisure, wellness, and exurban living and working (Hartman et al., 2011; Hartman, 2013).

14 Doing so meets the aims of the thesis as they are formulated in the introductory chapter: 1.) Discuss the implications and issues that the leisuring of regions raise for spatial development and planning; 2.) Elaborate how institutional frameworks shape regions that are leisuring; 3.) Discuss how the leisuring of regions can be stimulated through spatial planning.

7.1

Facing complexity: regions that are 'leisuring'

Planners have an interest in regions that are 'leisuring'. Throughout this thesis leisuring is used to refer to the on-going spatial transformations driven by activities and development projects related to tourism, recreation and leisure (Bunce, 2008; Hartman, 2013). Many places are being developed as tourism destinations, including cities, villages, and areas featuring specific natural beauty or cultural and built heritage. Peri-urban areas are experiencing transformations, becoming transitional zones between the urban and the rural, facing new activities and facilities related to leisure and recreation. The influx of new functions, land uses, firms and activities is driving the gradual change of existing functions, structures as well as the identities. In this thesis we have a focus on such places. Former agricultural areas become peri-urban metropolitan parks (chapter 3) or destinations for tourism and recreation (chapter 2, chapter 5). These places have drivers of change relating to developments at multiple spatial scales and governance levels. In chapter 6, we therefore emphasize that "it is essential to look carefully at how interactions between the global and the local shape development outcomes for individuals, households, communities and regions" (Milne & Ateljevic, 2001, p. 371).

On the one hand, this thesis identifies interactions between the global and the local producing *mismatches* and *urgencies* to pursue development trajectories that differ from the past ('push factors'). Mismatches and urgencies emerge for instance when the agricultural sector faces difficulties to stay viable in a globally competitive economy, when livability issues emerge due to increasing unemployment or when the desire arises to attract investments and stimulate employment and spatial development. These push factors are multiple and concern among others the following. First, alternatives could be desirable when employment declines in the more traditional agriculture, fishing or industrial sectors due to the combination of globalization and automation, particularly in highly specialized areas. This is the case in the Wadden Sea Region (WSR) and the Ruhr area in Germany as discussed in chapter 2. Second, the combination of urbanization, the importance of the service sector and the concentration of employment in major (regional) cities results in the need for alternative sources for socio-economic development in rural, peripheral and peri-urban areas being leisure (amongst others) and is mentioned in chapter 2, 3 and 5. Third, the desire to preserve unique features (e.g. heritage, landscape, culture, spatial qualities) could constrain developments such as housing and industrial sites or inhibit the up-scaling of agricultural firms and drive the need for functions that can

be 'qualitatively embedded' into landscapes which results in a quality that is essential for leisure-led regional development (chapter 4).

On the other hand, this thesis identifies interactions between the global and the local producing *opportunities* to pursue development trajectories that deviate from the past ('pull factors'). Opportunities for pursuing the leisuring of regions relate to a societal demand for leisure activities, recreation facilities and tourism destinations. At the global scale triggers for this demand are among others the increase of wealth and interest in health, enhanced infrastructure networks and mobility, the desire to travel and seek memorable experiences by exploring landscapes, cultures, and histories or participating in meaningful activities. At the local scale development opportunities are driven by factors such as the availability of unique features (e.g. heritage, landscape, culture, natural beauty, facilities and activities), accessibility and reputation.

Combinations of urgencies and opportunities can create pressures to (re)develop places and sites for the purposes of tourism, recreation and leisure, such as in the peri-urban and more peripheral areas that are examined in the previous chapters. These pressures drive 'the leisuring of regions' and emerge as a result of interactions between the global and the local by multiple actors, sectors and governance levels (Dewulf et al., 2009). In turn, the leisuring of regions raises issues for strategic spatial planning and decision-making concerning interventions in the evolution of regional development trajectories (how places develop over time). First, there is a need to enable and support spatial development by means of investments, policies, and plans. Second, there is a need to avoid the negative impacts on landscapes, heritage, eco-systems and communities. This duality comes with tensions, decision-making issues and governance implications. An emerging question is therefore how to manage the leisuring of regions. Hence, it raises the interest of planners.

Moreover, this thesis draws attention to the importance of differentiation in the leisure economy. Consumers are able to select from a wide variety of leisure activities and travel options as a result of the continuous introduction of new tourism destinations and leisure experiences. It has become a highly competitive as well as dynamic economy. Individual entrepreneurs, firms but also governments are therefore constantly looking for (new) ways to fulfill the demands of recreationists and attract tourists to their company or region. Here, the focus is shifting towards creating memorable experiences and enabling transformations – the process of personal development in relation to relaxation, meaning-giving, education, spirituality (Pine & Gilmore, 2011). This shift comes

with implications for spatial planning and development. Creating experiences goes beyond the traditional focus on efficiency and quantitative (economic) growth as was generally adequate for agricultural, industrial and service economies. For these economies it is often sufficient to deal with landscapes in a factual and technical-rational manner and to spatially separate functions and land uses to avoid counterproductive interactions. In contrast, creating experiences depends on factors such as the aesthetics, identities, authenticity and uniqueness of the natural environment (nature, ecology, geology) and built environment (infrastructure, architecture, heritage, public space) as well as interesting ways in which local stories, cultures, foods and histories are made available. It is the combination of tangible and intangible factors that provides a décor for producing leisure experiences (Caalders, 2002; Metz, 2002).

Against the background of these developments we could say that the world is becoming more complicated and difficult to manage. The leisuring of regions is an addition to the strategic spatial planning repertoire and adds to the difficulty of managing the development of today's society. It is a dynamic process that includes multiple actors, policy domains and governance levels. Due to the rise of regions that are leisuring communities are facing new challenges, planners are confronted with new issues, and actors in decision-making positions are presented with new options for development. Fortunately, we are also learning about the emergence and management of such emergent, new situations. In this context, this thesis draws particular attention to complexity theories. In recent years there has been increasing interest in applying these theories to examining transformations and development in cities and urban regions, notably because these complexity lenses offer the capacity to show that urban and regional change is driven by the dynamic interplay between various systems and subsystems at multiple levels (Chettiparamb, 2013; De Roo et al., 2012; Gerrits, 2012; Hartman & De Roo, 2013; Innes & Booher, 2010; Portugali, 2012; Rauws & De Roo, 2011).

Complexity theories are used throughout this thesis for conceptual support to examine the emergence, development and management of regions that are leisuring. When the contributions of all chapters are taken together they offer a complex adaptive system (CAS) perspective on regions that are leisuring. This perspective shows – in line with the statements above about the use of complexity theories in the domain of spatial planning and development – that regions are leisuring as a result of the interplay between changing contextual circumstances, planned interventions and processes of self-organisation by actors on multiple governance levels and spatial scales (also see Urry, 2003; Urry & Larsan, 2011).

This use of a CAS perspective is motivated taking in mind that in the context of regions that are leisuring, planners are facing development trajectories that evolve nonlinearly. These nonlinear trajectories cannot be managed in terms of command and control and require alternative approaches that revolve around influencing and adjusting (Loorbach & Rotmans, 2006). In search of these alternative approaches, we use the concept of transition in the analysis of the case studies. This brings us to the conclusion that regions that are leisuring exhibit a long-term process of development and transformation in which there are different roles for planning, ranging from resisting change to actively pursuing spatial transformations. When taken together, the combination of theories on complex adaptive systems and transitions offer an enhanced understanding of the underlying processes that drive the leisuring of regions. In doing so, it offers the perspective of regions that are leisuring exhibiting a dynamic state of 'becoming'. This is further discussed in the following section, which comes to the conclusion that nonlinearity challenges planners to support and contribute to the *adaptive capacity* of regions.

7.2

Learning about complexity: nonlinear development trajectories

Nonlinear development trajectories

Throughout this thesis complexity theories are used to develop a dynamic systems perspective on regions that are leisuring. Complexity theories draw attention to concepts and mechanisms that help explain the emergence of nonlinear development trajectories. Nonlinearity applies to situations that cannot be interpreted as exact continuations or extrapolations of past trajectories due to fundamental changes in terms of structures, functions and identities (Hartman & De Roo, 2013; Walker et al., 2004). Nonlinearity is a useful concept for regions that are leisuring as these areas are undergoing a complex and often long-term 'transition' process of departing from one relatively stable state and gradually moving towards a state that fundamentally differs in terms of structures, functions and identities. The cases of the Wadden Sea Region (chapter 2), peri-urban development in the Greater Hague Region (chapter 3) as well as the areas of Hondsrug and Friese Meren (chapter 5) show that the state of agricultural dominance is in decline. It is gradually being supplemented amongst others by functions, structures and identities that relate to the development of these areas as destinations for tourism, leisure and recreation. The development trajectories of these areas – how places

develop over a period of time – are therefore conceptualized as nonlinear (Hartman & De Roo, 2013). Nonlinear development trajectories can be explained by means of complexity theories. These elaborate on mechanisms including self-organization, emergence, adaptation, co-evolution, positive and negative feedback and the understanding of 'open' systems that interact with their contextual environment. Moreover, elaborating on these mechanisms sheds a light on the implications of nonlinear trajectories for spatial planning and development.

First, nonlinearity relates to the interplays between systems. Many systems are continually interacting with and adapting to one another, and thereby exhibit co-evolution (Heylighen, 2008). Economic, political, cultural, technological, socio-ecological and belief systems are amongst the systems that are interconnected, dynamic and influence the ways in which other systems evolve. Together these systems shape the dynamic contextual environment of socio-spatial systems such as regions. The interaction between these systems can result in urgencies to adapt development trajectories of the past ('push factors') and trigger opportunities to explore alternative development trajectories ('pull factors'). The forces that stem from the contextual environment and influence local development options can be considered 'autonomous' drivers of change when they are beyond the sphere of influence of actors at local and regional levels of governance. The adoption of the Reconstruction Act of Midden-Delfland shows that plans and interventions by higher level governments could be amongst these drivers of change (chapter 3). The case of the Wadden Sea Region shows that the interplays between different systems makes the leisure economy a serious option for development – which is contrary to the development trajectory of the past (chapter 2). The case of Vlietzone shows how economic fluctuations eliminate options such as housing and office development and make it very difficult to command-and-control regional development trajectories (chapter 3). This limited capacity to control drives the need for adaptive capacity.

Second, nonlinearity relates to adaptation. Adaptation is the ability of systems and agents within systems to respond and adjust to persistently changing circumstances (Axelrod & Cohen, 2000; Heylighen, 2008). Agents that respond by altering their actions, behaviors and interventions are important for the rise of new functions, activities and land uses. These can then drive the nonlinear evolution of development trajectories. Examples are the building of bungalow parks in search of alternative economies that contrast with traditional agricultural dominance (chapter 2), farmers that take up side activities in Midden-Delfland and the societal organizations that arise to respond to the

urbanization of Vlietzone (chapter 3). These developments are signals that traditional structures and identities are under pressure and/or that new ones are on the rise. Equally important for such adaptive responses by entrepreneurs are the supportive actions and interactions of planners, planning authorities, political leaders or societal organizations. These supportive actions are crucial for driving spatial transformations and for the pursuit of development paths that include leisure, tourism and recreation. Building leisure facilities to meet societal demands (chapter 3), stimulating spatial quality to support the leisure economy (chapter 4), promoting strategic storytelling to stimulate regional development (chapter 5) are all examples of planning interventions that contribute to adaptation.

Third, nonlinearity relates to emergence. Emergence is the rise of patterns and structures out of the collective actions of agents (Heylighen, 2008). The cases that are part of this thesis show that the leisuring of regions is accompanied by the emergence of different structures. Functional structures change due to the introduction of facilities, firms, land uses and activities related to tourism, recreation and leisure. Landscape structures are adapted and transformed in the cases of peri-urban Midden-Delfland, Friese Meren and Hondsrug to enhance their aesthetics, accessibility and attractiveness. New organizational structures and identities emerge in the context of further developing and marketing Midden-Delfland as a part of 'Hof van Delfland' as well as further developing and marketing the Hondsrug area as 'Geopark Hondsrug'. New actor-networks emerge such as societal organizations in peri-urban Vlietzone as well as networks amongst entrepreneurs and local and regional governments in the case of Friese Meren and Hondsrug. These examples indicate that the leisuring of regions is accompanied by the introduction of new functions, the emergence of new structures and the formation of new identities. Such steps are frequently and actively pursued by agents that aim to further develop the attractiveness of places for tourism and recreation. Emergence shows the need to acknowledge the temporality of structures, to identify emerging others, and to actively conceptualize alternative structures that provide a better fit between a system and its contextual environment.

Fourth, nonlinearity relates to positive and negative feedback mechanisms. Positive feedback refers to amplifying transformations so that these may grow out to affect wider (geographic) scales and higher (governance) levels. This is the aim of the strategic storytelling projects (chapter 5), fostering initiatives in niches of tourism, recreation and leisure to ultimately stimulate regional development. Negative feedback refers to the opposite process of suppressing change and stabilizing systems, for instance to protect spatial quality from

disturbances (chapter 4). It keeps systems in a particular development trajectory. The effect of these mechanisms is that agents become organized and coordinated in their actions, they become somewhat constrained in their actions (Heylighen, 2001). Instead of maximizing individual utility agents are stimulated to contribute to collective goals and aims (Heylighen, 2001). Chapter 4 identifies that both mechanisms are needed and should be in balance to support some projects with a positive impact whilst avoiding others with a negative impact. This clearly requires decisions and policies that define what projects and plans are considered positive and what are seen as negative perturbations. The subsection below on transitions further explains how positive and negative feedback can potentially result in a (negative) lock-in situation based on findings of the study on the Wadden Sea Region.

Nonlinear development trajectories strongly relate to agents adapting to changing circumstances, driving systems to shift from one relatively stable state to another. However, in the case of regions that are leisuring this is not easy and generally takes time – the cases of Midden-Delfland and Vlietzone show that it takes many decades to change and the strategic storytelling projects reveal the difficulty to achieve/enforce change. It could take many decades because adaptation is "a complex combinatorial optimization process" as explained by Kaufman & Weinberger (1989, p. 211). It requires that "many parts and processes must become coordinated to achieve some measure of overall success" (Kauffman, 1993, p. 33). In this thesis we use theories on transitions to conceptualize and conclude that the leisuring of regions is a long-term, co-evolving transition process.

