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Sabine Panzer-Krause

Rural tourism, resilience and sustainability transitions: The influence of tourists and tourism businesses on the production of space

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Rural tourism, resilience and sustainability transitions: The influence of tourists and tourism businesses on the production of space

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Rural Ireland (© Panzer-Krause 2018)

Although I have lived in small cities for most of my life, I am a rural person at heart, and I see myself as a bridge builder between the urban and the rural in all its shades.

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Summary

Against the backdrop of increasing ecological destruction and growing social inequalities worldwide, a broad debate about sustainable development commenced in the 1970s. In this context, a general discourse about pathways of sustainability transitions evolved, which is dominated by two opposing approaches. On the one hand, the transition studies literature follows a green growth efficiency-driven approach and argues that technological innovations will pave the way to more sustainable modes of living and prosperity when they are embedded in routines, in patterns of behaviour, in organizations etc. For this reason, transition studies scholars propose that policy-makers strategically promote regime shifts to sustainability by supporting experimentation in niches that are insulated from 'normal' market selection and encourage processes of learning in protected environments. Eventually, successful innovations can then diffuse and enter markets. On the other hand, postcapitalist scholars reject the efficiency paradigm and argue that the growth imperative not only leads to ecological and social instability, but also to economic instability. Hence, they advocate an alternative, sufficiency-driven turn to sustainability characterized by degrowth-oriented downscaling and rightsizing.

Although the approaches are contested and contradictory, sustainability transitions are of strategic concern for future development on all geographical scales. This cumulative habilitation thesis seeks to contribute to this field of research and thus investigates how transitions towards more sustainable paths of development can be initiated and fostered. The focus is on tourism in rural regions that have been growing intensely in recent years and are characterized by mass tourism causing ecological and socio-cultural pressure. The thesis thus analyses what influence particularly tourists and tourism businesses have on the production

of rural space with regard to sustainability and rural tourism resilience and what role rural regions may generally play in sustainability transition processes.

For this purpose, this habilitation thesis brings together several studies that deal with those research questions while acknowledging the heterogeneity of rural regions. Chapter 2 evaluates tourists' travel attitudes with regard to sustainability at the Giant's Causeway, Northern Ireland. A standardized survey was conducted amongst tourists, and the results show that sustainability awareness decreases from individual trip tourists to coach trip tourists to cruise-ship tourists. Hence, according to the tourists' different sustainability orientations, the introduction of segment-specific sustainability governance to guide tourists along processes of rural change and solve potential trial by space is recommended.

Meanwhile, using the Biosphere Reserve Southeast Rügen, Germany, as a case study, Chapter 3 identifies lock-ins in the Rügen tourism industry that hamper a sustainability transition and analyses the role that the voluntary compliance of tourism businesses with sustainability certification can play in breaking away from these unfavourable development paths. The study provides a framework to evaluate tourism businesses' sustainability strategies between green growth and degrowth at the micro-level. It indicates that particularly in protected areas that are confronted with acceptance problems, an efficiency-driven green growth approach guided by a spirit of sustainability can form the basis for moving towards more sustainable modes of development. However, it also raises the question of reasonable time frames for regional sustainability transitions.

Building on the theoretical basis of Chapter 3, Chapter 4 uses network analysis to investigate the features of a regional network of tourism enterprises in rural Ireland. In contrast to the economic-driven networks literature, the study focuses on socio-ecological goals alongside the economic goals and puts the network

members' sustainability orientation at the centre of attention. The study argues that sustainability networks support rural areas' efforts for change. However, degrowth strategists need to be represented as key actors of communication and joint activities in the long term in order to realize a clear shift away from business as usual. They are particularly the ones that take the initiative in generating and fostering business-led grassroots innovations. This is a type of innovation whereby businesses direct resources to establish more sustainable modes of tourism characterized by their not-for-profit nature. Such innovations have the potential to profoundly restructure the tourism sector towards sustainability.

Chapter 5 analyses the role played by German tour operators with the sustainability certification TourCert in processes of degrowth in tourism. They act as intermediaries and bundle different individual tourism offers into packages in order to sell them to their customers and thus have a substantial influence with regard to shifting the sector towards more sustainable modes. The findings show that TourCert-certified tour operators follow various socio-cultural measures that are in line with degrowth-inspired travelling. However, due to their tendency to choose rather remote destinations, which require long-haul travel, they cannot fully act as change agents. There is rather a paradox of growing degrowth, which implies that a clear differentiation between the mass market and a small-sized alternative travel sector is necessary.

The final Chapter 6 summarizes and further develops the key research outputs of the main chapters and draws general theoretical conclusions. Thus, it recognizes that tourists and tourism businesses as key stakeholders of tourism in rural destinations have a strong influence on the production of rural space. However, with a view to sustainability transitions, it becomes apparent that rural tourism resilience and sustainable change are challenged by the growing popularity of rural tourism

and the still dominantly growth-oriented rural tourism sector. Hence, there are various options for future pathways that are positioned within a wider spectrum of green growth-oriented mass tourism on the one hand and degrowth-oriented tourism on the other hand. With respect to degrowth in rural tourism, the COVID-19 pandemic can provide a window of opportunity to reset locked-in structures and open up new trajectories in the sense of a bounce-forward strategy. Against the background of shared responsibilities of urban and more or less rural regions, this habilitation thesis pleads for financial compensation for those rural tourism regions that are willing to follow a concept of reduced use of economic resources for the sake of greater ecological and socio-cultural goals that are of value for our societies on different geographical scales. Thus, rural regions can be far more than the problem regions as which they are often characterized.

Therefore, this habilitation thesis finally votes for a reconceptualization of urban and rural studies towards a joint field of research with regard to responsibilities in processes of sustainable change, one that acknowledges different shades of rurbanization where academics and practitioners of urban and rural studies join on an equal footing.

Keywords: green growth; degrowth; evolutionary approach; production of rural space; resilience; rural change; sustainable tourism; sustainability transition; sustainability certification; sustainability orientation; networks; lock-in; business-led grassroots innovations; rightsizing; COVID-19; shared responsibilities; financial compensation

Zusammenfassung

Vor dem Hintergrund zunehmender Umweltzerstörung und wachsender sozialer Ungleichgewichte begann in den 1970er Jahren eine breite Debatte über nachhaltige Entwicklung. In diesem Zusmmenhang entstand ein allgemeiner Diskurs über Nachhaltigkeitstransformationen, welche von zwei gegensätzlichen Ansätzen dominiert sind. Auf der einen Seite verfolgt die Transition Studies-Literatur einem effizienzbasierten Ansatz des Grünen Wachstums (Green Growth) und argumentiert, dass technologische Innovationen den Weg zu nachhaltigeren Lebensweisen und Prosperität ebnen werden, wenn sie in Routinen, Verhaltensmuster, Organisationen etc. eingebettet werden. Daher empfehlen die Vertreter dieses Ansatzes politischen Entscheidungsträgern, Regimewechsel zu mehr Nachhaltigkeit strategisch voranzutreiben, indem sie Experimentieren im vom ‚normalen' Markgeschehen isolierten Nischen unterstützen und dabei Lernprozesse in geschützten Umgebungen ermöglichen. Nach und nach können sich so erfolgreiche Innovationen verbreiten und auf den Märkten etablieren. Auf der anderen Seite weisen post-kapitalistische Vertreter das Effizienzparadigma zurück und argumentieren, dass der Wachstumsimperativ nicht nur zu ökologischer und sozialer, sondern auch zu ökonomischer Instabilität führt. Daher befürworten sie eine alternative, suffizienzbasierte Wende zu mehr Nachhaltigkeit, die durch degrowth-orientiertes Downscaling und Rightsizing gekennzeichnet ist.

Nachhaltigkeitstransformationen sind für die zukünftige Entwicklung auf allen geographischen Maßstabsebenen von strategischer Bedeutung, obwohl die diskutierten Ansätze umstritten und widersprüchlich sind. Diese kumulative Habilitationsschrift möchte dazu beitragen, dieses Forschungsfeld voranzutreiben und untersucht, wie Transitionen zu nachhaltigeren Entwicklungspfaden initiiert und vertieft werden können. Die Arbeit fokussiert sich auf Tourismus in ländlichen

Regionen, welche in den vergangenen Jahren intensiv gewachsen sind und sich durch Massentourismus auszeichnen, was zu ökologischen und sozio-kulturellen Herausforderungen führt. Die Habilitationsschrift analysiert, welchen Einfluss Touristen und touristsche Leistungsträger auf die Produktion ländlichen Raums im Hinblick auf Nachhaltigkeit und Resilienz haben und welche Rolle ländliche Regionen generell in Prozessen von Nachhaltigkeitstransformmationen spielen können.

Daher setzt sich die Habilitationsschrift aus mehreren Studien zusammen, welche sich mit den Forschungsfragen auseinandersetzen und dabei die Heterogenität ländlicher Räume berücksichtigen. Kapitel 2 untersucht die Einstellungen von Touristen auf Reisen im Hinblick auf Nachhaltigkeit am Giant's Causeway, Nordirland. Es wurde eine standardisierte Befragung von Touristen durchgeführt. The Ergebnisse zeigen, dass angefangen von Individualtouristen über Busreisetouristen bis hin zu Kreuzfahrttouristen das Nachhaltigkeitsbewusstsein nachlässt. Daher wird entsprechend der Nachhaltigkeitsorientierungen der Touristen ein segment-spezifischer Governance-Ansatz empfohlen, um Touristen entlang von Prozessen der Nachhaltigkeitstransformation und des ländlichen Wandels zu dirigieren und potentiellen ‚Trial by Space' zu lösen.