A long-term transition process

Introducing transition theories to the analysis of regions that are leisuring offers the perspective to see these regions in the light of a long-term, co-evolving transformation process. This is explained in detail in chapter 6, section 3. Aspects are amongst others path dependence, lock-in, the mobilization of actors and resources, and institutional design. Moreover, the use of theories on transitions in the case study analyses sheds a light on different planning approaches and multiple possible roles for planners. These vary between avoiding change (chapter 2), supporting development (chapter 4) and actively pursuing spatial transformation (chapter 3 and 5), which means that spatial planning can support as well as constrain the manifestation of transitions.

First, the leisuring of regions is a long-term transition. Spatial transformation is supported, albeit often incidentally, ad hoc by opportunity and rather locally, whilst the upper hand is with approaches restricting projects and plans that intend to fundamentally change structures and functions at a large scale and in a relatively short period of time. Restrictive approaches contribute to path dependence and lock-in situations. Path dependence concerns the influence of past decisions on future development paths. The case of the Wadden Sea Region (WSR) shows how a strong restrictive planning regime fosters the rise economically and morphologically monotonous landscape by favouring land uses related to agriculture and nature. By doing so, it restricts the rise of a leisure economy. Lock-in is coined to describe when places become 'trapped' in a distinct development trajectory and agents are prevented from exploring alternative options for development (Frenken et al., 1999). In the case of the WSR some land uses and activities can be found, but have emerged mainly in spite of and not because of this planning regime. In the case of Midden-Delfland the Reconstruction Act prevented the rise of housing projects, industries and green house complexes and provided funds to reconstruct the cultural-historical landscape of the past. Whereas funds were also provided for leisure facilities and nature development, the upper hand is with protecting the landscapes of the past and preventing large scale changes to the open spaces of Midden-Delfland.

Second, the leisuring of regions is a long-term transition because it involves the coordination and organization of many agents (individuals, firms, societal organizations, and institutions), the mobilization/allocation of financial resources and the adaptation of spatial, organizational and institutional structures. Chapter 3 reveals that it may take decades for peri-urban areas to shift from a predominantly agricultural area to a well-integrated metropolitan park. Transforming peri-urban Midden-Delfland into a leisure-oriented metropolitan park already takes multiple decades and today actors are still trying to further (re)develop the area and its identity as 'Hof van Delfland'. Chapter 5 on the analysis of two strategic storytelling projects shows that the effects of these projects may not instantly become visible in terms of spatial development. Their contribution may, at first, concern mobilizing and uniting public and private actors, (re)establishing commitment of actors and institutionalizing actor networks. Here, critical are the actions of individuals ('signifying agents') who take initiative and actively create and maintain these networks of actors. However, the research on the storytelling projects identifies that it remains difficult to create these (public-private) networks and for them to engage in collative action regardless whether these intermediary roles are taken by entrepreneurs (case of Friese Meren), by representatives from governmental agencies or by government-backed goal-oriented project agencies (case of

Hondsrug). Such factors therefore cause transitions to take several decades to become spatially manifest at a regional level.

Overall, the cases emphasize the involvement of multiple actors with a wide range of interests who are dispersed over different governance levels. No single agent is therefore in complete control of how development trajectories evolve over longer periods of time. The implication is that trajectories cannot be completely predicted or steered by means of blue-print planning and end-state plans nor for that matter by consensus planning and participatory plans (Hartman & De Roo, 2013). Although for certain periods command-and-control planning approaches may be used to strongly shape development trajectories (compare to the Reconstruction Act in the case of peri-urban Midden-Delfland), in the long haul they may need to be adapted (shown by the cases of peri-urban Midden-Delfland and Vlietzone) or can become counterproductive (shown by the case of the WSR). Planners are challenged to become "transition managers who aim to guide regions through transition processes by ensuring that those regions have the adaptive capacity to do so" (Hartman & De Roo, 2013, p. 566). This allows for a transition process "to become more fluid; instead of a collapse, this could involve a gradual process of moving from one state to the other through iterative adaptation to changing circumstances" (ibid, p. 566).

The on-going processes of adaptation

The above discusses regions that are leisuring are persistently dynamic areas, and therefore in the process of 'becoming'. Alternatively stated, they are 'open' socio-spatial systems wherein actors continually respond and adapt to changing circumstances. This thesis identifies the following (non-exhaustive) set of implications for spatial planning and development.

First, an implication is that planners may need to 'open up' and seriously consider the option of regions engaging in leisuring. Such a development trajectory could offer welcome opportunities for socio-economic and spatial development. Diversifying local economies, anticipating negative lock-in situations and managing regions in decline could be amongst the reasons to consider the option. Second, implications stem from the globalized tourism industry and dynamic sector of leisure and recreation. Today, visitors can select from a great variety of tourism destinations, leisure activities and experiences. Firms as well as regions are challenged to constantly redevelop themselves to co-evolve to the demands and desires of potential visitors – one of the driving forces behind the strategic storytelling projects discussed in chapter 5. These efforts are important for enhancing attractiveness and retaining

competitiveness – and can include stimulating spatial quality (chapter 4). Third, planners should take into account that there are no guarantees when it comes to adaptation. The leisuring of regions might be a temporal phenomenon in itself. Potentially the transition may lose momentum due to the increasing importance of alternative development paths. Chapter 3 outlines that regions may have the potential to develop in a variety of development directions. In the case of peri-urban development in the Greater Hague Region (GHR) these are ranging from housing, glass house development, leisure, agriculture, of which some of these development trajectories are mutually exclusive. Changes in systems of economy, culture, decision-making, politics and planning can greatly affect which development path is favored by actors and privileged in processes of decision-making – compare to the case of peri-urban Vlietzone (chapter 3).

Summarizing, adopting the perspective that development paths of socio-spatial systems such as regions that are leisuring can evolve nonlinearly and that these regions are therefore in a dynamic state of 'becoming' comes with consequences for strategic spatial planning. Planners must be aware that many forces which drive the change and transformation of functions, structure and identities are beyond their control and influence, and therefore 'autonomously' drive change. Examples are the macro-economic developments, demographic changes, technological innovations and changing life styles and consumer preferences. Adapting to changing circumstances is therefore an on-going process and brings pressures to continually (re)develop functions, structures, and identities amongst others to enhance attractiveness or retain competitiveness. Planners should also be aware that other development paths that do not include tourism or leisure may become more desirable by society and more promising by the likes of actors in decision-making positions for socio-economic and spatial development. This brings us to the conclusion that the role of planners is to focus on conditions that support and contribute to the *adaptive capacity* of regions.

7.3 Managing complexity: a planner's focus on adaptive capacity

In theories of complex adaptive systems, adaptation is defined as the process of achieving a better 'fit' between a system and its contextual environment (Heylighen, 2001).Adaptation or the capacity to adapt is important because contextual circumstances often change and systems will need to be 'refitted'. Adaptation in the context of regions that are leisuring can

then be understood as the 'refitting' of these areas in response to changes in their contextual environment (e.g. changing economic structure, life styles, demographics, technology, travel behaviour, etc.). The process of adaptation involves coordination and planning as well as unplanned, unpredictable and self-organized changes in the ways of doing and acting of agents that are part of a system.

Overall, adaptation is a driver of the gradual and possibly fundamental transformation of spatial structures, functions and identities of systems – resulting in the nonlinear evolution of development trajectories. It is the underlying driving force of regions that are leisuring. Moreover, adaptation is an important capacity to have and, therefore, an interesting capacity to actively pursue by planners. The cases that are part of this thesis draw attention to the following (non-exhaustive) set of factors that contribute to the adaptive capacity of regions and thereby to their ability to transition towards new states. These factors come with implications for strategic spatial planning.

A diverse regional leisure economy

The relevance of a degree of diversity has been extensively discussed in previous chapters. Diversity is a key aspect of avoiding negative lock-in situations and important to adapt to a highly competitive leisure economy and (re)claim a competitive position. Lock-ins may "trap exploring agents preventing them from exploring any other point" (Frenken et al., 1999, p. 147). The cases of the Wadden Sea Region and Midden-Delfland show that it is economically and socially unsustainable to maintain trajectories of the past that revolve around agriculture and to extrapolate these linearly into the future. Mitleton-Kelly (2003, p. 14) argues that "to survive and thrive an entity needs to ... generate variety'. De Landa (1994; 1997) and Heylighen (2001) explain that generating diversity is important for finding solutions to issues that arise when circumstance change.

In this thesis, particularly in chapter 6, we build on these arguments and draw attention to a degree of diversity. This should not be confused with a call to stimulate diversity at random for the sake of diversity. The issue is that "systems become unsustainable whenever they have either too much or too little diversity" (Goerner et al, 2009, p.77). Too much diversity may be counterproductive when it leads to policy inconsistencies, high transaction costs, fragmentation, lack of coordination, disputes, frustration, etc. (Folke et al., 2005; Duit et al., 2010). Some forms of tourism and leisure have a capacity to gentrify communities, disrupt ecosystems and landscapes, and can limit opportunities for ecotourism

or community-based tourism. Whereas diversity is needed, it is needed towards a certain degree: a degree of diversity (chapter 6).

Such a degree of diversity can contribute to systems being robust and flexible at the same time, which contributes to its capacity to adapt to changing circumstances. On the one hand, diversity makes systems flexible, easing the ability to reorient or switch between multiple trajectories. When circumstance change and development trajectories prove not to be sustainable paths towards the future, having options to switch to alternative ones could enable system to achieve a better fit. On the other hand, diversity contributes to robustness of systems. Eliminating or replacing some elements does not cause negative effects on the properties and overall functioning of a system (Gershenson, 2007). As such, a degree of diversity provides the ability to endure perturbations as well as provides time to recover from perturbations. Recovering of perturbations, however, requires the encouragement of re-establishing a degree of diversity.

Pursuing a degree of diversity is controversial, however. First, it implies to encourage development in order to reach a degree of diversity. Strategies are needed to actively seek innovation and path creation. Ahern (2011) identifies the need for a 'safe-to-fail' strategy: promote experimentation and at the same time anticipate failure so that the effects of failing experiments are contained and minimized. Experiments help to identify innovative and successful services and experiences as well as stir (in-region) competition and trigger a drive amongst firms to innovate. Second, it implies to avoid and counteract plans and initiatives that negatively perturb local situations. Planning frameworks are needed to limit the impacts of random developments that could fuel potentially chaotic situations and cause extensively perturbations to the functioning of systems. Hence, a degree of diversity comes with the planning challenge and decision-making issue of privileging some functions and land uses over others for instance by means of planning interventions – as is further discussed in the subsections below.

Collective action: governance arrangements, connectivity and transition management

The development of attractive, competitive destinations for tourism and recreation depends on a range of actions that need to be actively pursued. In this context, chapter 3, 4 and 5 highlight the relevance of governance arrangements. Governance arrangements are ensembles of interacting and collaborating (representatives of) governments, societal organisations and/or private actors that have a shared or common interest in the realisation of particular

projects. These arrangements have the potential to strike a chord between governments and institutional frameworks on the one hand, and the actions of societal organisations and market parties on the other hand. An example of the Council for the Hof van Delfland is given in chapter 3. The Council operates as a platform that builds bridges between a range of public and private actors on multiple levels and tries to stimulate a collective course of action. It aims to further develop the area in the direction of a leisure-oriented metropolitan park that is well-embedded in the Greater Hague Region. Other examples are the coalitions that emerge in the context of the 'Nije Pleats' project (chapter 4). The project leads to temporal governance arrangements around small scale development projects. Private initiators collaborate closely with a government-supported project team to realize the goals of the initiator as well as contribute to governmental ambitions regarding spatial quality. The case study research on strategic storytelling also identified the emergence of governance arrangements around the initiative of the Geopark Hondsrug and the development of the Friese Meren area (chapter 5). All cases draw attention to the role of intermediaries and 'bridging organizations' establishing relationships and networks between public and private sector agents. Examples of these intermediaries include individuals and groups who take initiative and actively create and maintain these networks of actors (chapter 4 on 'signifying agents'), intermediate project agencies (chapter 4, 5) or cooperative bodies (chapter 3). The cases also show that emergence of arrangements relate to leadership: (groups of) individual entrepreneurs and representatives of (semi-)governmental agencies that take initiative and mobilize resources to establish and support the bridging organizations that are entrusted with the formation of governance arrangements around initiatives that support the leisuring of regions.

The formation of governance arrangements requires that actors connect, interact and collaborate. Connectivity is therefore an important prerequisite for aligning the actions of governments, societal organizations and market parties. Connectivity relates to connections between (groups of) entrepreneurs, governments and organizations that have a role in area development. To enhance connectivity and stimulate collaboration, the literature on transition management proposes to form transition arenas and engage in practices of agenda setting, by articulating promising development trajectories that may trigger further innovative niche developments (Chapter 6). Strategic storytelling, for its part, seeks to mobilize and assemble perspectives with the aim to articulate a common understanding and portray or emphases desirable development trajectories. Chapter 5 brings these aspects together and proposes a cyclical approach that contains the following elements:

1. Establish a small actor network of frontrunners;
2. Draft a transition agenda that serves as a policy frame for collective action;
3. Mobilize resources;
4. Execute development projects;
5. Enhance regional and external connectedness;
6. Establish the adaptive capacity to revisit these steps by monitoring and evaluating progression and by revisiting and reorganizing actor networks, transition agendas, projects, and mobilizing additional resources.

A cyclical approach is an appropriate strategy in the context of nonlinearity for the following reasons. Contextual circumstances change continually and adaptation is time and again required to achieve a better fit between a system and its contextual environment. Because of nonlinearity, situations emerge that are new and, therefore, could require a different set of actors, approaches and projects. Here, strategic storytelling is useful to build new bridges and reinforce existing ones between actors, encourage dialogs between them and develop agendas for collective action. At this point, there is an important role for intermediaries and bridging organizations that mobilize and unite actors from different domains and governance levels (Chapter 5). In the Friese Meren case a group of entrepreneurs formed the driving force to initiate a strategic storytelling project. The project contributed to the rise of a governance arrangement in the sense that it resulted in the formal establishment of an entrepreneurial organisation and better linkages with governments and their policies. In the Hondsrug case a coalition of government agencies initiate a project organisation to connect to and mobilize other actors such as entrepreneurs, marketing organisations and universities to contribute to the development of an area in the province of Drenthe as Geopark Hondsrug. Here, the intention is to create a governance arrangement that actively pursues this goal. Nevertheless, as chapter 5 also identifies, changing circumstances require also the cyclical adjustment of stories, supportive projects and organisational structures.