Kapitel 3 nutzt unterdessen das Biosphärenreservat Südost-Rügen, Deutschland, als Fallbeispiel, um Lock-ins im Tourismus auf Rügen zu identifizieren, welche eine Nachhaltigkeitstransformation behindern, und analysiert die Rolle, welche freiwillige Nachhaltigkeitszertifizierungen von Tourismusunternehmen spielen, um diese zu überwinden. Die Studie entwickelt einen Rahmen, um die Nachhaltigkeitsorientierungen von Tourismusunternehmen im Spektrum zwischen Green Growth und Degrowth auf der Mikroebene bewerten zu können. Sie zeigt, dass insbesondere in Schutzgebieten, die mit Akzeptanzproblemen zu kämpfen

haben, ein effizienzorientierter Green Growth-Ansatz die Basis für die Etablierung nachhaltigerer Entwicklungspfade bilden kann. Allerdings wirft die Studie auch die Frage nach der Dauer regionaler Nachhaltigkeitstransformationen auf.

Aufbauend auf dem theoretischen Fundament von Kapitel 3, nutzt Kapitel 4 eine netzwerkanalytische Herangehensweise, um Eigenschaften touristischer Leistungsträger zu untersuchen, die in einem regionalen Nachhaltigkeitsnetzwerk im ländlichen Irland organisiert sind. Im Gegensatz zur Netzwerkliteratur, die auf ökonomische Aspekte fokussiert ist, betrachtet diese Studie darüber hinaus auch die ökologischen und sozialen Ziele der Netzwerkmitglieder und stellt Zusammenhänge zu ihrer jeweiligen Nachhaltigkeitsorientierung her. Die Studie kommt zu dem Schluss, dass Nachhaltigkeitsnetzwerke die Bemühungen ländlicher Akteure mit Blick auf einen ländlichen Wandel unterstützen. Jedoch sollten degrowth-orientierte Strategen langfristig als Schlüsselakteure in derartigen Netzwerken repräsentiert sein, um eine klare Wende weg vom ‚Business as Usual' zu erzielen. Insbesondere sie sind diejenigen, die unternehmensgeführte Grassroots-Innovationen initiieren und vorantreiben, eine Form von Innovationen, in die Unternehmen einen Teil ihrer Ressourcen leiten, die aber durch ihren Non-for-Profit-Charakter gekennzeichnet sind und die das Potential haben, den Tourismussektor tiefgreifend hin zu mehr Nachhaltigkeit zu restrukturieren.

Kapitel 5 analysiert die Rolle deutscher Reiseveranstalter mit TourCert-Zertifizierung für Degrowth-Prozesse im Tourismus. Sie agieren als Intermediäre und stellen verschiedene individuelle Tourismusangebote zusammen, um sie gebündelt an ihre Kunden zu verkaufen. Damit haben sie erheblichen Einfluss bezogen auf eine Nachhaltigkeitswende. Die Ergebnisse zeigen, dass TourCert-zertifizierte Reiseveranstalter verschieden sozio-kulturelle Maßnahmen umsetzen, die der Idee von degrowth-orientiertem Reisen entsprechen. Allerdings können sie

auf Grund ihrer Tendenz, eher entlegende Destinationen zu wählen, die oftmals Langstreckenflüge erfordern, nicht umfassend als Change Agents bezeichnet werden. Stattdessen muss eine klare Unterscheidung zwischen Massenmarkt und klein-skaliertem, alternativem Reisesektor gemacht werden.

Das finale Kapitel 6 fasst die Forschungsergebnisse der Hauptkapitel zusammen und entwickelt diese weiter, um zu abschließenden theoretischen Aussagen zu kommen. Dementsprechend wird anerkannt, dass Touristen und touristische Leistungsträger als Schlüsselakteure eines ländlichen Tourismus einen starken Einfluss auf die Produktion ländlichen Raums haben. Allerdings wird mit Blick auf Nachhaltigkeitstransformationen deutlich, dass durch die steigende Popularität des ländlichen Tourismus, der immer noch größtenteils wachstumsorientiert ist, ländliche Tourismusresilienz und nachhaltiger Wandel vor Herausforderungen stehen. Daher gibt es verschiedene Optionen für zukünftige Entwicklungspfade, welche sich in einem größeren Spektrum zwischen green growth-orientiertem Massentourismus einerseits und degrowth-orientiertem Tourismus andererseits positionieren lassen. Mit Bezug auf einen degrowth-orientierten ländlichen Tourismus kann die COVID-19-Pandemie ein Möglichkeitsfenster bieten, um verkrustete Strukturen aufzubrechen und neue Entwicklungspfade im Sinne einer Bounce-forward-Strategie zu eröffnen. Vor dem Hintergrund geteilter Verantwortlichkeiten zwischen urbanen und mehr oder weniger ländlichen Räumen plädiert diese Habilitationsschrift für eine finanzielle Kompensation für diejenigen ländlichen Tourismusregionen, die gewillt sind, ein Konzept einer reduzierten Nutzung ökonomischer Ressourcen zu verfolgen, um größere ökologische und sozio-kulturelle Ziele zu erreichen, welche von Wert für unsere Gesellschaften auf verschiedenen geographischen Maßstabsebenen sind.

Auf diese Weise können ländliche Regionen viel mehr als nur Problemregionen sein, als welche sie häufig charakterisiert werden.

Daher spricht sich diese Habilitationsschrift abschließend für eine Rekonzeptionalisierung von Stadtforschung und der Forschung zu ländlichen Räumen hin zu einem gemeinsamen Forschungsfeld aus bezogen auf Verantwortlichkeiten in Prozessen eines nachhaltigen Wandels, wobei es gilt, verschiedenste Formen von Rurbanität anzuerkennen und eine gleichberechtigte Basis für akademische Vertreter und Praktiker der Stadtforschung und der Forschung zu ländlichen Räumen zu schaffen.

Schlüsselwörter: Green Growth; Degrowth, evolutionärer Ansatz, Produktion ländlichen Raums; Resilienz; ländlicher Wandel; nachhaltiger Tourismus; Nachhaltigkeitstransformation; Nachhaltigkeitszertifizierung; Nachhaltigkeitsorientierung; Netzwerke; Lock-in; unternehmensgeführte Grassroots-Innovationen; Rightsizing; COVID-19; geteilte Verantwortlichkeiten; finanzielle Kompensation

1 Introduction

1.1 Sustainable development and sustainability transitions from a spatial perspective

The beginning of the industrial revolution in the late 18th century in England, which then spread across Europe and North America in the 19th century, marked the starting point for a massive restructuring of our societies and has entailed severe problems for the ecological foundations of our planet. However, it took around 200 years of increasing ecological destruction and growing social inequalities worldwide, until a broad debate about sustainable development commenced in science, politics and society around the globe after Meadows et al.'s (1972) publication "The limits to growth" was released. In their study, the authors accentuated that exponential economic and population growth would cause an "overshoot and collapse" (Meadows et. al. 1972: 125) of the global system in the medium term. This debate was significantly fuelled by the UN Earth Summit, held in Rio de Janeiro in 1992, where delegates from 178 countries and around 2,400 civil society stakeholders discussed how the future of humankind and of our planet as a whole could be ensured. In this context, a three-dimensional concept of sustainability was established aiming to achieve a harmonisation of economic development, ecological conservation and societal justice (Robinson 2004, Mensah 2019). The Agenda 21 as a roadmap for the 21st century, signed by the governments of these 178 countries, is one of the summit's most important final documents and a basis for further considerations with regard to sustainability in all areas of life around the globe (UN 1992, Mensah 2019). The Rio Summit was followed by a number of further United Nations conferences such as Rio+10 in 2002 or Rio+20 in 2012 and opened out into political programmes within the system of the UN (i.e. Millennium

Goals, Sustainable Development Goals) and beyond (Jeremić & Sachs 2014, Mensah 2019, UN DESA 2015, Borowy 2018).

Alongside with these developments, a huge effort has been made by academics covering a wide spectrum of disciplines to unravel the interrelations between the economy, ecology and socio-cultural justice. Sustainability, it has been more and more argued, cannot be defined as a final target status, but rather needs to be interpreted as a process that requires a permanent adaptation to environmental, socio-cultural and economic challenges. This implies that change must be considered relative to the current situation rather than static (Faber, Jorna & Engelen 2005). In this context, one of the key questions is how transitions towards more sustainable paths of development can be initiated and fostered.

Against this background, transition studies have emerged as a body of literature since the early 1990s. They originated in the Netherlands and try to disentangle the complexities of major transformations of societal functions (Schot, Hoogma & Elzen 1994, Kemp, Schot & Hoogma 1998, Geels 2002, Meadowcroft 2009, Coenen, Raven & Verbong 2010, Coenen & Truffer 2012). While focusing on technological transitions as a basis for sustainable development, the authors aim to analyse how transitions along societal pathways come about and how the potential for more sustainable technologies may be exploited strategically by governmental bodies. Hence, the literature on transition management brings together evolutionary economics, sociology and technology studies.

Following Schumpeter (1942), the transition studies scholars link transitions closely to the generation of innovations. Consequently, they analyse why many technological innovations that are obviously beneficial for sustainable development have not been able to gain acceptance at the markets. They argue that dominant technologies have become locked-in and new technologies are hard to establish on

those locked-in markets (Kemp, Schot & Hoogma 1998). In this context, Geels (2002) points out that new technologies as such cannot evoke societal change unless they are embedded in routines, in patterns of behaviour, in organizations etc. In this sense, technological transitions represent a “change from one sociotechnical configuration to another, involving substitution of technology, as well as changes in other elements” (Geels 2002: 1258). Established sociotechnical configurations, however, are often hard to overcome and the question arises as to how lock-ins can be opened for new trajectories. Here, Geels (2002) notes that once one element of a sociotechnical configuration is altered, it can entail changes in other elements that eventually result in the transition of the whole system.

Based on this knowledge, the transition studies literature proposes that policy-makers strategically promote regime shifts to sustainability. Thereby, the authors suggest applying a new structure of political incentives in order to embrace the challenge of changing a complete sociotechnical system with numerous interwoven domains (Kemp, Schot & Hoogma 1998, Geels 2002, Kemp & Loorbach 2003). Hence, neither conventional incentives supporting a specific economic sector nor a strict top-down planning and implementation approach are favoured. Instead, transition management is seen as bifocal aiming to achieve both system improvement and system innovation. Therefore, the right balance between protection and competition on the markets has to be targeted (Kemp, Schot & Hoogma 1998, Meadowcroft 2009).

The transition studies literature has developed a multi-level perspective on transitions, which includes niches, regimes and landscapes on three different hierarchical levels. According to Kemp, Schot & Hoogma (1998), on the micro-level niches play an important role for generating innovations. When insulated from ‘normal’ market selection they can function as incubators for radical innovations. In

niches, social networks can be established in protected environments, and processes of learning can be initiated. Hence, the authors argue that governments should pay attention to niche experimentation as part of Strategic Niche Management (SNM). However, Geels (2002) accentuates that niches are embedded into a patchwork of regimes on the meso-level. Regimes create stability as they guide innovative activity towards incremental improvements along trajectories. Finally, the macro-level of a sociotechnical landscape consists of changing external factors providing gradients for the trajectories. The multi-level perspective illustrates that the further success of a new technology is not only governed by the processes within the niche, but also by developments at the level of the existing regime and the sociotechnical landscape. Changes on the landscape level may put pressure on the regime and create openings for new technologies.

Hence, Strategic Niche Management (SNM) refers to governing sustainability transitions through an iterative process of articulating expectations, setting up and breaking down protection, social network building, experimentation, learning and wider diffusion as a process of branching into new market niches and eventually mainstream markets (Kemp, Schot & Hoogma 1998, Meadowcroft 2009).

While the transitions studies literature follows a green growth efficiency approach and, thus, principally favours sticking to the current economic system (von Weizäcker et al. 2009), postcapitalist scholars such as Jackson (2009) or Paech (2012) criticize the present socio-economic system and the technology-focused greening approaches that continue to follow a general growth ethos for pursuing business as usual. Within finite environmental limits, they argue, tackling sustainability issues requires alternative ways of organizing our societies. Thus, scholars such as Jackson (2009) reject the efficiency argument and state that a decoupling of economic growth and resource use is not possible since empirical

data hardly show any absolute resource input decline. They thus plead for an ‘alternative turn’ (Bina & La Camera 2011) that is characterized by sufficiency-driven strategies of downscaling (Schneidewind & Zahrnt 2014, Jarvis 2017, Kallis 2018, Paech 2012, Demaria, Kallis & Bakker 2019, Hickel & Kallis 2019).

The key aspect of these degrowth approaches, also coined as ‘décroissance’ (Latouche 2010), is their rejection of the conventional belief that only continuous economic expansion leads to societal and individual prosperity. Instead, they argue that the growth imperative entails increasing levels of inequality on all spatial scales, in addition to an unsustainable resource consumption making the system not only ecologically but also economically unstable (Kallis 2018). This dilemma is referred to as the ‘double crisis’ which became evident with the global financial crisis of 2008 (Jackson 2009). However, after the crisis there was a broad consensus across international institutions such as the UN, EU or OECD and politics that economic growth needed to be re-invigorated with the support of political incentives (UNEP 2011, European Commission 2010, OECD 2009, OECD 2014). By means of a Green New Deal especially sectors that promised to bring about new sustainable technologies and create green jobs were to be targeted by political recovery packages. These included, for example, the energy sector or the mobility sector.

While Jackson (2009) appreciates such a green stimulus as a transformational effort in answer to the 2008 financial crisis, he demands that investments should be clearly focused on tackling ecological challenges and creating a less unequal society without aiming at a continual consumption growth. However, in general, Jackson (2009: 12) concludes “[f]or the advanced economies of the Western world, prosperity without growth is no longer a utopian dream. It is a financial and ecological necessity”.

With the worldwide crisis caused by the COVID-19 pandemic, this statement triggers a new dynamism. With its detrimental negative economic effects resulting from massive political restrictions to stop the spread of the coronavirus, the crisis is seen by many scholars as a chance to reconfigure macroeconomic structures and enter into a steady-state economy with a constant stock of physical capital (Buch-Hansen 2014, Lange et al. 2020, Higgins-Desbiolles 2021a). Jackson (2009: 76), with reference to the 2008 financial crisis, comes to the conclusion that this "presents a unique window of opportunity to reconfigure our economies and invest in a sustainable future". This is even more the case with the COVID-19 pandemic and its much stronger impacts on people's lives. However, an alternative robust macroeconomics of sustainability is required, and Jackson (2009) concedes that no such economic model currently exists and thus needs to be developed. Here, Gibson-Graham's (2008) approach of diverse economies, which Klagge & Meister (2018) applied for the analysis of energy cooperatives in Germany, provides a more differentiated view that may form the basis for sustainability transitions.

Hence, pathways of transition towards more sustainable modes of living and the corresponding strategies are contested and contradictory. In addition to the general debates about sustainability transitions, academic discussions about the geographical dimensions of such transitions have also started to emerge. They are still in their infancy and have yet to mature, and are similarly diverse to the overall sustainability approaches (Coenen & Truffer 2012, Schulz et al. 2020, Hillebrand & Zademach 2013, Schulz & Bailey 2014).

Concepts like territory, place, scale or network are integral elements of geographical research (Mießner & Naumann 2018, Schulz et al. 2020). In the context of sustainability transitions, a study by Coenen, Raven & Verbong (2010) about the development of Aquifer Thermal Energy Storage in the Netherlands is

revealing. It shows evidence that local niche experimentation as an integral part of technology-based Strategic Niche Management relates to different notions of proximity such as geographical proximity or social proximity. Looking beyond local niches as geographical places of sustainability experimentation and using transition studies' multi-level perspective, Coenen, Benneworth & Truffer (2012) identify geographical variety in the transition processes of technological innovation systems. They suggest more specifically investigating global networks and local nodes of transition processes and, with a particular view to cities, analysing "whether certain (types of) localities can draw upon scale and scope effects through sheer size, highly localized concentrations of knowledge and capabilities or other intangible spillover effects" (Coenen & Truffer 2012: 976).

On the other hand, scholars who advocate an alternative, sufficiency-driven turn to sustainability have more intensively dealt with options for upscaling civil-society movements or transferring them to different local settings (Buch-Hansen 2018, Schmid 2019). Seyfang & Longhurst (2013) transfer the spatialized niche concept that focuses on technological innovations to a civil society context. With respect to the development and diffusion of grassroots innovations, they highlight that processes of learning and their spatiality differ from conventional innovations. Thus, they conclude that the transition studies' niche approach needs adaptation.

In sum, there seems to be a consensus amongst geographical scholars that in order to unravel the pathways along which sustainability transitions take place, an evolutionary, relational and regional approach that simultaneously considers upscaling mechanisms is meaningful. It also becomes evident that, so far, geographical studies of sustainability transitions have mainly focused on theoretical spatial considerations and on empirical studies of the urban context, many of which have dealt with technology-based industrial sectors (Coenen & Truffer 2012,

Coenen, Raven & Verbong 2010, Coenen, Benneworth & Truffer 2012, Kurzeja, Thiele & Klagge 2020, Seyfang & Longhurst 2013). An exception that explicitly focuses on energy transitions in rural regions is Mießner & Naumann's (2020) study, which uses a social science research perspective to theoretically explore the features of a successful realization of sustainable futures considering the role of energy.

In general, however, there is a lack of knowledge about rural regions' sustainability challenges, their pathways to change and their role within the wider context of spatial sustainability transitions. Especially a better understanding of sustainability transitions is needed in relation to service sectors such as the tourism sector that have not yet been the centre of academic research, and of how sustainable rural change is fostered and enhanced by different types of sustainability actors.

1.2 Resilience and sustainable rural change: The case of rural tourism

1.2.1 Rural regions, sustainability and the development of rural tourism

Rural regions and rurality are not easy to grasp due to their great variety and the ambiguous ideas people have of them. Nevertheless, by many, rural regions are perceived as idyllic and as places of great cohesion where people live in harmony with nature. In economic terms, however, they are frequently considered to be backward problem regions concerning their ability to generate knowledge and thus their economic dynamics and development perspectives (Jacuniak-Sude & Mose 2011, Woods 2011, Mose 2016, Maschke, Mießner & Naumann 2020). While industrial and knowledge-intensive service sectors are mainly clustered in

agglomerations, rural regions often suffer from structural economic problems as the traditional agricultural and forestry sector's role has radically declined over the past decades. This has entailed unemployment, lower living standards, and oftentimes outmigration and the thinning out of public services in many areas. For this reason, rural regions across Europe have become subject to political interference through a variety of subsidy schemes, especially on the EU-level, promoting integrated rural development, but also increasing the risk of rural regions becoming dependent on external funding (Steinführer et al. 2016). Nevertheless, bottom-up approaches with local participation and a focus on the endogenous rural potential have become key elements of rural development within Europe (European Commission 1996, 2016).

Yet, due to processes such as agricultural restructuring, counter-urbanization and digitalization in rural regions and thus adjustments of the lifestyles of the urban and rural population, Cloke (2006: 18) notes a "blurring of conventional boundaries between country and city" and thus dismisses binary theorization of the urban-rural context. Similarly, Woods (2011: 48) reflects on "the urbanization of the rural and the ruralization of the urban" and refrains from the classical divide between the urban and the rural. Hence, it needs to be acknowledged that rural regions are very heterogeneous in a holistic sense regarding their economic, ecological and socio-cultural pathways (Mose 2016, Pauleit et al. 2010). Accordingly, when referring to rural regions this habilitation thesis includes a whole spectrum of regions with different gradients of rurality.