The many actors and factors that are involved in processes of adapting structures, functions and identities of places make the leisuring of regions, in the words of Kaufman & Weinberger (1989, p. 211), “a complex combinatorial optimization process”. Individuals, organizations and institutions may have their own perspectives on the most promising state of a region and the projects that are needed to get there. Perspectives may harmonize but can also collide and conflict. The cases of peri-urban development in the Greater Hague Region are good examples of this. Peri-urban areas offer potential for leisure-related functions and land uses but could also be used for housing, greenhouses, offices, or infrastructure development. Potentially, some options offer synergies

whilst others are mutually exclusive. Their development trajectories are therefore constantly challenged and renegotiated which makes is challenging to develop a shared perspective on future situations to avoid and situations to achieve.

Design of institutional frameworks: inhibiting, allowing and encouraging behaviors and actions

The importance of a diverse regional leisure economy, discussed earlier, does not mean that plans and initiatives should be supported at random as they can easily perturb local situations. In doing so, they may deplete the qualities that places confer to the leisure economy, qualities on which its successful development often depends (compare to issues regarding 'common-pool resources' e.g. in Ostrom, 1990). As such, in the Netherlands, governments at the level of the nation, province and municipality are all involved in trying to steer and shape development trajectories by means of institutional design. Institutional design is the process of "devising and realization of rules, procedures, and organizational structures that will enable and constrain behaviour and action so as to accord held values, achieve desired objectives, or execute given tasks" (Alexander, 2002, p. 1; North, 1990, Alexander, 2006). Institutional design is a key aspect of strategic planning (Innes, 1995; Alexander, 2005) and generally results in institutional frameworks consisting of a multilevel system of formal organizational structures, ensembles of formal rules (laws, regulations and procedures), policies and informal constraints (norms and codes of conduct).

The design of institutional frameworks delineates the range of actions of the plurality of actors involved in initiating and executing plans and projects that contribute to the development of the leisure economy (cf. De Landa, 1994, on space of possibilities). These frameworks can be crafted to (strongly) steer and shape development trajectories of a region, for instance emphasising or privileging leisure. In this study we found that institutional frameworks can be designed as such to simultaneously inhibit and allow particular land uses and activities over others as well as to encourage ones that contribute to strategic visions and goals. It is a challenge to find a framework that offers a satisfactory balance between inhibiting, allowing and encouraging particular land uses and activities over others. This balance is important on the one hand to encourage innovations in niches of tourism, leisure and recreation and the pursuit of diversity and, on the other hand, to protect nature, heritage, and spatial quality from the negative impact of spatial development. Chapter 4 of this research unpacks an institutional framework that is geared towards achieving such a

balance between inhibiting, allowing and encouraging particular land uses and activities over others in the context of stimulating spatial quality. The chapter indentifies a framework that is 1.) selective in order not to be too comprehensive and prescriptive from the top down[15]; 2.) multi-component because it consists of a combination of measures to achieve the composite goal of inhibiting, allowing and encouraging[16]; and 3.) dynamic because the framework is constantly renegotiated in multilevel decision-making processes.

The findings suggest that, following Heylighen (2008), the ability of socio-spatial systems to transform towards enhanced states requires that "agents are organized and coordinated in their actions so as to maximize their synergy" (p. 9). To organize and coordinate the actions of agents generally involves the presence of rules, regulations or procedures "determining which actions are allowed, and which are not" (ibid, p.9). The implication of organizing and coordinating the actions of agents is that the freedom of individual agents is (somewhat) reduced, which is considered essential in order to turn a collection of initially independent agents into a collective, organized, and goal-directed

15 Such frameworks can limit more context-sensitive or place-based approaches. Although higher level governments should be selective when introducing measures, this does not mean that other aspects are unimportant. These are then viewed as the responsibility of municipalities, communities and developers to further negotiate and specify. The rationale is to create more degrees of freedom at the regional and local levels by shifting responsibilities. Choices regarding the design of institutional frameworks must be able to diverge at the tiers of provinces and municipalities, each having to deal with specific local circumstances, interests, issues and political compositions.

16 First, measures that delineate which land uses and activities are allowed, such as laws, regulations and norms that privilege some activities over others. Second, measures that introduce conditions for development such as process requirements stating that initiators of development plans and projects should demonstrate how particular criteria are taken into account. For instance, in Friesland, it is obliged to motivate by means of a spatial quality paragraph how functions are 'qualitatively embedded' into local contexts. Third, measures that are aimed to the active pursuit of synergies between individual interests and common or shared interests (e.g. spatial quality, regional coherence). These include the support of organisations such as the Quality Team (chapter 4) and the Hof van Delfland (chapter 3) or initiating projects such as Nije Pleats (chapter 4) and around strategic storytelling (chapter 5). Fourth, measures that stimulate the creation of visions and perspectives on future situation to achieve and situation to avoid. An example is the support of organisations such as ARK Fryslân and Atelier Fryslân.

whole[17] (Heylighen, 2008). However, if the (self-)organization and coordination amongst agents are weak or absent, influencing development plans and projects becomes a daunting challenge, as does affecting their possible negative impact on places and communities. Possibly, individuals will consider this a positive situation as it provides them with the freedom to pursue their individual goals and maximize their utility. But this situation can also be problematic when plans and projects act against collective views on spatial and socio-economic development. Therefore a first major challenge for institutional design is to find a framework that offers a satisfactory balance between inhibiting, allowing and encouraging land uses and activities over others (compare to chapter 4). A second major design challenge in the context of nonlinearity is that institutional frameworks need to be dynamic. They are likely to be constantly contested and renegotiated in the face of changing contextual circumstances and local development opportunities. Below it is further explained that this requires a reflexive stance towards governance.

Reflexive stance towards governance

This thesis points out that a reflexive stance toward governance is needed in the context of nonlinearly evolving development trajectories. Voss & Bornemann (2011, p. 1) explain that a reflexive stance toward governance rejects "the assumption of 'one' adequate problem framing, 'one' true prognosis of consequences, and 'one' best way to go that could be identified in an objective manner from a neutral, supervisory outlook on the system as a whole". This is a consequence of accepting that there are multiple possible pathways coexist in which development trajectories may unfold towards the future (Geels & Schot, 2007). Furthermore, reflexivity "calls into question the foundation of governance itself, that is, the concepts, practices and institutions by which societal development is governed, and that one envisions alternatives and reinvents and shapes those foundations" (Voss & Kemp, 2006, p. 6). For strategic spatial planning the consequence is that systems of planning and governance must themselves be adjusted and adapted in response to changing circumstance.

Alternatively stated, reflexivity emphasizes the need to recognize when and how situations are changing, to call into question whether concepts, practices and institutions are still sufficient, and to envision alternative approaches (Voss & Kemp, 2006). By doing so, reflexivity builds on advancements in critical

17 In complexity theories, the notion of self-organization is coined to describe the process when organization emerges 'spontaneously' and no single agent is in control of the entire process.

(social) theory on the reflection, assessment and change of social and cultural structures (Forester, 1980), the theory of structuration on the analysis of both agency and structure to examine the production and change of social systems (Giddens, 1984) and the strategic-relational approach of Jessop (2005; 2008) which elaborates on the interactions between structure and agency and the (reflexive) reorganization of institutional frameworks (structures) through the actions of agents (agency).

The relevance of reflexivity for managing regions that are leisuring is illustrated for instance by the case studies on the development of peri-urban Midden-Delfland and Vlietzone (chapter 3). These areas could not remain completely devoted to agriculture. Forces driving change relate to the combination of urban development in the Greater Hague Region, demands to preserve nature, heritage and open space for recreation as well as the global agri-economic system that renders small scale farms unviable. Peri-urban Vlietzone, for its part, was strongly affected by the financial crisis of 2008 which led to the postponement of housing and office developments. Changing situations affect development options. When situations change, alternative governance approaches may be needed. In the case of Midden-Delfland top-down approaches were not continued after the Reconstruction Act expired, but substituted by a more bottom-up and collaborative approach to the governance of the peri-urban. This shows that a planning implication of reflexivity is that "the planning process becomes readable as a repeatedly and experimentally generated response to changing relations in spatial development" (Van Wezemael, 2012, p. 45).

A reflexive stance contributes to the ability to recognize when and how changing circumstances affect development trajectories of regions. Reflexivity could be of use as development trajectories of regions can become subjected to path dependence and lock-in situations. Path dependence refers to a set of cumulative decisions taken over a long period of time to reinforce a particular development path (Hassink, 2010). When the returns on such decisions are increasing, these situations often feature self-reinforcing positive feedback. It can also be negative when regions become locked-in and are unable to deviate from past trajectories as a result of self-reinforcing tendencies. As is discussed in chapter 2, "[t]he ability to deviate from a vested development trajectory is then constrained by rigidly retaining traditional spatial patterns, policies, strategies, and institutional settings that once supported economic growth in an area but do so no longer. Consequently, mismatches will emerge between entrepreneurial and societal desires and institutional settings, causing an inability to acquire other, perhaps better, suitable combinations of land uses and functions at a specific time and place" (Hartman & De Roo, 2013, p. 559).

Whereas chapter 2 illustrates how rigid institutional frameworks can constrain regions from leisuring, it is shown in chapter 4 that institutional frameworks are not necessarily static. They are constantly renegotiated and transformed amongst others in response to emerging societal demands or changing socio-economic situations.

Summarizing, this section identifies that socio-spatial systems such as regions that are leisuring could benefit from the capacity to adapt. It draws attention to a set of conditions that contribute to adaptive capacity of regions and their ability to transition towards new, enhanced states. Moreover, it discusses in-depth the multiple implications for strategic spatial planning in the context of the design of institutional framework, stimulating organizing capacity and managing adaptive capacity.

7.4 Towards an agenda for further research

On the basis of the findings and case study analyses presented in this thesis, we can provide several suggestions for an agenda for further research. These suggestions build on perspectives such as regions that are leisuring are exhibiting emergence: local interactions and innovations in niches of tourism, recreation and leisure give rise to new functions, structures and identities (Heylighen, 2008; Walker et al., 2004). We have identified that new spatial, organizational and institutional structures do not emerge easily. These are often relatively long-term transition processes which depend on the aligned actions of a range of entrepreneurs, firms, organizations and institutions on multiple governance levels. Forces driving the transition of regions that are leisuring are contextual influences such as economic development, technological innovation, environmental change, political dynamics, and lifestyle changes. Furthermore, transitions come about as a result of adaptation: the local of often self-organized interactions that produce series of small changes whereby the structures and functions of systems gradually but fundamentally change over a period of time. These findings contribute to an enhanced understanding of regions that are leisuring as a phenomenon but also touch upon several topics that are discussed below, which can be further researched to further improve planners their capacity to manage regions that are leisuring.

Building adaptive capacity

However, the capacity to adapt is very context-dependent and differs from place to place. Section 7.3 draws attention to a set of conditions that contribute to the adaptive capacity of regions and thereby to their ability to transform towards new states. But these conditions are not automatically present or supported by local actors in decision-making positions. Therefore, we may need to pay more attention to analyze or assess *the extent to which* regions feature adaptive capacity. This could shift the focus towards helping regions to further improve their adaptive capacity by engaging in a process of 'building adaptive capacity'. Studying adaptive capacity building could shed a light on the extent to which conditions are in place in specific regions and whether resources are available to further improve adaptive capacity. It would mean the development of a more situated, context sensitive approach to adaptive capacity. As such, it could help (local) decision-makers to prioritize certain actions over others, based on possible pathways towards adaptive capacity and resource availability to engage in such pathways.

Emergence and evolution of governance arrangements

This thesis identifies the formation of governance arrangements as a key aspect of adaptation. However, this aspect still remains under researched whilst it becomes an increasingly relevant topic to further explore. We know that governance arrangements are collaborative coalitions of (representatives of) governments, societal organizations and/or private actors that have a shared or common interest in the realization of particular projects. We also know that these arrangements have the potential to strike a chord between governmental structures and formalized institutional frameworks on the one hand, and the actions of societal organizations and market parties on the other hand. Yet we do not know in detail the determinants or conditions for the (successful) emergence of (productive) governance arrangements. A preliminary but non-exhaustive set of factors are identified in this thesis such as connectivity, formal and informal intermediaries or bridging organizations, and institutional variety. But further studies are needed that focus in more detail on how arrangements adapt over time in relation to external, contextual changes or how the adaptation of arrangements is organized 'from within' to enhance their performance. Moreover, studies could look into the emergence of possible issues concerning democratic legitimacy of these governance arrangements. This thesis touches upon these aspects but did not examined them exhaustively. Doing so would, however, further expand the emerging field of evolutionary governance theory (Van Assche et al., 2014).

Building 'experience environments'

The ability to form productive governance arrangements gains importance now that the industry cluster of tourism, recreation and leisure has gradually become an experience-oriented economy. The leisure economy is fast-growing, highly competitive and therefore also highly dynamic. Throughout the world, places have been adapted and transformed for the purpose of leisure, tourism and recreation. Because of the enormous growth of the leisure economy, there is an immense and intense global competition, which means an abundance of choice is available to society. Visitors are able to continuously shift their interest from one destination to another. Entrepreneurs and governments are caught up in a process of continuous innovation and improvement of their firm and region. They are stuck in a process of becoming, forced to iteratively find and develop niches that captivate people and attract visitors, inhabitants and businesses.