It becomes obvious that sustainable rural development strategies have to take into account individual problems and actor constellations. Particularly in scenic and heritage-rich rural regions, rural tourism has been discovered and developed since the 1970s as an alternative economic pillar. Rural tourism centres on activities linked to the consumption of attractive landscapes, interesting rural artefacts and cultures,

and special rural experiences (Woods 2011, Bardone & Kaaristo 2014). Since tourism represents a job-creating service sector, which does not require highly skilled personnel, it has the capacity to compensate job losses in the agricultural and forestry sector. While the beginnings of rural tourism can be traced back to the late 19th century when it was mostly based in small rural towns, its development since the 1970s has been supported by improved infrastructure and transport, particularly rises in car ownership. This has made it easier for visitors to access the countryside well beyond the central rural towns (Lane & Kastenholz 2015).

Rapid and uncontrolled tourism development has led to mass tourism in the coastal regions of the Mediterranean, which has been accompanied by many ecological and socio-cultural problems. In contrast, rural tourism is interpreted as a small-scale alternative that is marked by its traditional character and low impact on nature and the rural societies. Here, small family-owned businesses are supposed to be the main actors, and initiatives that foster cooperation and integration aim to obtain benefits for all involved (Bramwell 2004, Lane & Kastenholz 2015).

Hence, rural tourism has been used as a regeneration tool for many rural regions. It is considered a form of sustainable tourism and, thus, opens up new perspectives for sustainable rural development. This is especially the case as in rural regions, sustainability concepts – although they are considered holistic concepts integrating economic, ecological and socio-cultural aspects – have paid special attention to improving the quality of life for current and future generations. Due to the general structural weakness of rural regions, there is a focus on human welfare while emphasizing the role of policy-makers and local participation (Curry 2012, Jacuniak-Sude & Mose 2011).

At the same time, rural regions are traditionally considered compensation areas for urban regions as they offer space not only for the cultivation of foods or the

production of energy, but also for the establishment of recreational areas, especially in the form of protected areas. While the main aim of national parks is to preserve the planet's biodiversity, other protected areas like UNESCO biosphere reserves function as model regions for sustainable development that integrate ecological, economic and socio-cultural aspects to test transformational processes towards more sustainable pathways in so-called living labs (Mose et al. 2019).

Here, much more research is necessary. However, over the past decades, cities have become major objects of investigation in human geographical research (Maschke, Mießner & Naumann 2020). In contrast, the rural has been "marginalized […] as an adjunct to the urban" (Woods 2011: 6) and rural regions are considered a leftover category by many scholars. In order to generate a better understanding of the spatial processes of sustainability transitions, a binary theorization of the urban-rural context should be overcome. Rural studies need to be liberated from their marginalized position and allowed to meet with the field of urban geography on an equal footing.

1.2.2 Mass tourism in rural destinations, the production of rural space and challenges for sustainable rural change

The countryside has increasingly attracted tourists. While there is ever-growing overall enthusiasm towards travel – according to UNWTO (2021) international arrivals alone have risen from 277 million in 1980 to 1,466 million in 2019 – the increased popularity of travelling the rural is predominantly due to the augmented establishment of protected areas and iconic sites in rural regions that promise visitors a unique and unspoilt experience. Such places are often given particular attention by tourists when they are nationally or internationally acknowledged, for instance as national parks or by one of the UNESCO's conservation programmes.

Examples of such rural tourism destinations are the Biosphere Reserve Southeast Rügen, Germany, officially recognized by the UNESCO's programme 'Man and the Biosphere' (MAB) in 1991 (Panzer-Krause 2017); the Burren and Cliffs of Moher region, Ireland, that secured UNESCO Global Geopark status in 2011 (Panzer-Krause 2019); or the Giant's Causeway and Causeway Coast, Northern Ireland, which has been a designated natural UNESCO World Heritage Site since 1986 (Panzer-Krause 2020).

Such UNESCO site designations showcase the world's biological, geological and cultural diversity and promote sustainable development. While UNESCO biosphere reserves function as "learning areas for sustainable development" (UNESCO 2021a), in which to test approaches to the conservation of biodiversity in harmony with human activity, UNESCO Global Geoparks are designated areas with an overwhelming geological past (UNESCO 2021b). Finally, the UNESCO 'Convention concerning the Protection of World Cultural and Natural Heritage' promotes the protection of heritage of "outstanding universal value" (UNESCO 2020d). The MAB Programme was initiated in 1971, and the number of UNESCO biosphere reserves worldwide has increased remarkably from 440 in 2003 to 714 in 2021 alone (UNESCO 2021a). Similarly, as many as 1,121 heritage sites (as of 2020) have been recognized by the World Heritage Committee, many of which are located in rural areas (UNESCO 2021c). Also, after only 20 years of existence, the UNESCO counted 169 Global Geoparks in 2021 (UNESCO 2021b).

The Biosphere Reserve Southeast Rügen is located on the island of Rügen, Germany's biggest island. While the tourism history of Rügen dates back to the first half of the 19th century, tourist arrivals in 2019 amounted to more than 1.5 million, more than ever before (Panzer-Krause 2017, Statistik M-V 2020). This is also the case for the Cliffs of Moher, located in the Burren and Cliffs of Moher Geopark at

the western coast of Ireland. Here, the number of visitors rose by 86% from approximately 912,000 in 2006 to more than 1.6 million in 2019 (Fáilte Ireland 2007, Fáilte Ireland 2021). Tourist numbers at the Giant's Causeway in Northern Ireland have likewise risen enormously, by 98% from 533,000 in 2012 to 1.04 million in 2018 (NISRA 2019, Panzer-Krause 2020). All three cases are examples of rural tourism destinations that explicitly put the regions' natural and cultural heritage at the centre of tourist consumption.

Hence, many rural destinations that promote rural tourism with low impact on rural landscapes and societies have become visitor magnets and thus places of mass tourism. While the phenomenon of overtourism has been frequently discussed in the urban context by academics and practitioners in recent years (Gürsoy 2019, Namberger et al. 2019), it has hardly been referred to with regard to rural areas that focus on rural tourism (Panzer-Krause 2020). However, such developments in many rural regions are in stark contrast to the idea of small-scale rural tourism and cause multiple sustainability challenges. In the Biosphere Reserve Southeast Rügen as well as in the Burren and Cliffs of Moher region and at the Giant's Causeway and Causeway Coast, heavy traffic and congestion are major problems. Road and parking facilities have been expanded to ease such problems. However, such interventions in the rural settings have not yet led to profound improvement of the traffic situation at the three destinations. Further sustainability challenges are the disturbance of flora and fauna and the overutilization or destruction of fragile sites. With regard to social problems, rural tourism destinations that offer one anchor attraction, such as the Burren and Cliffs of Moher region or the Giant's Causeway and Causeway Coast region, lack a way of genuinely integrating small local tourism providers in order to gain benefits for all (Panzer-Krause 2019, Panzer-Krause 2020, McAreavey & McDonagh 2010, Healy, van Riper & Boyd 2016). In addition, access

and return travel to and from the destinations, especially when they involve flights or ship cruises[1] as is often the case in Ireland and Northern Ireland, have increasingly become subject to debate concerning the ecological consequences of tourism (Gössling & Peeters 2015, Panzer-Krause 2021).

These tendencies in rural tourism development impact on rurality at the destinations. Cloke (2006) and others point out that rurality is combined of its material status and its imaginative status. In this context, Halfacree (2006, 2007) differentiates between three facets of rurality: first, rural localities that display social rural practices of producing or consuming; second, formal representations of the rural, which are used by rural stakeholders to prevail their ideas of the rural over others; and third, everyday lives of the rural, which refer to daily routines of the local population. The degree of rural spatial coherence signalizes the extent to which these three facets of rural space are in harmony with each other. This can range from a coherent and unified condition where all the three facets of rural space are in line, to a totally incoherent and chaotic condition where trial by space has not been resolved (Halfacree 2006, 2007). Thus, various stakeholders have an influence on the production of rural space. In rural tourism destinations, the key stakeholders are tourism businesses and tourists as well as the local population and policy-makers (Panzer-Krause 2020). With regard to initiating and promoting processes of sustainability transitions in rural tourism destinations, it is key to understand the mechanisms of the production of rural space and the relevant influence of different actors.

[1] Ship cruises have become the target of criticism in recent years due to the vast negative ecological and socio-economic effects they induce. Langenbach (2019) assesses cruise ship operators' communication strategies with regard to sustainability and observes that they are characterized by not referring to any negative effects while emphasizing the tour operators' own engagement with sustainability measures both regarding technical measures and financial support for socio-ecological projects: Langenbach, M. (2019). Herausforderungen und Ansätze für die Umsetzung von zukünftig nachhaltigen Kreuzfahrten. BA thesis. Hildesheim.

Similarly to tourism in general, rural tourism was thrown into deep economic crisis in 2020 with the beginning of the unprecedented COVID-19 pandemic, when all over the world national governments implemented travel bans or restrictions, mandatory closures of accommodation, restaurants and tourism-related attractions and quarantine regulations in a combination of national and regional lockdowns and with varying degrees of strictness. The objective of these measures has been to limit the spread of the coronavirus (Gössling, Scott & Hall 2020, Bausch, Gartner & Ortanderl 2021). For tourism in the three case study areas, this led to a significant decline of tourist numbers in 2020. While official visitor numbers for the Cliffs of Moher and the Giant's Causeway have not been published by governmental statistics agencies for 2020, the director of the Cliffs of Moher Visitor Experience commented in an interview in July 2020 that a drop of 80% in visitor numbers compared to 2019 was estimated for the Cliffs of Moher in 2020 (Quann 2020). Here, the dependence on the international market becomes apparent. Similarly, at the Giant's Causeway, the UK National Trust, as the owner and manager of the World Heritage Site, reported in spring 2021 that in face of the COVID-19 lockdown regulations wildflowers were thriving as never seen before (Gardiner 2021). On the other hand, on the island of Rügen with 1.2 million tourist arrivals in 2020, a drop of a moderate 20% compared to 2019 was registered (Statistik M-V 2021) and shows the destination's importance for the domestic market.

During the COVID-19 pandemic, many people seem to appreciate natural sites for recreation purposes as long as they are fairly uncrowded and within close reach, or at least within their own country. In Korea, this phenomenon has been referred to as 'untact tourism'. According to Bae & Chang (2021: 1018), 'untact' is "a newly coined term in Korea with the negative prefix 'un' added to the word 'contact', referring to a behavioural disposition to minimize direct contact between people".

Hence, natural sites have been considered safer since they allow activities that are in line with social distancing regulations and recommendations. Thus, although it is still largely unclear how tourism will further develop under post-COVID-19 circumstances, there is already a lively debate about the chances the pandemic offers in terms of resetting and reconfiguring worldwide tourism towards more sustainable modes, including a focus on domestic rather than long-haul travel (Gössling, Scott & Hall 2020, Higgins-Desbiolles 2020a, Higgins Desbiolles 2020b, Sigala 2020, Abbas et al. 2021, Akhtar et al. 2021, Traskevich & Fontanari 2021, Bae & Chang 2021, Więckowski 2021). Hence, regarding regional resilience with respect to the tourism sector in terms of actors' or systems' responsiveness to shocks like the 2008 financial crisis, the ongoing ecological crisis or the COVID-19 pandemic, many scholars advocate adopting an evolutionary perspective on the concept of resilience. Following Scott (2013: 597), such an evolutionary resilience lens implies a bounce-forward approach "characterised by an emphasis on adaptive capacity and transformation" instead of a bounce-back perspective, "based on 'return-to-normal' assumptions". This habilitation thesis applies the evolutionary approach to rural tourism resilience.

1.3 Thesis outline

This thesis addresses two key research questions with regard to sustainability transitions and sustainable rural change in rural tourism destinations:

1. What influence do tourists and tourism businesses have on the production of rural space concerning sustainable rural change?
2. What role can rural regions generally play in sustainability transition processes?

For this purpose, besides the introduction (Chapter 1), this habilitation thesis is structured in four main chapters (Chapter 2, 3, 4 and 5) and a conclusion chapter (Chapter 6). Chapter 2 investigates how tourists at a rural tourism hotspot in Northern Ireland exert leverage on the production of rural space by their attitudes towards sustainability. By means of two case studies, Chapter 3 and Chapter 4 analyse regional sustainability networks of tourism businesses and their influence on sustainable rural change. Here, tourism enterprises' sustainability strategies that range between the extremes of strict green growth strategies and resolute degrowth strategies are investigated. Chapter 5 focuses on sustainability-certified tour operators as intermediaries that create packages by combining different tourism services along the tourism supply chain and then sell them to their customers, many of whom organize holidays to remote rural areas worldwide. It is evaluated whether they have the potential to act as change agents and upscale the downscaling idea of degrowth as a strategy to accelerate sustainability transition processes.

Finally, Chapter 6 synthesizes and further develops the outcomes of these studies. It culminates in a concept of rural tourism resilience in which rural tourism destinations can position themselves along a spectrum marked by degrowth-oriented rural tourism on the one hand and, on the other hand, sustainability-focused mass tourism that can no longer be classified as traditional small-scale rural tourism. On the basis of this, a theory of rural regions' role in sustainability transitions is derived that is linked to shared responsibilities between more or less rural regions and urban regions (Fig. 1.1). It needs to be pointed out that the studies in Chapter 2, Chapter 3, Chapter 4 and Chapter 5 were carried out before the COVID-19 pandemic.

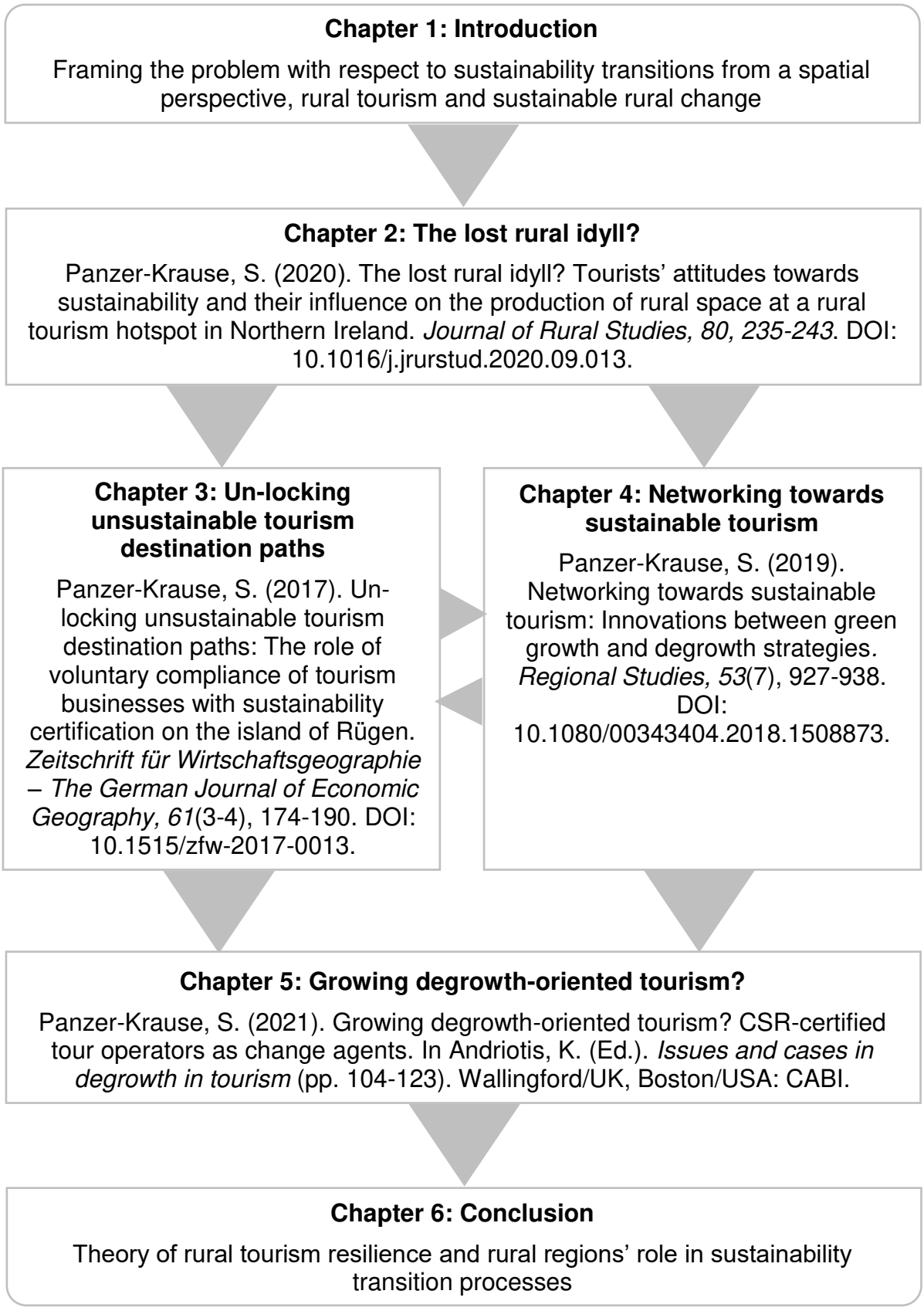

Figure 1.1: Overview of the research programme.

The thesis is a cumulative habilitation. Thus, the main chapters consist of three peer-reviewed papers published in internationally recognized scientific journals and one reviewed book chapter published in a volume edited by Andriotis (2021) (Fig. 1.1). Since it is a cumulative piece of work, each chapter is treated as an individual unit with its individual figure numbering, table numbering and list of references. However, a standardized citation scheme is applied. The cumulative habilitation is comprised of the following four original publications, which are supplemented with footnotes containing additional information:

1. Panzer-Krause, S. (2020). The lost rural idyll? Tourists' attitudes towards sustainability and their influence on the production of rural space at a rural tourism hotspot in Northern Ireland. *Journal of Rural Studies, 80, 235-243*. DOI: 10.1016/j.jrurstud.2020.09.013.

2. Panzer-Krause, S. (2017). Un-locking unsustainable tourism destination paths: The role of voluntary compliance of tourism businesses with sustainability certification on the island of Rügen. *Zeitschrift für Wirtschaftsgeographie – The German Journal of Economic Geography, 61*(3-4), 174-190. DOI: 10.1515/zfw-2017-0013.

3. Panzer-Krause, S. (2019). Networking towards sustainable tourism: Innovations between green growth and degrowth strategies. *Regional Studies, 53*(7), 927-938. DOI: 10.1080/00343404.2018.1508873.

4. Panzer-Krause, S. (2021). Growing degrowth-oriented tourism? CSR-certified tour operators as change agents. In Andriotis, K. (Ed.). *Issues and cases in degrowth in tourism* (pp. 104-123). Wallingford/UK, Boston/USA: CABI.

Further publications that are not specifically part of this habilitation thesis, but which the thesis also refers to, are the following:

1. Lammers, L., Lübcke, J. & S. Panzer-Krause (2014). Gestaltung und Pflege von Grünanlagen in benachteiligten Stadtquartieren: Welchen Beitrag leisten Stadtteilnetzwerke?, *Hildesheimer Geographische Studien, 4*, 56-87.
2. Panzer-Krause, S. (2015). Renewable energies and rural development in Germany: Business finance and the role of trust illustrated by two case studies from Brandenburg. In Dannenberg, P. & E. Kulke (Eds.). *Economic development in rural areas. Functional and multifunctional approaches* (pp. 109-129). Farnham, Burlington: Ashgate.
3. Taha Basch, H. & S. Panzer-Krause (2016). Auf der Flucht! Die Bedeutung persönlicher Netzwerke für den Wanderungsprozess syrischer Flüchtlinge nach Deutschland, *Hildesheimer Geographische Studien*, 6, 1-25.