In doing so Benur & Bramwell (2015, p. 215) observe that actors "meet market demands through an increasingly careful engineering of experiences to match specific market expectations, which involves the detailed choreographing of activities, encounters and experiences". This comes with major challenges, not only for firms, also for planners managing the development of destinations for tourism and recreation. Regions that are leisuring are forced to evolve into 'experience environments'– a region which is experienceable as a more or less cohesive entity and host to a range of leisure experiences from which visitors can select (cf. Mossberg, 2007 on experiencescapes). This is illustrated by recent developments in the case of Geopark Hondsrug. The Hondsrug area is being developed to become experienceable as a cohesive Geopark. The region is made more recognizable as a cohesive entity by means of a 'brand identity' (reappearing logos, colors, symbols, names), signage, landscape art, landscape design and infrastructure development. Furthermore, eleven history-oriented stories are elaborated. Each story tells the tale of a specific part of the area's past and ties together a dynamic set of sites, histories, expositions, activities, events and facilities. The efforts to create a more cohesive entity make the area better recognizable and marketable on the one hand, and on the other hand allows drawing attention to a range of experiences visitors can select from. Whereas local and provincial government authorities initiated the project, a purposeful project agency is established that, amongst others, strongly encourages entrepreneurs to connect to the rationale behind framing the regions as a Geopark. Conditions clearly include connectivity amongst actors, interactions, signifying agents and bridging organizations, an agenda for collective action, resource availability, etc.

These ideas relate to theories on (urban) imagineering which is a portmanteau of imagining and engineering. It refers to a spatial development process as well as the (re)creation of the image of a place (Rutheiser, 1996; Paul, 2005) and to the concept of Disneyfication which is the repacking and thematising of places and their identities (Bryman, 2004). Clearly, using these ideas and applying these concepts in practice should be approached with great caution. When transforming places for the leisure economy becomes a commercial or political goal on its own, it could be at odds with the sustainable development of local societies and environments. Nevertheless, due to its potential contribution to socio-economic and spatial development the design, development and management of such experience environments remains a relevant topic to further explore and develop in the context of a highly dynamic and competitive leisure economy.

Lastly, a nonlinear perspective on regional development paths will always be accompanied by a discussion on whether to further specialize for increasing returns on investments at the risk of lock-in situation or on whether to diversify by means of niche-innovations for the benefit of flexibility. “The longstanding binary of specialisation versus diversification” as it is called by Dawley et al. (2010, p. 662). The challenge is to find a balance, as is discussed in the context of a degree of diversity (chapter 6). This will be an ongoing process to find such a balance and will remain a point of discussion due to the different perspectives and interests of entrepreneurs, local communities, politicians, planners, societal organization, entrepreneurial associations and lobby groups, etc. Particularly, because findings such a balance involves making decision on privileging some land uses and activities at the expense of others. It is, nevertheless, essential to choose as well as essential one to have this ongoing discussion when accepting a nonlinear perspective and aiming to manage the nonlinear development trajectories of regions, such as those that are in the process of leisuring.

A

Abrahamse, J. (2002).
Plattelandsmetropool, de witte schimmel voorbij. *Noorderbreedte,* 26 (5a), 1-47.

Affolderbach, J. & Parra, C. (2012).
Cross-disciplinary Perspectives on Governance. In J. Affolderbach, T. DuBry, O. Gonzalez & C. Parra (Eds.) *Reinforcing Governance: Perspectives on Development, Poverty and Global Crises* (pp. 11-27). Brussels: P.I.E. Peter Lang.

Ahern, J. (2011).
From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. *Landscape and Urban Planning*, 100(4), 341-343.

Albrechts, L. (2006).
Bridge the Gap: From Spatial Planning to Strategic Projects. *European Planning Studies*, 14(10), 1487-1500.

Albrechts, L. (2006a).
Shifts in strategic spatial planning? Some evidence from Europe and Australia. *Environment and Planning A*, 38, 1149-1170.

Albrechts, L. (2006b).
Bridge the Gap: From Spatial Planning to Strategic Projects. *European Planning Studies*. 14(10), 1487-1500.

Alexander, E. R. (2005).
Institutional transformation and planning: From institutionalization theory to institutional design. *Planning Theory*, 4(3), 209-223.

Alexander, E.R. (2006). Institutional design for sustainable development. *The Town Planning Review*, 77(1), 1-27.

Allen, A, (2003).
Environmental planning and management of the peri-urban interface: perspectives on an emerging field, *Environment & Urbanization*, 15(1), 135-147.

Allen, P. M. (1997).
Cities and regions as self-organizing systems: models of complexity. Amsterdam: Gordon and Breach Science Publishers.

Allen, P. M. (2012).
Cities: The Visible Expression of Co-evolving Complexity. In J. Portugali, H. Meyer, E. Stolk & E. Tan (Eds) *Complexity theories of cities have come of age: an overview with implications to urban planning and design* (pp. 67-90). Berlin: Springer.

Allison, H. E. & Hobbs, R. J. (2004).
Resilience, adaptive capacity, and the 'Lock-in Trap' of the Western Australian agricultural region. *Ecology and Society*, 9(1), article 3.

Allmendinger, P. (2002).
Planning Theory. Basingstoke: Palgrave MacMillan.

Amin, A. & Thrift, N. (1994).
Living in the global. In A. Amin & N. Thrift (Eds.) *Globalization, institutions, and regional development in Europe* (pp. 1-22). Oxford: Oxford University Press.

Amin, A. & Thrift, N. (1995).
Globalisation, institutional thickness and the local economy. In P. Healey, S. Cameron, S. Davoudi, S. Graham & A, Madanipour (Eds.) *Managing Cities; the New Urban Context* (pp. 92-108). Chichester: John Wiley & Sons.

Andrews, R. & Boyne, B. A. (2008).
Organizational environments and public-service failure: an empirical analysis. *Environment and Planning C: Government and Policy,* 26, 788-807.

Ansoff, I.H. (1975).
Managing strategic surprise by response to weak signals. *California Management Review,* 18(2), 21-33.

Antrop, M. (1998).
Landscape change: Plan or chaos? *Landscape and Urban Planning,* 41, 155-161.

Antrop, M. (2005).
Why landscapes of the past are important for the future. *Landscape and Urban Planning*, 70, 21-34.

Argyris, C. & Schön, D. (1978).
Organizational learning: A theory of action perspective. Reading, Mass: Addison Wesley.

Arthur, W. B. (1995).
Increasing Returns and Path Dependence in the Economy. Ann Arbor, MI: University of Michigan Press.

Ashby, W.R. (1958).
Requisite variety and its implications for the control of complex systems. *Cybernetica*, 1(2), 83-99.

Ashworth, G. J., Graham, B. & Tunbridge, J.E. (2007).
Pluralising Pasts; heritage, identity and place in multicultural societies. London: Pluto Press.

Axelrod, R. & Cohen, M. (2000).
Harnessing complexity: organisational implications of a scientific frontier. New York: Basic Books.

B

Baggio, R., Scott, N. & Cooper, C. (2010).
Improving tourism destination governance: A complexity science approach. *Tourism Review*, 65(4), 51-60.

Baldwin, R. (2006).
Globalisation: the great unbundling(s). In *Globalisation challenges for Europe*, Secretariat of the Economic Council, Finnish Prime Minister's Office, Helsinki, http://hei.unige.ch/baldwin/PapersBooks/Unbundling_Baldwin_06-09-20.pdf

Batty, M. (2005).
Cities and Complexity: Understanding Cities with Cellular Automata, Agent-Based Models, and Fractals. Cambridge, MA: MIT Press.

Batty, M. (2005).
Cities and Complexity: understanding cities with cellular automata, agent-based models, and fractals. Cambridge, MA: MIT Press.

Batty, M. (2008).
The Size, Scale, and Shape of Cities. *Science*, 319 (5864), 769-771.
Beauregard, R. (2003). Democracy, Storytelling, and the Sustainable City. In B. Eckstein & J. Throgmorton (Eds.) *Story and Sustainability: Planning, Practice, and Possibility for American Cities* (pp. 65-78). Cambridge MA: MIT press.

Belussi, F. (1998).
Path-dependency vs. industrial dynamics: an analysis of two heterogeneous districts. *Human Systems Management*, 18, 161-174.

Benford, R.D. & Snow, D.A. (2000).
Framing processes and social movements: an overview and assessment. *Annual Review of Sociology*, 26(1), 611-639.

Benneworth, P. & Hospers, G. J. (2007).
The new economic geography of old industrial regions: universities as global-local pipelines. *Environment and Planning C: Government and Policy*, 25, 779-802.

Benur, A. M. & Bramwell, B. (2015).
Tourism product development and diversification in destinations. *Tourism Management*, 50, 213-224.

Berkhout, P. & Van Bruchem, C. (2007).
Landbouw-economisch bericht 2007. Den Haag: LEI.
Berkhout, P. & Van Bruchem, C. (2008). *Landbouw-economisch bericht 2008.* Den Haag: LEI.

Bertolini, L. (2010).
Complex systems, evolutionary planning? In E. Silva, G. de Roo (Eds) *A Planners meeting with Complexity* (pp. 81-98). Aldershot: Ashgate.

Bervaes, J. C. A. M., Kuindersma, W. & Onderstal, J. (2001).
Rijksbufferzones, verleden, heden en toekomst. Wageningen: Alterra.

Boelens, L. (2010).
Theorizing practice and practising theory; outlines for an actor-relational-approach in planning. *Planning Theory*, 9(1), 28-62.

Boschma, R. & Martin, R. (2010).
The aims and scope of evolutionary economic geography. In R. Boschma & R. Martin (Eds.), *The handbook of evolutionary economic geography* (pp. 3-39). Cheltenham: Edward Elgar.

Boschma, R. A. & Lambooy. J. G. (1999).
Evolutionary economics and economic geography. *Journal of Evolutionary Economics,* 9, 411-429.

Boschma, R.A. & Frenken, K. (2006).
Why is economic geography not an evolutionary science? Towards an evolutionary economic geography. *Journal of Economic Geography*, 6, 273-302.

Bridges, W. (1991).
Managing transitions; making the most of change. Reading, MA: Addison-Wesley.

Brinkhuijsen, M., De Jong, H. & De Jonge, C.S.J. (2007).
Landscape and Leisure in Europe: parasitism and symbiosis. Wageningen: Alterra.

Brouder, P. & Eriksson, R.H. (2013).
Tourism evolution: On the synergies of tourism studies and evolutionairy economic geography. *Annals of Tourism Research,* 43, 370-389.

Brouder, P. (2014).
Evolutionary economic geography: A new path for tourism studies? *Tourism Geographies*, 16(1), 2-7.

Brouwer, A., De Jong, M. & De Roo, G. (2007).
Expeditie woonlandschappen; het landschap als drager van een regionale wooneconomie. Assen: In Boekvorm Uitgevers.

Bruegmann, R. (2005).
Sprawl: A compact history. Chicago: University of Chicago Press.

Bryant, C. R. (1995).
The role of local actors in transforming the urban fringe, *Journal or Rural Studies*, 11(3), 255-267.

Bryman, A. E. (2004).
The Disneyization of society. London: Sage.

Buhalis, D. (2000).
Marketing the competitive destination of the future. *Tourism Management*, 21, 97-116.

Buijs, A.E, Pedroli, B. & Luginbu, Y. (2006).
From hiking through farmland to farming in a leisure landscape: changing social perceptions of the European landscape. *Landscape Ecology*, 21, 375-389.

Bulkens, M., Minca, C., & Muzaini, H. (2014).
Storytelling as method in spatial planning. *European Planning Studies*, DOI: 10.1080/09654313.2014.942600

Bunce, M. (2008).
The 'leisuring' of rural landscapes in Barbados: new spatialities and the implications for sustainability in small island states. *Geoforum*, 39, 969-979.

Butler, R.W. (1980).
The concept of the tourist area life-cycle of evolution: Implications for management of resources. *Canadian Geographer*, 24(1), 5-12.

Butler, R.W. (2011).
Tourism area life cycle. Woodeaton: Goodfellow.

Byrne, D. (1998).
Complexity theory and the Social Sciences. London, Routledge.

Byrne, D. (2000).
The politics of complexity: Acting locally matters. *Soundings*, 14(Spring), 141-150.

Byrne, D. (2005).
Complexity, configurations and cases. *Theory, Culture & Society,* 22(5), 95-111.

C

Caalders, J. (2002).
Rural tourism development: A network perspective. Delft: Uitgeverij Eburon.

Cadieux, K. V. & Hurley, P. T. (2011).
Amenity migration, exurbia, and emerging rural landscapes: global natural amenity as place and as process. *GeoJournal*, 76(4), 297-302.

Caffyn, A. (2000).
Is there a tourism partnership life cycle? In B. Bramwell & B. Lane (Eds.) *Tourism Collaboration and Partnerships: Politics, Practice and Sustainability* (pp. 200-229). Clevedon: Channel View Publications.

Carpenter, S.R. & Brock, W.A. (2008).
Adaptive capacity and traps. *Ecology and Society*, 13(2), article 40.

Castells, M. (1996).
The Information Age: Economy, Society and Culture. Oxford: Blackwell Publishing.

Chattiparamb, A. (2013).
Complexity theory and planning: Examining 'fractals' for organising policy domains in planning practice. *Planning Theory*, 13(1), 5-25.

Chell, E (2004).
Critical incident technique, in Cassell C and Symon G (Eds) Essential Guide to Qualitative Methods in Organisation Studies, London, Sage, pp. 45-60.

Cilliers, P. (1998).
Complexity and postmodernism: Understanding complex systems. New York, NY: Routledge.

Cilliers, P. (2001).
Boundaries, hierarchies and networks in complex systems. *International Journal of Innovation Management*, 5(2), 135-147.

Cilliers, P. (2005).
Complexity, Deconstruction and Relativism. *Theory, Culture & Society*, 22(5), 255-267.

Couclelis, H. (2006).
"Where has the future gone?" Rethinking the role of integrated land-use models in spatial planning. *Environment and Planning A*, 37(8), 1353-1371.

D

Davoudi, S. & Stead, D. (2002).
Urban-rural relationships: an introduction and brief history. *Built Environment*, 29(4), 269-277.

Dawley, S., Pike, A. & Tomaney, J. (2010).
Towards the Resilient Region? *Local Economy*, 25(8), 650-667.