Finally, a number of BA and MA theses, which were realized under the supervision of the author of this habilitation thesis are connected to the topics discussed here and contribute further insights. They will be referred to in this habilitation thesis, too:

1. Bengsch, B. (2019). Die Partnerinitiativen der Nationalen Naturlandschaften in Deutschland: Ein Vergleich von Struktur und Arbeitsweise. BA thesis. Hildesheim.
2. Dormeier, M. (2015). Nachhaltiger Tourismus im Biosphärenreservat Südost-Rügen. Eine Netzwerkanalyse. MA thesis. Hildesheim.
3. Dormeier, M. (2013). Irland - Wahrnehmungsgeographie, Raumbilder und Imageforschung am Beispiel der "Grünen Insel". BA thesis. Hildesheim.
4. Filbrandt, H. (2017). Der degrowth-Ansatz bei TourCert-zertifizierten deutschen Reiseveranstaltern. Eine standardisierte Befragung. BA thesis. Hildesheim.

5. Friedberg, J. (2016). Nachhaltiger Tourismus auf Rügen - Eine Umfrage unter den Urlaubern. BA thesis. Hildesheim.

6. Harries, V. (2017). Viabono - Ein relevantes Umweltsiegel für den Nachhaltigen Tourismus? Betrachtung der Relevanz des Umweltsiegels "Viabono" für den Nachhaltigen Tourismus in der Reiseregion Lüneburger Heide. BA thesis. Hildesheim.

7. Hipkins, D. (2016). Nachhaltiger Tourismus in der Burren Region, Irland: Eine Netzwerkanalyse des Burren EcoTourism Network. BA thesis. Hildesheim.

8. Horn, J. (2017). Nachhaltiger Tourismus aus Sicht deutscher Pauschalreiseveranstalter. BA thesis. Hildesheim.

9. Langenbach, M. (2019). Herausforderungen und Ansätze für die Umsetzung von zukünftig nachhaltigen Kreuzfahrten. BA thesis. Hildesheim.

10. Reckemeyer, V. (2019). Grünanlagen an Krankenhäusern: Cultural Ecosystem Services aus Nutzersicht. BA thesis. Hildesheim.

11. Rentz, A.-K. (2015). Tourismus und Nachhaltigkeit. Umsetzung des Konzepts der Nachhaltigkeit am Beispiel des Cliffs of Moher Visitor Experience, Irland. BA thesis. Hildesheim.

12. Robra, F. (2019). Kreuzfahrten und Nachhaltigkeit. Untersuchung zu Nachhaltigkeitseinstellungen von Kreuzfahrtreisenden. MA thesis. Hildesheim.

13. Scheb-Wetzel, F. (2014). Nachhaltige Mobilität: Das Schaufenster Elektromobilität in der Metropolregion Hannover Braunschweig Göttingen Wolfsburg. MA thesis. Hildesheim.

14. Schmidt, J. (2015). Nachhaltiger Tourismus im Harz – Die Reisemotivation der Touristen im Harz am Beispiel Braunlage. BA thesis. Hildesheim.

15. Schreiber, J. (2013): Sustainable Entrepreneurship - Entwicklungspotential für ländliche Räume? BA thesis. Hildesheim.
16. Sielaff, L. (2019). Die Bedeutung der Viabono-Nachhaltigkeitszertifizierung für die Betriebe. Durchführung qualitativer Interviews in zertifizierten Unternehmen im Bereich des Nationalparks Eifel. BA thesis. Hildesheim.
17. Wilde, J. (2018). Nachhaltige Mobilität auf Reisen: Kann CarSharing einen Beitrag dazu leisten? BA thesis. Hildesheim.
18. Yilmaz, H. (2013). Tourismus und nachhaltige Entwicklung an der türkischen Riviera. BA thesis. Hildesheim.

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2 The lost rural idyll? Tourists' attitudes towards sustainability and their influence on the production of rural space at a rural tourism hotspot in Northern Ireland

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Abstract

This study focuses on tourists' power in the production of space expressed by their travel attitudes when visiting a rural tourism hotspot that follows a growth ethos and is characterized by mass tourism. It aims to decode how these dynamics influence small-scale rural tourism, contesting sustainable rural change and the rural idyll as perceived by the tourists. For this purpose, a standardized survey amongst visitors at the Giant's Causeway, the most visited tourist attraction in Northern Ireland, was conducted. The results show that sustainability awareness decreases from individual trip tourists to coach trip tourists to cruise ship tourists, and thus segment-specific sustainability governance is desirable. By realizing this, a rural tourism hotspot should function as a hub that coordinates and promotes a network of regional tourism providers in order to enable its genuine integration in the rural community.

Keywords: rural tourism hotspot; production of rural space; sustainability attitudes; tourist segments; rural idyll; rural change

2.1 Introduction

The rural is often conceived of as an idyllic place with an intact environment, where life is shaped by traditional values and in harmony with nature (Lovell & Bull 2017, Shucksmith 2016, Rockett & Ramsey 2016, Gaffey 2004). Against the backdrop of this image of the rural, tourists have shown a growing interest in the countryside and its natural and cultural landscapes (Carneiro, Lima & Lavrador Silva 2015). According to Lane & Kastenholz (2015) rural tourism is defined by its small-scale character. The landscape and the rural life are commodified by rural tourism providers, and thus activities such as experiencing farm life or guided walks to encounter the characteristics of a landscape are offered (Woods 2011). In many rural areas, this form of tourism is used as a conservation tool (Powell & Ham 2008, Cortes-Vasquez 2017). Hence, rural tourism is closely linked to sustainable development (Lane & Kastenholz 2015: 1139). However, the production of space is influenced by the dynamics of power induced by different stakeholder groups in the specific rural arenas (Frisvoll 2012). Tourists can be considered one of them.

Over recent decades, an increasing number of rural heritage sites in the countryside have been established and intensely marketed for tourism. Such sites usually follow growth-oriented government goals. Their interpretation centres are often able to serve immense numbers of visitors. Visitor access is very comfortable and the average duration of stay relatively short (Reichel, Uriely & Shani 2008, Panzer-Krause 2019). Due to the development of such large-scale flagship attractions the dynamics of tourism have changed profoundly in such rural regions. On the one hand, the attraction sites have become rural tourism hotspots characterized by mass tourism. On the other hand, their hinterlands, which retain a small-scale orientation, struggle to economically benefit and have to grapple with

the ecological and socio-cultural consequences (Weidenfeld 2010, Panzer-Krause 2019).

Much is known about mass tourism in urbanized destinations (Bramwell 2004, Essex, Kent & Newnham 2004, do Valle et al. 2012, Dodds & Butler 2010, Weaver 2012, Lai & Hitchcock 2016). Indeed, in recent years, tourism's negative consequences, especially in cities, have been linked to the term overtourism which describes a situation when a destination's carrying capacity is exceeded and a 'too much' of tourism is perceived by the local population (Gürsoy 2019, Namberger et al. 2019). However, tendencies of overtourism at spatially confined rural tourism hotspots are still a relatively neglected field of research. And although the commodification of rural landscapes for tourist consumption from the tourism providers' point of view has been studied extensively (Garrod, Wornell & Youell 2006, Everett 2012, Ikonen 2016, Kordel 2016, Eimermann 2016), less attention has been paid to rural tourists' attitudes and behaviour (Lee & Moscardo 2005, Pérez, Hernández & Campón 2013, Buffa 2015, Chen, Nakama & Zhang 2017), and hardly any studies have segmented rural tourists in relation to sustainability aspects (Kim & Weiler 2013).

This study tackles these gaps in research and seeks to decode the dynamics of tourism in rural regions impacted by rural tourism hotspots under the influence of growth-oriented governance models. The focus of interest is on tourists' perspectives and their influence on the production of a rural tourism space. A segment-specific sustainability approach is used to examine tourists' sustainability awareness and travel attitudes. For this purpose, tourists at the Giant's Causeway, the most visited tourist attraction in Northern Ireland, are segmented into individual trip tourists, coach trip tourists and cruise ship tourists. Furthermore, the investigation considers the ways in which the rural idyll, perceived as authentic by

tourists, and sustainable rural change are contested. Here, it is hypothesized that individual trip tourists have a higher awareness of sustainability challenges while travelling rural regions than coach trip tourists and cruise ship tourists.

The paper proceeds as follows. In Section 2.2, the threefold model of rurality as developed by Halfacree (2007) and Frisvoll (2012) is further extended by considering tourists as a group of stakeholders who influence the production of rural space against the background of sustainability challenges. Section 2.3 presents the methodology of the empirical study and Section 2.4 provides discussion of the results. Section 2.5 concludes and derives measures for sustainable rural change in a region characterized by a rural tourism hotspot.

2.2 Rurality, tourists and sustainability challenges

2.2.1 The conceptualization of rurality in the context of rural tourism

In the academic literature, rurality has been conceptualized in different ways. In contrast to many researchers who interpret rurality as oppositional to the urban, Cloke (2006) and Woods (2011) reject such a binary theorization. Instead, Cloke (2006: 18), amongst others, argues that the ongoing and profound changes in the rural which are driven by processes such as agricultural restructuring, counter-urbanization or digitalization, have led to a "blurring of conventional boundaries between country and city". Cloke (2006) emphasizes the combination of the imaginative and material status of rurality. While many other rural researchers show a reluctance to open their theoretical perspectives to the gains of the cultural turn, he pleads for a hybrid conceptualization of rurality that involves both the approach of social construction and concerns of political and economic materialism.