De Bont, C. J. A. M., Van Bruchem, C. Helming, J. F. M., Leneman, & H., Schrijver, R. A. M. (2007).
Schaalvergroting en verbreding in de Nederlandse landbouw in relatie tot natuur en landschap. Den Haag: LEI.

De Landa, M. (1994).
Virtual Environments and the Emergence of Synthetic Reason. In M. Dery (Eds.) *Flame Wars: the Discourse of Cyberculture* (pp. 263-286). Durham: Duke University Press.

De Landa, M. (1997).
A Thousand Years of Nonlinear History. Cambridge, MA: Zone Books.

De Roo, G. & Silva, E. A. (2010).
A Planner's Encounter with Complexity. Farnham: Ashgate.

De Roo, G. (2003). *Environmental Planning in the Netherlands: too good to be true: from command-and-control planning to shared governance*. Aldershot: Ashgate.

De Roo, G. (2010).
Being or becoming? That's the question! Confronting complexity with contemporary planning theory. In G. de Roo & S. Silva (Eds.) *A planner's encounter with complexity* (pp. 19-40). Farnham: Ashgate.

De Roo, G. (2012).
Spatial Planning, Complexity and a World 'Out of Equilibrium' – Outline of a Non-linear Approach to Planning. In G de Roo, J Hillier, J van Wezemael (Eds.) Planning and Complexity: Systems, Assemblages and Simulations (pp. 129-166). Farnham: Ashgate.

De Roo, G., & Silva, E.A. (2010).
A planner's encounter with complexity. Farnham: Ashgate.

De Roo, G., Hillier, J. & Van Wezemael, J. (2012).
Complexity and planning: Systems, assemblages and simulations. Farham: Ashgate.

De Roo, G., Visser, J. & Zuidema, C. (2012b).
Smart methods for environmental externalities: urban planning, environmental health and hygiene in the Netherlands. Farnham: Ashgate.

Dewulf, A. R. P. J, Termeer, C. J. A. M., Werkman, R.A., Breemen, G.E. & Poppe, K.J. (2009).
Transition management for sustainability: towards a multiple theory approach. In K. J. Poppe, C.J.A.M. Termeer & M. Slingerland (Eds.) *Transitions towards sustainable agriculture and food chains in peri-urban area's* (pp. 25-50). Wageningen: Academic Publishers.

Dietz, T, Ostrom, E. & Stern, P. (2003).
The struggle to govern the commons. *Science*, 302(5652), 1907-1912.
Dormans, S. (2008). *Narrating the city; urban tales from Tilburg and Almere*. Enschede: Printpartners Ipskamp.

Douglas, I. (2006).
Peri-urban ecosystems and societies: transitional zones and contrasting values. In D. McGregor, D. Simon, & D. Thompson (Eds) *The Peri-Urban Interface: Approaches to Sustainable Natural and Human Resource Use* (pp. 18-27). London: Earthscan.

Duit, A. (2012).
Adaptive capacity and the ecostate. In E. Boyd & C. Folke (Eds.), *Adapting institutions: Governance, complexity and social-ecological resilience* (pp. 127-147). Cambridge: Cambridge University Press.

Duit, A. Galaza, V., Eckerberg, K. & Ebbessona, J. (2010).
Governance, complexity, and resilience. Global Environmental Change, 20(3), 363-368.

E

Essletzbichler, J. & Rigby, D. L. (2007).
Exploring evolutionary economic geographies. *Journal of Economic Geography*, 7(5), 549-571.

F

Faludi, A. F. K. & Van der Valk, A. J. J. (1994).
Rule and Order: Dutch planning doctrine in the twentieth century. Dordrecht: Kluwer Academic Publishers.

Farrell, B.H., & Twining-Ward, L. (2004).
Reconceptualising tourism. *Annals of Tourism Research*, 31(2), 274-295.

Fisher, T. (2003).
Differentiation of Growth Processes in the Peri-urban Region: An Australian Case Study. *Urban Studies,* 40(3), 551-565

Florida, R. (2002).
The rise of the creative class, and how it's transforming work, leisure, community and everyday life. New York: Basic Books.

Folke, C. (2002).
Resilience and Sustainable Development: building adaptive capacity in a world of transformations. Stockholm: Edita Norstedts Tryckeri AB.

Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T. & Rockström, J. (2010).
Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4), article 20.

Folke, C., Hahn, T., Olsson, P. & Norberg, J. (2005).
Adaptive governance of social-ecological systems. *Annual Review of Environmental Resources*, 30, 441–73.

Forester, J. (1980).
Critical theory and planning practice. *Journal of the American Planning Association*, 46(3), 275-286.

Foxon, T.J., Stringer, L.C. & Reed, M.S. (2008, February 22-23).
Governing long-term socialecological change: What can the resilience and transitions approaches learn from each other? Paper prepared for presentation at the 2008 Berlin Conference, 'Long-Term Policies: Governing Social-Ecological Change', Berlin.

Frenken, K. (2006).
Technological innovation and complexity theory. *Economics of Innovation and New Technology*, 15(2), 137-155.

Frenken, K., Marengo, L. & Valente, M. (1999).
Interdependencies, near-decomposability and adaptation. In T. Brenner (Eds.) *Computational Techniques for Modelling Learning in Economics* (pp. 145-165). Boston: Kluwer Academic Publishers.

Frenken, K., Van Oort, F. & Verburg, T. (2007).
Related variety, unrelated variety and regional economic growth. *Regional Studies*, 41(5), 685-697.

Friedmann, J. (1996).
Modular cities: beyond the rural-urban divide, *Environment and Urbanization*, 8(1), 129-131.

Friedmann, J. (2005).
Planning Cultures in Transition. In B. Sanyal (Eds.) *Comparative Planning Culture* (pp. 29-44). Routledge: London.

G

Gallent, N., Bianconi, M. & Andersson, J. (2006).
Planning on the edge: England's rural-urban fringe and the spatial-planning agenda, *Environment & Planning B,* 33(3), 457-476.

Gallent, N., Shoard, M. , Andersson, J., Oades, R. & Tudor, C. (2004).
England's urban fringes: multifunctionality and planning. *Local Environment*, 9(3), 217-233.

Garnsey, E. & McGlade, J. (2006).
Complexity and Co-evolution; continuity and change in socio-economic systems. Cheltenham: Edward Elgar Publishing.

Garud, R. & Karnøe, P. (2001).
Path dependence and creation. Mahwah: Lawrence Erlbaum Associates.

Geels, F. W. & Schot, J. (2007).
Typology of sociotechnical transition pathways. *Research Policy,* 36, 399-417.

Geels, F. W. (2002).
Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. *Research Policy,* 31, 1257-1274.

Geels, F. W. (2010).
Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39(4), 495-510.

Geels, F.W. & Schot, J. (2007).
Typology of sociotechnical transition pathways. *Research Policy*, 36, 399-417.

Geels, F.W. (2005).
Processes and patterns in transitions and system innovations: Refining the coevolutionary multi-level perspective. *Technological Forecasting & Social Change*, 72(6), 681-696.

Geels, F.W. (2010).
Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39(4), 495-510.

Gerrits, L .(2008).
The Gentle Art of Coevolution: a complexity theory perspective on decision making over estuaries in Germany, Belgium and the Netherlands. Rotterdam: Optima Grafische Communicatie.

Gerrits, L. (2012).
Punching Clouds: An Introduction to the Complexity of Public Decision-Making. Litchfield Park, AZ: Emergent Publications.

Gerrits, L., Rauws, W. & De Roo, G. (2012).
Dutch spatial planning policies in transition. *Planning Theory & Practice,* 13(2), 336-341.

Gershenson, C. (2007).
Design and control in self-organizing systems. Mexico City: CopIt ArXives.

Getz, D. (2008).
Event tourism: Definition, evolution, and research. *Tourism Management*, 29(3), 403-428

Giddens, A. (1984).
The constitution of society: Outline of the theory of structuration. Cambridge: Polity Press.

Gieling, S. & De Laat, L. (2004).
The inner city: sunny side up. In L. Deben, W. Salet & M. T. Van Thoor (Eds) *Cultural Heritage and the future of the historic inner city of Amsterdam* (pp. 311-318). Amsterdam: Askant Acedemic Publishers.

Gillespie, A. (2007).
Foundations of economics. Oxford: Oxford University Press.

Goerner, S. J., Lietaer, B. & Ulanowicz, R. E. (2009).
Quantifying economic sustainability: Implications for free-enterprise theory, policy and practice. *Ecological Economics*, 69, 76-81.

Goethals, M. & Schreurs, J. (2011).
Developing shared terms for spatial quality through design. In S. Oosterlynk, J. van den Broeck, L. Albrechts, F. Moulaert & A. Verhetsel (Eds) *Strategic spatial planning projects: catalysts for change?* (pp. 97-127). Abingdon: Routledge.

Gössling, S. Hall, C.M. Ekström, F. Engeset, A.B. & Aall, C. (2012).
Transition management: A tool for implementing sustainable tourism scenarios? *Journal of Sustainable Tourism*, 20(6), 899-916.

Grabher, G. (1993).
The weakness of strong ties: the lock-in of regional development in the Ruhr area. In G. Grabher (Eds.) *The Embedded Firm: on the socioeconomics of industrial networks* (pp. 255-277). London: Routledge.

Graham, S, & Healey, P. (1999).
Relational concepts of space and place: Issues for planning theory and practice. *European Planning Studies*, 7(5), 623-646.

Greater Hague Region (2005).
Partiële herziening RSP: uitwerkingsplan Vliet/A12-zone. Den Haag: Dtadsgewest Haaglanden.

Greater Hague Region (2008).
Regionaal Structuurplan Haaglanden 2020: *Visie*. Delfgauw: Nivo.

Gunder, M. & Hillier, J. (2009).
Planning in Ten Words or Less: A Lacanian Entanglement with Spatial Planning. Farnham: Ashgate.

Gunderson, L. & Holling, C.S. (2002).
Panarchy: understanding transformations in human and natural systems. Washington DC: Island Press.

Gunderson, L.H., Carpenter, S.R., Folke, C., Olsson, P. & Peterson, G.D. (2006).
Water RATs (resilience, adaptability, and transformability) in lake and wetland social-ecological systems. *Ecology and Society*, 11(1), article 16.

Gupta, J. Termeer, K., Klostermann, J., Meijerink, S., Van der Brink, M., Jong, P. & Nooteboom, S. (2010).
Institutions for climate change: A method to assess the inherent characteristics of institutions to enable the adaptive capacity of society. *Environmental Science & Policy,* 13(6), 459-471.

H

Haags Milieucentrum (2004).
De dynamiek van de ongeordende orde; een groene schakel langs de Vliet. The Hague, Haags Milieucentrum.

Habermas, J. (1984).
Theory of communicative action. Boston: Beacon Press.

Hajer, M. (2003).
Policy without polity? Policy analysis and the institutional void. *Policy Sciences*, 36, 175-195.

Hall, C.M. (2008).
Tourism Planning: policies, processes and relationships. Harlow: Pearson Education.

Hartman, S. & De Roo, G. (2013).
Towards managing nonlinear regional development trajectories. *Environment & Planning C: government and policy*, 31(3), 556-570

Hartman, S. (2013).
Exploring a planner's adaption to 'leisuring' regions. In A. Postma, I. Yeoman & J. Oskam (Eds.) *The Future of European Tourism* (pp. 238-253). Stenden University: Leeuwarden.

Hartman, S. & De Roo, G. (2009).
Op het snijvlak van risico en kansen; over ruimtelijke processen en ontwikkelingen van het waddengebied. Ridderkerk: Holland Ridderkerk.

Hartman, S., Rauws, W.S., Beeftink, M.J. & De Roo, G. (2011).
The capacity to adapt: regional development in an age of quality and dynamism. In H. Ovink & E. Wierenga (Eds.) *Design & Politics #5: regions in transition, designing for adaptivity* (pp. 13-110). Rotterdam: 010 Publishers.

Hassink, R. (2005).
How to unlock regional economies from path dependency? From learning region to learning cluster, *European Planning Studies,* 13, 521-535.

Hassink, R. (2010).
Regional resilience: a promising concept to explain differences in regional economic adaptability?. *Cambridge Journal of Regions, Economy and Society,* 3(1), 45-58,

Healey, P. (2001).
New approaches to the content and process of spatial development frameworks. In OECD (Eds.) *Towards a new role for spatial planning* (pp. 143-163). Paris: OECD Publications.

Healey, P. (2003).
Collaborative planning in perspective. *Planning Theory*, 2(2), 101-123.

Healey, P. (2004).
The Treatment of Space and Place in the New Strategic Spatial Planning in Europe. *International Journal of Urban and Regional Research*, 28(1), 45-67.

Healey, P. (2006).
Collaborative Planning; shaping places in fragmented societies. Basingstoke: Palgrave MacMillan.

Healey, P. (2007).
Urban complexity and spatial strategies towards a relational planning for our times. New York: Routledge.

Healey, P. (2007).
Urban Complexity and Spatial Strategies: towards a relational planning for our times. Oxon: Routledge.

Hendriks, C.M. & Grin, J. (2007).
Contextualizing reflexive governance: The politics of Dutch transitions to sustainability. *Journal of Environmental Policy & Planning*, 9(3-4), 333-350.

Hermans, E. W. & De Roo, G. (2006).
Lila en de Planologie van de Contramal: de ruimtelijk-economische ontwikkeling van Noord-Nederland krijgt een eigen kleur. Assen: In Boekvorm.

Heylighen, F. (2001).
The science of self-organization and adaptivity. In L.D. Kiel (Eds.) *The encyclopedia of life support systems* (pp. 253-280). Oxford: Eolss.

Heylighen, F. (2008).
Complexity and self-organization. In M.J. Bates & M.N. Maack (Eds.), *Encyclopedia of library and information sciences*. (Vol. 2, pp. 1215-1224). New York, NY: Taylor & Francis.

Heylighen, F., Cilliers, P. & Gershenson, C. (2007).
Philosophy and complexity. In J. Bogg & R. Geyer (Eds.) *Complexity, Science and Society*. (pp. pp. 117–134). Oxford: Radcliffe.

Hidding, M. C. & Teunissen, A. T. J. (2002).
Beyond fragmentation: new concepts for urban–rural development. *Landscape and Urban Planning*, 58(2-4), 297-308.

Hidding, M. C. (2006).
Planning voor stad en land. Bussum: Coutinho.

Hidding, M. C., Needham, B & Wisserhof, J. (2000).
Discourses of town and country. *Landscape and Urban Planning*, 48(3), 121-130

Hillier, J. (2007).
Stretching beyond the horizon: a multiplanar theory of spatial planning and governance. Aldershot: Ashgate.

Hof van Delfland Raad (2010).
Ruimtelijke visie Hof van Delfland 2025; een mooi, vitaal en verbonden metropolitaan landschap. The Hague,

Hof van Delfland Raad.
Hoggart, K. (2005).
The city's hinterland: dynamism and divergence in Europe's Peri-Urban Territories. Aldershot: Ashgate Publishing Ltd.

Holland, J. H. (2006).
Studying complex adaptive systems. *Journal of Systems Science and Complexity*, 19(1), 1-8.

Holland. J. H. (1995).
Hidden Order: How Adaptation Builds Complexity. New York: Addison Wesley.

Holmes, J. (2008).
Impulses towards a multifunctional transition in rural Australia: Interpreting regional dynamics in landscapes, lifestyles and livelihoods. *Landscape Research*, 33(2), 211-223.

Hover, M. E. J. (2013).
De Efteling als 'verteller' van sprookjes. Kaatsheuvel: De Efteling.

Hubbard, C. & Gorton, M. (2011).
Placing agriculture within rural development: evidence from EU case studies. *Environment and Planning C: Government and Policy*, 29, 80-95.

Hudalah, D., Winarso, H. & Woltjer, J. (2010).
Planning by opportunity: an analysis of periurban environmental conflicts in Indonesia. *Environment and Planning A*, 42(9), 2254-2269.

I

Innes, J. & Booher, D. (2010).
Planning with Complexity: an introduction to collaborative rationality for public policy. Abingdon: Routledge.

Innes, J. E. (2000).
Planning theory's emerging paradigm: communicative action and interactive practice. *Journal of Planning Education and Research*, 14, 183-189.

J

Jacobs, J. (1961).
The death and life of great American cities. New York, NY: Random House.

Jessop, B. (2003).
Governance and metagovernance: On reflexivity, requisite variety, and requisite irony. In H.P. Bang (Eds.) *Governance, as social and political communication* (pp. 142-172). Manchester: Manchester University Press.

Jessop, B. (2005).
Critical realism and the strategic relational approach. *New Formations*, 58, 40-53.

Jessop, B. (2008).
State Power. Cambridge: Polity Press.

K

Kauffman, S. A (1993).
Origins of Order: Self Organization and Selection in Evolution. Oxford University Press, Oxford.

Kauffman, S. A. (1995).
At home in the universe. New York: Oxford University Press.

Kauffman, S.A. & Weinberger, E.D. (1989).
The NK model of rugged fitness landscapes and its application to maturation of the immune response. *Journal of Theoretical Biology*. 141(2), 211-224.

Kemp, R. & Loorbach, D. (2006).
Transition management: a reflexive governance approach. In J. P. Voss, D. Bauknecht & R. Kemp (Eds.) *Reflexive governance for sustainable development* (pp. 103-130). Cheltenham: Edward Elgar.

Kemp, R., Loorbach, D. & Rotmans, J. (2007).
Transition management as a model for managing processes of co-evolution towards sustainable development. *International Journal of Sustainable Development and World Ecology,* 14, 78-91.

Khan, A. Z., Moulaert, F. & Schreurs, J. (2013).
Epistemology of Space: Exploring Relational Perspectives in Planning, Urbanism, and Architecture. *International Planning Studies*, 18(3-4), 287-303.

Kingdon, J. W. (2002).
Agendas, Alternatives, and Public Policies. New York: Longman.

Kloosterman, R.C. & Trip, J.J. (2011).
Planning for Quality? Assessing the Role of Quality of Place in Current Dutch Planning Practice. *Journal of Urban Design*, 16(4), 455-470.

Kuindersma, W. & Boonstra, F. G. (2010).
The changing role of the state in Dutch regional partnerships. *Environment and Planning C: Government and Policy,* 28, 1045-1062.

L

Lash, S. (2003).
Reflexivity as Non-Linearity. *Theory Culture & Society*, 20(2), 49-57.

Lissandrello, E. & Grin, J. (2011).
Reflexive planning as design and work: Lessons from the port of amsterdam. *Planning Theory & Practice*, 12(2), 223-248.

Loorbach, D. & Rotmans, J. (2006).
Managing transitions for sustainable development. In X. Olshoorn & A. J. Wieczorek (Eds.) *Understanding industrial transformation; Views from different disciplines* (pp. 187-206). Dordrecht: Springer.

Loorbach, D. (2007).
Transition management: New mode of governance for sustainable development. Zeist: AD Druk.

Loorbach, D. (2010).
Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework. *Governance: An International Journal of Policy, Administration, and Institutions*, 23(1), 161-183.

Low, B. Ostrom, E. Simon, C. & Wilson, J. (2002).
Redundancy and diversity: Do they influence optimal management? In F. Berker, J. Colding & C. Folke (Eds.) *Navigating social-ecological systems: Building resilience for complexity and change* (pp.83-114). Cambridge: University Press.

Lowe, P. & Ward, N. (2007).
Sustainable rural economies: some lessons from the English experience, *Sustainable Development*, 15, 307-317.

Lowndes, V. & Skelcher, C. (2002).
The dynamics of multi-organizational partnerships: an analysis of changing modes of governance. *Public Administration*, 76(2), 313-333.

M

Ma, M. & Hassink, R. (2013).
An evolutionary perspective on tourism area development. *Annals of Tourism Research*, 41, 89-109.

Mandelbaum, S. J. (1991).
Telling Stories. *Journal of Planning Education and Research*, 10(3), 209-214

Manson, S. & O'Sullivan, D. (2006).
Complexity theory in the study of space and place. *Environment and Planning A*, 38(4), 677-692.

March, J.G. (1991).
Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.

Markusen, A. & Schrock, G. (2006).
The Distinctive City: Divergent Patterns in Growth, Hierarchy and Specialisation. *Urban Studies,* 43(8), 301-1323.

Marsden, T. (1999).
Rural Futures: the consumption countryside and its regulation, *Sociologia Ruralis*, 39(4), 501-520.

Marshall, S. (2009).
Cities, Design & Evolution. New York: Routledge.

Martens, P. & Rotmans, J. (2005).
Transitions in a globalising world. *Futures*, 37(10), 1133-1144.

Martin, R. L. & Sunley, P. (2006).
Path dependence and regional economic evolution. *Journal of Economic Geography,* 6(1), 395-437.

Martin, R. L. & Sunley, P. (2007).
Complexity thinking and evolutionary economic geography. *Journal of Economic Geography*, 7(5), 573-601

Martin, R. L. (2010).
Rethinking regional path dependence: beyond lock-in to evolution. *Economic geography*, 86(1), 1-27.

Martin, R.L. & Sunley, P. (2006).
Path dependence and regional economic evolution. *Journal of Economic Geography*, 6(4), 395-437.

Martin, R.L. & Sunley, P. (2010).
The place of path dependency in an evolutionary perspective on the economic landscape. In R.A. Boschma & R.L. Martin (Eds.) *The handbook of evolutionary economic geography* (pp. 62 92). Cheltenham: Edward Elgar.

Martin, R.L. (2010).
Roepke lecture in economic geography-rethinking regional path dependence: Beyond lock-in to evolution. *Economic Geography*, 86(1), 1-27.

Mather, A.S., Hill, G., & Nijnik, M. (2006).
Post-productivism and rural land use: cul de sac or challenge for theorization?, *Journal of Rural Studies*, 22, 441-455.

Mattingly, M. (1999).
Institutional Structures and Processes for Environmental Planning and Management of the Peri-urban Interface. London: University College London.

McCann, P. & Ortega-Argilés, R. (2011).
Smart specialization, regional growth and applications to European Union cohesion policy, *Regional Studies*, DOI: 10.1080/00343404.2013.799769

McCann, P. (2008).
Globalization and economic geography: the world is curved, not flat. *Cambridge Journal of Regions, Economy and Society,* 1(3), 351-370.

McCarthy, J. (2005.)
Rural geography: multifunctional rural geographies reactionary or radical?, *Progress in Human Geography*, 29(6), 773-782.

McDonald, J.R. (2009).
Complexity science: An alternative world view for understanding sustainable tourism development. *Journal of Sustainable Tourism*, 4(17), 455-471.

Metz, T. (2002).
Fun! Leisure and Landscape. Rotterdam: NAi Publishers.

Milne, S. & Ateljevic, I. (2001).
Tourism, economic development and the global–local nexus: theory embracing complexity. *Tourism Geographies*, 3(4), 369-393.

Ministry of LNV & VROM (2008).
Agenda Landschap; landschappelijk verantwoord ondernemen voor iedereen. Den Haag: OTB.

Ministry of OC&W (1999).
Nota Belvedère; Beleidsnota over de relatie cultuurhistorie en ruimtelijk inrichting. Den Haag: VNG Uitgeverij.

Ministry of VROM, LNV, PB&WM & EZ (2006).
Nota ruimte; ruimte voor ontwikkeling. Den Haag: Sdu Uitgevers.

Ministry of VROM, LNV, V&W, EZ (2007).
Ontwikkeling van de wadden voor natuur en mens; Deel 4 van de planologische kernbeslissing Derde Nota Waddenzee. Den Haag: Sdu Uitgevers.

Mitleton-Kelly, E (2003).
Ten principles of complexity & enabling infrastructures. In E. Mitleton-Kelly (Eds.) *Complex systems & evolutionary perspectives of organisations: The application of complexity theory to organizations* (pp. 23-50). Oxford: Elsevier Science Ltd.

Mossberg, L. (2007).
A marketing approach to the tourist experience. *Scandinavian Journal of Hospitality and Tourism*, 7(1), 59-74.

Mossberg, L. (2008).
Extraordinary Experiences through Storytelling. *Scandinavian Journal of Hospitality and Tourism*. 8(3), 195-210

Moulaert, F., Van Dyck, B., Khan, A.Z. & Schreurs. J. (2013).
Building a Meta-Framework to 'Address' Spatial Quality. *International Planning Studies*, 18(3-4),389-409.

Municipality of Midden-Delfland (2005).
Gebiedvisie Midden-Delfland® 2025. Rosbeek: Nuth Drukkerij.

Municipality of Rijkwijk (2001).
Stadslandschap en groene schakel in Haaglanden. Press release, 16 March 2001

Municipality of The Hague (2005a).
Wéreldstad aan zee; structuurvisie Den Haag 2020. Den Haag: Gemeente Den Haag.

Municipality of The Hague (2005b).
Wéreldstad aan zee; structuurvisie Den Haag 2020 – Beleidsagenda. Den Haag: Gemeente Den Haag.

Municipality of The Hague (2005c).
Wéreldstad aan zee; structuurvisie Den Haag 2020 – Achtergronden. Den Haag: Gemeente Den Haag.

Municipality of The Hague (2005d).
Wéreldstad aan zee; structuurvisie Den Haag 2020 – Bijlage B. Den Haag: Gemeente Den Haag.

Municipality of The Hague (2006).
Wéreldstad aan zee; structuurvisie Den Haag2020 – Vliet/A- zone. Den Haag: Gemeente Den Haag.

Municipality of The Hague (2011).
Voorstel van het college tot vaststelling beheersverordening Vlietzone. Raadsvoorstel 162, November 22, 2011.

Myers, D. & Kitsuse, A. (2000).
Constructing the Future in Planning: A Survey of Theories and Tools. *Journal of Planning Education and Research*, 19(1), 221-231.

N

Nicolis, G. & Prigogine, I. (1989).
Exploring Complexity. New York: W.H. Freeman & Co.

North, D. C. (1990).
Institutions, Institutional Change, and Economic Performance. Cambridge: Cambridge University Press.

O

O'Sullivan, D., Manson, S. M., Messina, J. P. & Crawford. T. W. (2006).
Space, place, and complexity science. *Environment and Planning A*, 38(4), 611-617.

Olsson, A. K., Therkelsen, A. & Mossberg, L. (2013).
Making an effort for free – volunteers' roles in destination-based storytelling. *Current Issues in Tourism,* dx.doi.org/10.1080/13683500.2013.784242

Olsson, P., Gunderson, L.H., Carpenter, S.R., Ryan, P., Lebel, L., Folke, C. & Holling, C.S. (2006).
Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society*, 11(1), article 18.

Ostrom, E. (1990).
Governing the commons: The evolution of institutions for collective action. Cambridge: Cambridge University Press.

Overbeek, G. & Vader, J. (2003).
Urban pressure and rural land use. Paper presented at the XX Congress of the European Society for Rural Sociology Sligo, Ireland 18-22 August

Overbeek, M., Van der Kroon, S., Leneman, H. & Somers, N. (2006).
Landeigenaren in Nationale Landschappen. Den Haag: LEI.

P

Pahl-Wostl, C. (2007).
Transition towards adaptive management of water facing climate and global change. *Water Resource Management*, 21, 49-62.

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: the Morvan regional park case. *Journal of Environmental Planning and Management,* 53(4), 491-509.

Parra, C. (2012).
The vicissitudes of the French regional park model illustrated through the life history of the Morvan. *Environment and History*, 18, 561-583.

Parris, K. (2004).
Measuring changes in agricultural landscapes as a tool for policy makers. In J. Brandt & H. Vejre (Eds) *Multifunctional Landscapes Volume 1: Theory, Values and History* (pp. 193-218). Southampton: WIT Press.

Pastras, P. & Bramwell, B. (2013).
A strategic-relational approach to tourism policy. *Annals of Tourism Research,* 43, 390-414.

Paul, D.E (2005).
The local politics of 'going global': Making and unmaking Minneapolis–St Paul as a world city. *Urban Studies*, 42(12), 2103-2122.

Pendal, R., Foster, K. A. & Cowell, M. (2010).
Resilience and regions: building understanding of the metaphor. *Cambridge Journal of Regions Economy and Society,* 3(1), 71-84.