As an analytical lens for the social construction of rurality in combination with materialism, this study uses Halfacree's (2006, 2007) three-fold model of rural space, which is inspired by Lefebvre (1991 [1947]) and extended and deployed in the rural tourism context by Frisvoll (2012). Halfacree (2006, 2007) differentiates rurality into rural localities, formal representations of the rural and everyday lives of the rural. Rural localities refer to spatial practices representing production and/or consumption activities. Formal representations are activated and portrayed by different rural stakeholders who try to ensure their representations prevail over others, while everyday lives of the rural can take diverse shapes formed by the daily routines of the rural population. All three facets constitute the rural totality. The degree of rural spatial coherence reflects "the extent to which rural residents, policy makers, business interests, pressure groups etc. are 'singing from the same hymn sheet'" (Halfacree 2007: 128). Here, Halfacree (2007) distinguishes between three formats and emphasises that each may dynamically change from one to another. A congruent and unified condition indicates that the three facets of rural space are in line and co-constitutive. A contradictory and disjointed state points to tension within/between the elements of rural space. An overall coherence, however, exists. Finally, when internalizing the three facets of rural space completely fails, Halfacree (2007) refers to a chaotic and incoherent condition. Here, spatial contestation takes place. He incorporates this in the concept of trial by space. In rural spaces with a high degree of coherence, trial by space has been successful, while with regard to the other extreme, in chaotic conditions, trial by space has not been resolved (Halfacree 2007).

Although Frisvoll (2012) appreciates Halfacree's (2006, 2007) conceptualization of rural space, he criticizes it for failing to adequately address the subject of power with regard to coherence and trial by space. He thus refers to the significant role of

power in the social construction of rurality. Hence, Frisvoll (2012) extends the Halfacreean approach and applies it to a range of rural tourism cases. He interprets power as entanglements. Thus, power is regarded as embedded into practices, forces, processes and relations. Frisvoll (2012) proposes three hubs as an analytical lens to investigate the nature of power in the production of rural space: an immaterial hub, a material hub and a personal hub. The immaterial hub focuses on the actors' social relations with regard to laws and regulations as well as informal guidelines. The material hub considers the material side of the stakeholders' social relations such as property or money. The personal hub, finally, draws attention to the personal side of the actors including family, career, personal vulnerabilities and similar aspects. The three hubs interrelate with each other and with the three facets of Halfacree's (2006, 2007) model of rurality.

Neither Halfacree (2006, 2007) nor Frisvoll (2012) consider tourists as a group of stakeholders that have an influence on the trial by space in the rural. However, especially in rural tourism hotspots with an immense number of visitors, their attitudes and behaviour certainly have an impact on the production of rural space against the background of sustainability challenges. Thus, this study focuses on tourists and seeks to decode their role of power. Thereby, the three hubs of analysing power shall be used as an analytical tool.

2.2.2 Rural tourism, tourism hotspots in rural regions and sustainability concepts

According to Woods (2011: 94), rural tourism can be defined as "touristic activities that are focused on the consumption of rural landscapes, artefacts, cultures and experiences". Here, rural signifiers such as fresh air, visually pleasing landscapes, historic farm buildings and other forms of countryside capital are of particular

relevance (Woods 2011, Garrod, Wornell & Youell 2006). Moreover, sensory impressions are vital for the rural tourism experience (Woods 2011). Since these are place-related, Bardone & Kaaristo (2014) refer to rural sensescapes.

Since the 1970s tourism has been strategically used as a regeneration and conservation tool in rural areas, many of which face a decline of the agricultural sector which requires new forms of income to be found (Carneiro, Lima & Lavrador Silva 2015, Lane & Kastenholz 2015, Cortes-Vasquez 2017). Thus, rural tourism was interpreted as an alternative to mass tourism such as was, for example, experienced in the coastal regions of the Mediterranean (Bramwell 2004, Essex, Kent & Newnham 2004, Dodds & Butler 2010, Hernández, Suárez-Vega & Santana-Jiménez 2016). In contrast to these formerly rural regions that had undergone rapid and radical change with regard to their landscape and previously rural communities, rural tourism is considered small-scale, ideally controlled by local people who run small family-owned businesses and at best held together by cooperation and integration in order to gain benefits for all involved, as well as being of traditional character and having little impact on nature and rural society. Rural tourism is often interpreted as the “antithesis of mass tourism” (Lane & Kastenholz 2015: 1139). Hence, it is considered an option to sustainably develop rural regions (Essex, Kent & Newnham 2004, Carneiro, Lima & Lavrador Silva 2015, Lane & Kastenholz 2015). Rural tourism is thus often equated with sustainable tourism and regarded as a win-win-situation for local residents, tourists and the environment (Poudel & Nyaupane 2013).

Experiencing rurality has become increasingly popular (Woods 2011). One of the reasons for this is the rising number of internationally recognized iconic sites that have been established in rural regions and intensely marketed for tourism over

recent decades such as Neuschwanstein Castle, Germany or the Cliffs of Moher, Ireland (Paunović & Jovanović 2017, Panzer-Krause 2019).

Many heritage sites in rural regions have become large-scale visitor magnets accompanied by interpretative centres that offer good infrastructure and service facilities and are accessible for everyone. In the countryside, they frequently contrast sharply with the small-scale tourism structures of rural destinations. Although in many cases flagship attractions are state-run and thus do not directly benefit local tourism businesses, they are usually considered a developing engine for rural economies (Reichel, Uriely & Shani 2008, Panzer-Krause 2019, National Trust 2019a).

Yet, recent years have often witnessed high rises in visitor numbers so that these solitary tourism hotspots in rural areas undermine the notion of rural tourism as a small-scale alternative to mass tourism and create numerous sustainability challenges. These include heavy traffic and congestion on inadequate, small rural roads, increased sealing, for instance to create new service and parking facilities or walkways, destruction of fragile sites by careless visitors or overutilization, the diverging interests of the various stakeholders and a lack of adequate consideration of local residents' needs (McAreavey & McDonagh 2010, Healy, van Riper & Boyd 2016).

Despite these challenges and although rural tourism hotspots usually declare their commitment to sustainability, a strong adherence to a traditional growth ethos persists. This is in line with the general sustainable tourism planning that has been debated since the 1990s (Weaver 2012, Hall 2011, Brouder 2017, Gibson 2019). Here, Hall (2011) acknowledges certain positive effects such as the development of indicators and management plans, however, he criticizes the lack of progress concerning real change towards sustainability. Meanwhile, Fletcher (2011)

condemns sustainable tourism as having no sustaining effect at all except for helping to sustain capitalism. With regard to small-scale rural tourism, Mellon & Bramwell (2016) give a more positive outlook and argue that sustainable tourism policies usually co-evolve with and through other community-related policies. However, whether this can be the case for solitary rural tourism hotspots remains unclear. Generally, Jafari (2001) suggests considering the fact that mainstream tourism cannot be fully replaced by small-scale tourism due to large visitor numbers.

Moreover, while there has never been a genuine discussion about significantly reducing or even quitting tourism on a global scale, Moscardo & Murphy (2014) state that contrariwise tourism development is considered a tool for sustainability by international organizations (UN 2012, UNEP & UNWTO 2012). As a consequence of these prevalent opinions which are unlikely to be abandoned in the foreseeable future, there is a need to engage in developing pragmatic green growth-related practices that allow a growing number of tourists to be handled. Hence, Weaver (2012) pleads for strategies to establish sustainable mass tourism destinations.

In order to derive measures for sustainable rural change – which Woods (2012) refers to as one of five key challenges for rural studies – it is not only necessary to recognize the rural tourism industry's perceptions and national governments' development goals, but also to better decode visitors' travel attitudes and their view of rural holidays as they have a significant impact on the production of rural space.

2.2.3 Rural travellers and their influence on the trial by space regarding sustainable rural change

Studies that investigate small-scale rural tourism often portrait the rural traveller as a person who engages in nature-oriented activities like hiking, horse-riding or cycling while on holiday, who seeks cultural experiences and feels a desire to learn about

the destination's environmental context and its local customs (Chen, Nakama & Zhang 2017, Fennell 2015[4]). They are often referred to as ecotourists, green tourists, nature-based tourists or responsible tourists (Buffa 2015). However, Woods (2011) argues that the spectrum of rural tourists can widely range from those focusing on scenic tourism as the most passive level of holidaying to those who actively engage in activities that ensure a physical connection to and interaction with the cultural and natural landscape. Therefore, tourists travelling to rural areas and seeking nature-oriented experiences have to be considered diverse.

Tourists' increasing desire to experience rurality and to consume natural and cultural landscapes is often inspired by their somewhat nostalgic idea of the rural as an idyll. Especially in Western societies, this ideal of the countryside links rural life to harmony with nature. Rurality is associated with environmental intactness and a backward, simple and innocent way of life characterized by traditional values and culture (Woods 2011, Carneiro, Lima & Lavrador Silva 2015, Reichel, Uriely & Shani 2008). Hopkins (1998: 65) describes the countryside as it is idealized and romanticized by tourists as "some other place, a place, spatially, temporally and symbolically distanced from the everyday way of life"[2].

Even though rural tourists are a heterogeneous group, their quest for authenticity when visiting the rural is characteristic (Frisvoll 2013). They seek a more or less active connection with the land and the local people. However, the meanings that tourists associate with the rural are socially constructed and often not congruent with reality (Woods 2011, Lovell & Bull 2017). Tourists' perceptions of the countryside are nonetheless used for marketing purposes, and by turning the landscape, culture and traditions into a commodity, the rural myth is constantly

[2] Schmidt's (2015) findings from a survey amongst tourists in the German Harz mountains confirm this: Schmidt, J. (2015). Nachhaltiger Tourismus im Harz. Die Reisemotivation der Touristen im Harz am Beispiel Braunlage. BA thesis. Hildesheim.

reinforced (Gaffey 2004, Kaul 2012)[3]. Hence, tourists contribute to shaping rurality and thus have an influence on the trial by space. The increasing popularity of food-motivated travel provides a good example. As Everett (2012) asserts, rural food producers who showcase their facilities to visitors adapt to the tourists' expectations of traditional food production and thus perpetuate idealistic rural images.