Phelan, S.E. (1995).
From chaos to complexity in strategic planning. Paper presented at the 55th Annual Meeting of the Academy of Management, Vancouver, Canada, August 6-9, http://www.aom.pace.edu/bps/Papers/chaos.html

Phillipson, J., Gorton, M., Raley, M & Moxey, A. (2004).
Treating farms as firms? The evolution of farm business support from productionist to entrepreneurial models. *Environment and Planning C: Government and Policy,* 22(1), 31-54.

Pike, A., Dawley, S., Tomaney, J. (2010).
Resilience, adaptation and adaptability. *Cambridge Journal of Regions, Economy and Society,* 3(1), 59-70.

Pine, B. J. & Gilmore, J.H. (1999).
The experience economy: Work is a theatre & every business a stage. Boston: Harvard Business School Press.

Polletta, F. (2009).
It was like a fever: storytelling in protest and politics. Chicago: University of Chicago Press
Porter, G. & De Roo, G. (2007).

The End has no merit.... In G. De Roo & G. Porter (Eds) *Fuzzy planning; the role of actors in a fuzzy governance environment* (pp. 1-18). Aldershot: Ashgate.

Portugali, J. (2008).
Learning from paradoxes about prediction and planning in self-organizing cities. *Planning Theory,* 7(3), 248-262.

Portugali, J. (2011).
Complexity, Cognition and the City. Berlin: Springer-Verlag.

Portugali, J., Meyer, H., Stolk, E. & Tan, E. (2012).
Complexity theories of cities have come of age: an overview with implications to urban planning and design. Berlin: Springer.

Province of Friesland (2007).
Streekplan Fryslân: om de kwaliteit fan de romte.

Province of Friesland (2011).
Verordening Romte Fryslân 2011.

Province of Friesland (2012).
Nieuwsbrief Grutsk op 'e Romte [press release] 19 October 2012.
Province of Friesland (2014a). *Grutsk op 'e Romte! Ruimtelijke kwaliteit in Fryslân*.

Province of Friesland (2014b).
Ontwerp verordening Romte Fryslân 2014.

Province of Zuid-Holland (2003).
Streekplan Zuid-Holland West. Den Haag: Provincie Zuid-Holland.

Putnam, R.D. (2000).
Bowling Alone. New York: Simon & Schuster

Q

Quinn, R. E. & Cameron, K. (1983).
Organisational life cycles and shifting criteria of effectiveness: some preliminary evidence. *Management Science*, 29(1), 33-51.

Qviström, M. (2007).
Landscapes out of order: studying the inner urban fringe beyond the rural – urban divide. *Geografiska Annaler, series B: Human Geography*, 89(3), 269-282

R

Raad voor de Wadden (2008).
Recreatie en toerisme in het Waddengebied; Toekomstige ontwikkelingsmogelijkheden en hun effecten op economie, duurzaamheid en identiteit. Easterein: Van der Eems.

Rapoport, A. (1970).
The study of spatial quality. *Journal of Aesthetic Education*, 4(4), 81-95.

Rauws, W. S. & De Roo, G. (2009).
Peri-urban dynamics; Towards managing transitional change. Report for Peri-urban Land Use Relationships (PLUREL) European Commission 6th Framework Programme, Faculty of Spatial Sciences, University of Groningen, Groningen

Rauws, W. S. & Van Dijk, T. (2013).
A design-approach to forge visions that amplify paths of peri-urban development. *Environment & Planning B*, 40(2), 254-270.

Rauws, W.S. & De Roo, G. (2011).
Exploring transitions in the peri-urban area. *Planning Theory & Practice*, 12(2), 269-284.

Reed, M.G. (1999).
Collaborative tourism planning as adaptive experiments in emergent tourism settings. *Journal of Sustainable Tourism*, 7(3 4), 331-355. Relph, E. C. (1976). *Place and Placelessness*. London: Pion.

Rotmans, J. & Kemp, R. (2003.)
Managing Societal Transitions: Dilemmas and Uncertainties: The Dutch energy case-study. Paper prepared for OECD Benefits of Climate Policy: Improving Information for Policy Makers, 12-13 December 2002, http://www.oecd.org/dataoecd/6/31/2483769.pdf

Rotmans, J. & Loorbach, D. (2009).
Complexity and transition management. *Journal of Industrial Ecology,* 13(2), 184-196.

Rotmans, J., Kemp, R., & Van Asselt, M. (2001).
More evolution then revolution; transition management in public policy. *Foresight*, 3(1), 1-17.

Ruhanen, L. (2013).
Local government: Facilitator or inhibitor of sustainable tourism development? *Journal of Sustainable Tourism,* 21(1), 80-98.

Russel, R. & Faulkner, B. (1999).
Movers and shakers: chaos makers in tourism development, *Tourism Management* 20(4), 411-423

Rutheiser, C. (1996).
Imagineering Atlanta: The politics of place in the city of dreams. New York: Verso.

S

Salmon, C. (2010).
Storytelling: bewitching the modern mind, London, Verso Books

Sandercock, L. (2003).
Out of the Closet: The Importance of Stories and Storytelling in Planning Practice. *Planning Theory & Practice,* 4(1) 11-28.

Schot, J. & Geels, F.W. (2008).
Strategic niche management and sustainable innovation journeys: Theory, findings, research agenda, and policy. *Technology Analysis & Strategic Management*, 20(5), 537-554.

Scott, A. J. (2004).
Global city-regions: trends, theory, policy. Oxford: Oxford University Press.

Selman, P. (2009).
Planning for landscape multifunctionality. *Sustainability: Science, Practice, & Policy* 5(2), 45-52.

Senge, P. M. (1990).
The Fifth Discipline: The art and practice of the learning organization. New York: Doubleday.

Shane, D. G. (2005).
Recombinant urbanism: conceptual modeling in architecture, urban design and city theory. Chichester: Wiley.

Shane, D. G. (2006).
The emergence of landscape urbanism. In C. Waldheim (Ed) *The landscape and urbanism reader* (pp. 55-67). New York: Princeton Architectural Press.

Sharpley, R. (2002).
Rural tourism and the challenge of tourism diversification: the case of Cyprus. *Tourism Management*, 23, 233-244.

Sharpley, R. (2004).
Tourism and the countryside. In C. M. Hall & A. M. Williams (Eds.) *A Companion to Tourism*. Oxford: Blackwell.

Shove, E. & Walker, G. (2007).
CAUTION! Transitions ahead: politics, practice, and sustainable transition management. *Environment and Planning A,* 39(4), 763-770.

Sieverts, T. (2003).
Cities Without Cities: An interpretation of the Zwischenstadt. London: Spon press.

Simmie, J. & Martin, R. (2010).
The economic resilience of regions: Towards an evolutionary approach. *Cambridge Journal of Regions, Economy and Society*, 3(1), 1-17.

Simon, D. (2008).
Urban Environments: Issues on the Peri-Urban Fringe. *Annual Review of Environmental Resources*, 33(1), 167-85.

Slee, R.W. (2005).
From countrysides of production to countrysides of consumption?, *Journal of Agricultural Science*, 143, 255-265.

Smith, N. R. (2014).
Beyond top-down/bottom-up: Village transformation on China's urban edge. *Cities*, online ahead of print, DOI: dx.doi.org/10.1016/j.cities.2014.01.006

Snow, D.A. & Benford, R. D. (1988).
Ideology, Frame Resonance and Participant Mobilization. *International Social Movement Research*, 1, 197-219.

Steele, F. (1981).
The Sense of Place. Massachusetts: CBI Publishing Company.

Stephenson, J. (2010).
People and Place, *Planning Theory & Practice*. 11(1), 9-21.

STIRR (2012).
Verslag Academische Werkplaatssessie Fries Merenland 14 december 2012, Retrieved from www.recreatieenruimte.nl/wp-content/uploads/VerslagAWPFriesMerenlanddef.pdf

Swyngedouw, E. (2005).
Governance Innovation and the Citizen: The Janus Face of Governance-beyond-the-State, *Urban Studies*, 42(11), 1991-2006.

T

Tacoli, C. (2003).
The links between urban and rural development. *Environment and Urbanization,* 15(1), 3-12.

Taylor, L. (2011).
No boundaries: exurbia and the study of contemporary urban dispersion. *GeoJournal*, 76, 323-339.

Ten Cate, F. (2010).
Vergunningvrij bouwen en ruimtelijke kwaliteit; een handreiking voor gemeenten en welstandscommissies. Amsterdam: Mart.Spruijt.

Theobald, W.F. (2005).
Global Tourism. Burlington: USA: Elsevier.

Therkildsen, H. P., Hansen, C. J. & Lorentzen, A. (2009).
The experience economy and the transformation of urban governance and planning, *European Planning Studies*, 17(6), 925-941.

Throgmorton, J.A. (1996).
Planning as Persuasive Storytelling: The Rhetorical Construction of Chicago's Electric Future. Chicago, IL: University of Chicago Press.

Throgmorton, J.A. (2003).
Planning as persuasive storytelling in a global-scale web of relationships. *Planning Theory*, 2(2), 125-151.

Tordoir, P.P. (2010).
Noorderlicht; ruimtelijk economisch toekomstperspectief voor Noord Nederland. Amsterdam: Ruimtelijk Economisch Atelier Tordoir.

Trip, J.J. (2007).
Assessing quality of place: a comparative analysis of Amsterdam and Rotterdam. Delft: Delft University of Technology.

Tuan, Y. F. (1990).
Topophilia: a study of environmental perception, attitudes and values. New York: Columbia University Press.

Tuan, Y. T. (1977).
Space and Place: the perspective of experience. Minneapolis: University of Minnesota Press.

U

UNWTO (2011).
Tourism Towards 2030; global overview. Madrid: World Tourism Organization.

Urry, J. & Larsen, J. (2011).
The tourist gaze 3.0. London: Sage Publications.

Urry, J. (2002).
The Tourist Gaze. London: Sage.

Urry, J. (2003).
Global complexity. Cambridge, MA: Polity Press.

Urry, J. (2005).
The Complexities of the Global. *Theory Culture & Society*, 22(5), 235-254.

Urry, J. (2007).
Complexity. *Theory Culture & Society,* 23(2-3), 111-115.

V

Van Assche, K. & Jacobs, M. (2002).
Kwaliteit in Complexiteit; ruimtelijke kwaliteit en de kennisontwikkeling daarover. Wageningen: Alterra.

Van Assche, K., Beunen, R. & Duineveld, M. (2013).
Evolutionary governance theory: An introduction. Heidelberg: Springer.

Van de Schuit, J., Van Amsterdam, H. Breedijk, M., Brandes, L., Fick, E. & Spoon, M. (2008).
Ruimte in cijfers 2008. Den Haag: PBL.

Van den Brink, M. (2009).
Rijkswaterstaat on the Horns of a Dilemma. Delft: Eburon.

Van den Broeck, P., Abdelwahab, M. Miciukiewiczc, K. & Hillier, J. (2013).
On Analysing Space from a Strategic-Relational Institutionalist Perspective: The Cultural Park for Children in Cairo, *International Planning Studies*, 18(3-4), 321-341.

Van den Brugge, R. & Van Raak, R. (2007).
Facing the adaptive management challenge: insights from transition management. *Ecology and Society,* 12(3), article 30.

Van der Stoep, H. & Aarts, N. (2012).
Sticky stories: how civic initiatives connect to regional planning agendas. Paper presented at the 26th Annual AESOP Conference, Ankara, 11-15 July

Van Dijk, T. (2011).
Imagining future places: How designs co-constitute what is, and thus influence what will be. *Planning Theory*, 10(2), 124–143.

Van Hulst, M. (2012).
Storytelling, a model of and a model for planning. *Planning Theory*, 11(3), 299-318.

Van Notten, W. F., Sleegers, A. M. & Van Asselt, M. B. A. (2005).
The future shocks: On discontinuity and scenario development. *Technological Forecasting and Social Change,* 72, 175-194.

Van Rij, E., Dekkers, J. & Koomen, E. (2008).
Analysing the success of open space preservation in the Netherlands: the Midden-Delfland case. *Journal of Economic and Social Geography*, 99(1), 115-124.

Van Wezemael, J. E. (2012).
Transformative practices as an exploration of possibilities spaces. In G. de Roo, J. Hillier & J. Van Wezemael (Eds.) Com*plexity and planning: Systems, assemblages and simulations* (pp. 93-116). Farnham: Ashgate.

Van Wissen, L . J. G. (2009).
Migratie en krimp in het noorden; inspelen op krimp en vergrijzing grote uitdaging voor de toekomst. *Demos,* 25(1), 13-16.

Verhoeven, I. (2007).
Wie de macht in het gezicht kijkt, eist verantwoording. Politici en actieve burgers in een mediadebat over gemeentelijke herindeling. In J. W. Duyvendak, G. Engbersen, M. Teeuwen & I Verhoeven (Eds) *Macht en Verantwoordelijkheid: essays for Keen Schuyt* (pp. 220-230). Amsterdam: Amsterdam University Press.

Verhoeven, I. (2009).
Burgers tegen beleid; een analyse van dynamiek in politieke betrokkenheid. Amsterdam: Uitgeverij Aksant.

Voss, J. & Bornemann, B. (2011).
The politics of reflexive governance: Challenges for designing adaptive management and transition management. *Ecology and Society*, 16(2): article 9.

Voss, J.P. & Kemp, R. (2006).
Sustainability and reflexive governance: introduction. In J. P. Voss, D. Bauknecht & R. Kemp (Eds.) *Reflexive governance for sustainable development* (pp. 3-30). Cheltenham: Edward Elgar.

VROMraad (2006).
Groeten uit Holland, qui è fantastico! Den Haag: OBT bv.

VROMraad (2011).
Ruimtelijke kwaliteit: verkenning. Den Haag: OBT.

W

Waldrop, M. (1992).
Complexity: The emerging science at the edge of order and chaos. London: Penguin Books.

Walker, B., C. S. Holling, S. R.
Carpenter & Kinzig, A. (2004). Resilience, adaptability and transformability in social–ecological systems. *Ecology and Society*, 9(2): article 5

Webster, D. (2002).
On the Edge: Shaping the Future of Peri-urban East Asia. Stanford: Shorenstein APARC.

Weick, K. E., & Sutcliffe, K. M. (2007).
Managing the unexpected: resilient performance in an age of uncertainty. San Francisco: Jossey-Bass.

Westerink, J., Lagendijk, A., Dühr, S., Van der Jagt, P. & Kempenaar, A. (2012).
Contested Spaces? The Use of Place Concepts to Communicate Visions for Peri-Urban Areas. *European Planning Studies*, 21(6), 791-800.

Wilkinson C (2011).
Strategic Navigation: in search of an adaptive mode of strategic spatial planning practice. *Town Planning Review* 82(5), 595-613.

Wilkinson, C. (2012).
Social-ecological resilience and planning: an interdisciplinary exploration. Stockholm: Universitetsservice US-AB.

Williams, A.M. & Shaw, G. (2009).
Future play: Tourism, recreation and land use*. Land Use Policy*, 26(Suppl. 1), S326-S335.

Wilson, G.A. (2001).
From productivism to post-productivism...and back again? Exploring the (un)changed natural and mental landscapes of European agriculture, *Transactions of the Institute of British Geographers*, 26, 77-102.

Woestenburg, M., Lengkeek, J. & Timmermans, W. (2009).
Recreatie & landschap 1900-2009: van bermtoerisme tot Dance Valley. Wageningen: Landwerk.

Wolfram, S. (1984).
Universality and complexity in cellular automata. *Physica D,* 10, 1-35.

Wolfram, S. (2002).
A New Kind of Science. Champaign: Wolfram Media.

Woods, M. (2007).
Engaging the global countryside: globalization, hybridity and the reconstitution of rural place. *Progress in Human Geography,* 31(4), 485-507.

Z

Zhao, P. (2013).
Too complex to be managed? New trends in peri-urbanisation and its planning in Beijing, *Cities*, 30, 68-76.

Zuidema, C. (2011).
Stimulating local environmental policy: making sense of decentralisation in environmental governance. Zutphen: Wöhrmann Print Service.

APPENDIX A – INTERVIEWS

Policy advisor for Greater Hague Region, department of nature and environment **
(Februari 2008, The Hague).

Policy advisor for Greater Hague Region, department of spatial planning and international affairs **
(Februari 2008, The Hague).

Manager at Greater Hague Region, department of spatial planning **
(Februari 2008, The Hague).

Policy advisor #1 for the municipality of The Hague, department of spatial planning **
(Februari 2008, The Hague).

Independent landscape architect #1 **
(Februari 2008, The Hague).

Independent landscape architect #2 **
(Februari 2008, The Hague).

Policy advisor #1 for the municipality of Midden-Delfland **
(Februari 2008, Schipluiden).

Policy advisor # 2 for the municipality of Midden-Delfland **
(Februari 2008, Schipluiden).

Policy advisor #2 for the municipality of The Hague, department of spatial planning**
(March 2008, The Hague).

Advisor #1 for the Greenservice of the province of South Holland **
(March 2008, The Hague).

Advisor #2 for the Greenservice of the province of South Holland **
(March 2008, The Hague).

Alderman of the municipality of Leidschendam-Voorburg
(March 2008, Leidschendam).

Policy advisor #1 for the municipality of The Hague, department of spatial planning **
(April 2008, The Hague).

Policy advisor #2 for the municipality of The Hague, department of spatial planning **
(April 2008, The Hague).

Policy advisor #3 for the municipality of The Hague, department of spatial planning **
(April 2008, The Hague).

Manager at private real estate developer
(April 2008, The Hague).

Researcher University of Amsterdam
(May 2008, The Hague).

Alderman of the municipality of Midden-Delfland
(May 2008, Schipluiden).

Secretary of the Association of Municipalities of the Wadden Sea Region
(June 2009, Delfzijl).

Policy advisor for the Province of Friesland, member of the Quality Team
(May 2012, Leeuwarden).

Policy advisor for the Province of Friesland, member of the Quality Team
(June 2012, Leeuwarden).

Independent landscape architect and consultant
(February 2012, Sneek).

Policy advisor at Atelier Fryslân and independent landscape architect
(May 2012, Leeuwarden).

Policy advisor for the Province of Drenthe, department of spatial planning
(May 2012, Groningen).

Policy advisor for the Province of Friesland, department of economic affairs
(December 2012, Leeuwarden).

Policy advisor for the association 'Plattelânsprojecten'
(December 2012, Leeuwarden).

Independent leisure entrepreneur and consultant
(November 2012, Joure).

Staff member of the project agency Geopark Hondsrug
(December 2012, Borger).

Staff member of the project agency Geopark Hondsrug
(July 2011, Borger).

Policy advisor for the Province of Drenthe, department of geology
(Augustus 2011, Assen).

Advisor for the Greenservice of the province of Drenthe
(September 2011, Diever).

Representative of the association for leisure entrepreneurs 'RECRON'
(September 2011, Meppel).

Staff member at the association for environmental management 'Milieudefensie'
(January 2012, Assen).

Policy advisor # 1 for the Province of Drenthe, department of economic affairs
(September 2011, Assen).

Member of the advisory board for the project agency Geopark Hondsrug
(September 2011, Valthe).

Policy advisor for the Province of Drenthe, department Xplorelab
(June 2012, Groningen).

Manager at Marketing Drenthe
(September 2011, Assen).

Independent consultant
(Februari 2012, Loon).

Policy advisor # 2 for the Province of Drenthe, department of economic affairs
(February 2012, Assen).

Policy advisor # 3 for the Province of Drenthe, department of economic affairs
(February 2012, Assen).

Independent architect
(February 2012, Beilen).

Researcher at the Hanzehogeschool Groningen
(September 2011, Groningen).

*** interviews conducted by Delik Hudalah and analyzed by Stefan Hartman in collaboration with Delik Hudalah in the context of the Peri Urban Land Use Relationships (PLUREL), a project in the context of the EU 6th Framework Programme.*

APPENDIX B – OVERVIEW OF ACADEMIC AND PROFESSIONAL PUBLICATIONS

Academic publications

Hartman, S., Parra, C., & De Roo, G. (2015).
Stimulating spatial quality? Unpacking the approach of the province of Friesland, the Netherlands. *European Planning Studies*. Published online ahead of print. http://dx.doi.org/10.1080/09654313.2015.1080229

Hartman, S. (2015).
Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity. *Journal of Sustainable Tourism*. Published online ahead of print. http://dx.doi.org/10.1080/09669582.2015.1062017

Hartman, S. & Zandberg, T. (2015).
The future of mega sport events: examining the 'Dutch Approach' to legacy planning. *Journal of Tourism Futures*, 1(2), 108-116. http://dx.doi.org/10.1108/JTF-12-2014-0002

Hartman, S. & De Roo, G. (2013).
Towards managing nonlinear regional development trajectories, *Environment & Planning C: government and policy*, 31(3), 556-570. http://dx.doi.org/10.1068/c11203r

Book chapters

Hartman, S. (2013).
Exploring a planner's adaption to 'leisuring' regions. In A. Postma, I. Yeoman & J. Oskam (Eds.) The Future of European Tourism (pp. 238-253). Stenden University: Leeuwarden.

Hartman, S., Rauws, W.S., Beeftink, M.J. & De Roo, G. (2011).
The capacity to adapt: regional development in an age of quality and dynamism. In H. Ovink & E. Wiegenga (Eds.) *Design & Politics #5: regions in transition, designing for adaptivity* (pp. 13-110). Rotterdam: 010 Publishers.

Conference papers

Hartman, S. & Zandberg, T. (2014).
Legacy planning of mega events: the organic growth strategy of Amsterdam as a sustainable development model? EuroCHRIE Conference, 6-9 October 2014, Dubai, United Arab Emirates.

Hartman, S. (2014).
Strategic storytelling: a development catalyst for 'leisuring' regions? Paper for the 28th Annual AESOP Conference, 9-12 July 2014, Utrecht, The Netherlands.

Hartman S., (2012).
Stimulating quality of place: governing tensions between robustness and flexibility. Meeting of AESOP's thematic group 'Complexity & Planning', 16-17 November 2012, Groningen, The Netherlands.

Hartman, S. & De Roo, G. (2012).
Emergent leisure-oriented landscapes: exploring a planners' adaptation to nonlinearity. 26th Annual AESOP Conference, 11-15 July 2012, Ankara, Turkey.

Hartman, S. (2011).
Contested spatial developments in the city-region of The Hague: a peri-urban perspective. Regional Studies Association Winter Conference, 25 November 2011, London, UK.

Hartman, S. & De Roo, G. (2010).
Understanding regional development trajectories; learning from the case of the Wadden Sea Region. 24th Annual AESOP Conference, 7-10 July 2010, Helsinki, Finland.

Scientific reports

Van der Heijden, J. De Roo, G., Zuidema, C. & Hartman, S. (2012).
Het stand still beginsel in de omgevingswet. Baarn: AT & Osborne.

Hartman, S. & De Roo, G. (2009).
Op het snijvlak van risico en kansen; Over ruimtelijke processen en ontwikkelingen van het waddengebied. Ridderkerk: Hollandridderkerk

Hartman, S. & G. de Roo (2009).
Planologie; op het snijvlak van risico en kansen. In P. Kabat, J. Bazelmans, J. van Dijk, P.M.J. Herman, H. Speelman, N.R.J. Deen & R.W.A. Hutjes (Eds.) *Kennis voor een duurzame toekomst van de Wadden: Integrale kennisagenda van de Waddenacademie* (pp. 75-82). Rotterdam: Platform P.

Hartman, S. & G. de Roo (2009).
Urban and rural planning: balancing risks and opportunities. In P. Kabat, J. Bazelmans, J. van Dijk, P.M.J. Herman, H. Speelman, N.R.J. Deen & R.W.A. Hutjes (Eds.) *Knowledge for a sustainable future of the Wadden: Integrated research agenda of the Wadden* Academy (pp. 73-80). Rotterdam: Platform P.

Professional publications

Hartman, S. & Fokker, L. (2014).
Sporttoerisme als aanjager van gebiedsontwikkeling : leren van de Sportas Amsterdam. In K. de Bruijn, T. Vermeulen, D. Korteweg Maris, M. Rooijackers, J. Oskam, K. van der Most, N. Heerschap, L. Mensink & K. Breedveld (Eds.). *Trendrapport toerisme, recreatie en vrije tijd 2014* (pp. 324-327). Nieuwegein: NRIT Media/CELTH/NBTC Holland Marketing.

Hartman, S. (2013).
Regionale veerkracht. In K. de Bruijn, T. Vermeulen, D. Korteweg Maris, M. Rooijackers, J. Oskam, R. van Rosendaal, K. van der Most, J. van der Meulen, K. Breedveld & U. van der Noort (Eds.). *Trendrapport toerisme, recreatie en vrije tijd 2013* (pp.86-88). Nieuwegein: NRIT Media/CELTH/NBTC Holland Marketing.

Hartman, S., Starc. K., & Subirats, A. (2010).
Third place to recharge a forgotten space. In T Ilmavitra (eds.) *Mapping Urban Space*. Helsinki: Yliopistopaino Oy.

Hartman, S. (2010).
Ruimtelijke crisis door verstarring; leren van ontwikkelingen in de Waddenregio. In G. Bouma, F. Filius, H. Leinfelder & B. Waterhout (Eds.) *Ruimtelijke ordening in crisis: gebundelde papers en ontwerpopgaven Plandag 2010* (pp. 87-96). Delft: Stichting Planologische Discussiedagen

Rauws, W.,S. Beeftink, M.J. & Hartman, S. (2010).
Crisis in de regionale planning: waar zijn de verbindende ruimtelijke concepten? In G. Bouma, F. Filius, H. Leinfelder & B. Waterhout (Eds.) *Ruimtelijke ordening in crisis: gebundelde papers en ontwerpopgaven Plandag 2010* (pp. 87-96). Delft: Stichting Planologische Discussiedagen. (2nd price Young spatial planners paper).

Hartman, S. (2009).
Ruimtelijke dynamiek in de regio Haaglanden; worstelen met dromen en de werkelijkheid. In G. Bouma, F. Filius, H. Leinfelder & B. Waterhout (Eds.) *Tussen droom en werkelijkheid: gebundelde papers en ontwerpopgaven Plandag 2009* (pp. 195-203). Delft: Stichting Planologische Discussiedagen.

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Leisuring Landscapes

The industry cluster of tourism, recreation and leisure transforms the landscape of many regions. As a result, regions are 'leisuring', experiencing on-going transformative processes that are designed to foster touristic, recreational and residential demands. This thesis focuses on socio-spatial patterns that emerge, examines directions in which places evolve, distinguishes transitions, and discusses adaptive planning strategies and reflexive governance approaches to guide places in their evolution in a meaningful way.

Leisuring Landscapes **presents the results of a multiple case study research. The case of the Wadden Sea Region includes how the leisure economy is emerging locally mainly in spite of and not because of a strong restrictive planning regime. The case of the Greater Hague Region examines the influence of planning on peri-urban areas gradually becoming part of the urban fabric and transitioning in the direction of metropolitan parks. The case studies on the Frisian Lake District and Geopark Hondsrug examine whether the planning approach of strategic storytelling is a catalyst for the leisuring of regions. The final case study examines the policy approach of the province of Friesland to stimulate spatial quality – a fundamental pillar of the development of the leisure economy.**

The thesis draws attention to a nonlinear perspective on how region evolve. It argues that spatial planners should therefore focus on the adaptive capacity of places so to navigate (themselves) through a contextual environment that is changing continually. Moreover, it identifies a set of conditions that help planners to do so.

Stefan Hartman (1984) works as a senior lecturer and researcher at Stenden University, Leeuwarden, and its affiliated research department European Tourism Futures Institute (ETFI). His research interests include spatial planning, sustainable tourism and leisure, and multilevel governance. He has a particular interest in theories of complex systems, transitions and the management and governance of adaptive capacity. In his current work he has multiple roles including those of researcher, lecturer, education developer, project leader, consultant, guest speaker and taskforce coordinator at the Centre of Expertise Leisure Tourism & Hospitality (CELTH).