Kim & Weiler (2013) as well as Carneiro, Lima & Lavrador Silva (2015) and Pérez, Hernández & Campón (2013), amongst others plead for differentiated approaches to rural tourism marketing to reflect the diverse audience of tourism consumers. In addition to the marketing aspect, in this paper it is argued that tourism-segment-specific measures need to be developed and implemented to minimize the negative environmental, socio-cultural and economic impacts of tourist activities at rural tourism hotspots and in their surrounding rural areas.

Yet, a pre-requisite for the segment-specific sustainability governance of the trial by space with regard to rural tourists is to identify groups with similar sustainability orientations. According to Bergin-Seers & Mair (2009), green consumerism can be found in the tourism industry. Here, as in general, it is useful to distinguish between different green shades ranging from dark green to not green at all (Bergin-Seers & Mair 2009, Buffa 2015, Orams 1995). In this way tourists can be classified, according to their green consumer scorecard. However, Bergin-Seers & Mair (2009) point out that very green tourists may not exist as such people would abstain from travelling due to their concerns about its negative impacts. Furthermore, highly inconsistent behaviour can be observed amongst tourists, which accentuates that "not all who claim to have green values translate that into

[3] The findings of a BA thesis realized under the supervision of the author of this habilitation thesis generally back up this statement. Here, both tourists and residents in the Republic of Ireland were asked about their perceptions of the island of Ireland. So far, the perceptions were largely congruent with the images created for marketing purposes: Dormeier, M. (2013). Irland – Wahrnehmungsgeographie, Raumbilder und Imageforschung am Beispiel der "Grünen Insel". BA thesis. Hildesheim.

purchases" (Bergin-Seers & Mair 2009). Additionally, Kim & Weiler (2013) found that many tourists are characterized by attitudinal ambivalence and show, for instance, pro-environmental behaviour in one case but ignore sustainability targets in another. Therefore, Buffa (2015) concludes that the different segments of sustainable tourism are not always easily understood. Moreover, so far most studies that exist on the subject only investigate the sustainability attitudes of ecotourists. On the one hand, they often narrow down the view to environmental issues only, on the other hand, they also disregard the rest of the general population of tourists (do Valle et al. 2012, Buffa 2015).

In their study do Valle et al. (2012) analyse the relationship between tourists' pro-environmental behaviour and a number of socio-demographic variables and psychological determinants. Accordingly, they observe a generally positive relationship between pro-environmental behaviour and rising levels of education and income. However, no well-established effects can be identified concerning age and gender. With regard to psychological determinants it can be stated that there is a strong relationship between pro-environmental behaviour and personal values such as self-respect, and personal norms such as altruism as well as environmental awareness in general.

According to Orams (1995), it is possible to identify three approaches that positively influence tourists' behaviour in natural areas: firstly, physical control measures such as barriers or boardwalks; secondly, direct control measures like permits and charges; and thirdly, indirect control measures, especially with regard to on-site environmental interpretation. Buffa (2015) confirms that especially light-green or softer ecotourists engage with interpretation facilities. Nevertheless, empirical results on the effectiveness of environmental interpretation are inconsistent (Orams 1997, Poudel & Nyaupane 2013). Moscardo & Murphy (2014)

generally see little evidence of any significant change in tourism practice, and Weaver (2012) is convinced that tourists might be concerned about sustainability problems but not prepared to take any personally inconvenient remedial actions.

However, there is a lack of research about an integrated approach to the segment-specific sustainability attitudes of tourists who visit a rural tourism hotspot that contrasts starkly with the adjacent rural area characterized by a small-scale-oriented tourism sector. This paper aims to contribute to a better understanding in order to address sustainability challenges not only on-site but also within the surrounding region by generating a concept of governing the trial by space regarding tourists, and thus to encourage sustainable rural change against the background of a persisting growth ethos.

2.3 Methodology

2.3.1 Case study

The empirical study draws on a case study located in Northern Ireland. The Giant's Causeway and Causeway Coast was designated as a natural UNESCO World Heritage Site in 1986. It stretches three kilometres along the north coast of county Antrim. The site's main attraction consists of the approximately 40,000 regularly patterned tertiary basalt columns that formed during an episode of extensive volcanic activity and were eventually exposed by the sea. The area is closely associated with the legend of the mythical giant Fionn MacCumhail who is said to have created the causeway as a crossing to Scotland (Causeway Coast & Glens Heritage Trust 2012).

Tourism at the Giant's Causeway that includes the consumption of the natural landscape as well as artefacts, culture and experience can be traced back about

300 years. However, it was only with its designation as a World Heritage Site and especially after the 1998 Good Friday Agreement which ended a 30-year-era of civil unrest in Northern Ireland, that the Giant's Causeway became relevant for international tourism and started to develop into an iconic tourism hotspot in the rural (Crawford & Black 2012). With the opening of a new 18.5 million GBP interpretive centre in 2012 visitor numbers rose by 98% within seven years (Table 2.1). Thus, in 2018 the visitor centre attracted more than one million tourists from over 160 countries, and tourist numbers are likely to climb further. Hence, the Giant's Causeway is the most visited tourist attraction in Northern Ireland (Crawford & Black 2012, NISRA 2019, National Trust 2019a). With an estimated 484.26 million GBP of revenue generated at the Giant's Causeway in 2018, tourism has become a key pillar of the regional economy and is considered an engine for the region's development (Causeway Coast & Glens Heritage Trust 2012, National Trust 2019a).

Table 2.1: Visitor numbers at the Giant's Causeway 2011-2018 (source: NISRA 2019).

Year	2011	2012	2013	2014	2015	2016	2017	2018
Number of visitors (thousands)	533	524	754	788	851	944	1,012	1,039

The Giant's Causeway flagship attraction follows a high intensity approach to interpretive rural heritage tourism. Due to the increasing popularity of the site, which is owned and managed by the UK National Trust, it faces capacity problems, especially during the peak season and has therefore adopted a range of visitor management measures to ensure visitor flow and visitor safety while protecting the site and its outstanding universal value. These include the monitoring and coordination of visitor arrivals during the day in order to stretch visiting slots from morning to evening and to avoid visitor rejections due to capacity limits.

Furthermore, the site is facing sustainability challenges such as increased ground sealing caused by the construction of the newly built visitor centre, pathways and the expansion of carpark facilities, and problems associated with intense traffic and congestion (Causeway Coast & Glens Heritage Trust 2012, National Trust 2019a, National Trust 2019b).

2.3.2 Research design

In order to investigate tourists' attitudes towards sustainability and create a snapshot of the current situation, a questionnaire survey was carried out at the main attraction of the Giant's Causeway by means of face-to-face-interviews with 379 tourists on 9th June 2019. To realize a simple random sample the 20 interviewers were instructed to randomly approach a person returning from the Giant's Causeway site approximately every 25 minutes. Thus, the data collection was stretched out throughout the whole day. Since neither detailed data about the entire population of visitors in 2019 nor samples of further current studies are available, a test of representativeness was not possible. Thus, the possibility of sampling bias cannot fully be ruled out. However, the research leader who was present on-site to supervise and give support was reassured by the visitor centre that the chosen date was a typical day within the high season.

Table 2.2: Items measuring tourists' attitudes towards sustainability.

number	item	dimension of sustainbility
1	Have good value for money/travel inexpensively	economy (scale reversed)
2	Eat local and fresh food (regional cuisine)	ecology, socio-culture, economy
3	Stay in ecofriendly-certified accommodations	ecology
4	Meet the local people and get to know their everyday life	socio-culture
5	See the whole island of Ireland in limited time	ecology, economy, socio-culture (scale reversed)
6	Learn about the history of Northern Ireland	socio-culture
7	Spend lots of time outdoors (hiking, cycling, surfing etc.)	ecology

Response format: 1=not important at all, 5=very important

The questions addressed the importance of seven different aspects of the visitors' trips, evaluated from the tourists' point of view and measured on a 5-point Likert scale ranging from "not important at all" (1) to "very important" (5). According to the concept of sustainability, these aspects represent economic, ecological and socio-cultural facets of travelling (Table 2.2). The selection of the items was guided by key findings of different rural tourism studies conducted on the island of Ireland (Saunders 2015, Healy et al. 2016, Cawley & Gillmor 2008, Conway & Cawley 2012). Within the conflict area of economy, ecology and socio-culture, they reflect main sustainability challenges specifically with regard to experiencing rurality. In favour of relatively short interview times for the tourists, further possible sustainability indicators were not included, even though they might have allowed a more nuanced evaluation of the tourists' attitudes towards sustainability.

Furthermore, the survey included questions about the tourists' type of travel, their motivation to visit the Giant's Causeway, their on-site spending, the duration of their trip and the location of their accommodation before and after their visit to the

Giant's Causeway. The visitors were interviewed mostly in English. To reduce language issues with regard to the international audience, questions using a Likert scale as a response option were accompanied by smiley symbols. Although the questions were phrased carefully, the risk of a social desirability bias needs to be acknowledged (Krumpal 2011).

Following a segment-focused approach, the respondents were categorized according to their type of travel into coach trip tourists who travelled on an organized tour either for their whole holiday or only for a day trip, cruise ship tourists who were on a cruise ship holiday and used the port of Belfast as the starting point for a day trip to the Causeway Coast, and individual tourists who planned their trip and travelled independently. Correspondingly, 41% of the interviewed tourists were coach trip tourists, 32% could be identified as individual tourists, and 27% of respondents were on a cruise ship trip. On the day of data collection, two cruise ships docked in Belfast bringing around 4,000 visitors to Northern Ireland (Belfast Harbour 2019a). Due to the expanding cruise ship market in general and the growing numbers of visitors calling at Belfast Harbour on cruise ships specifically (Belfast Harbour 2019b), cruise ship tourists were treated as a separate segment in this study.

In the survey sample females were slightly overrepresented with 56% of respondents. The largest age group interviewed was that of the 51 to 65 year olds, and most of the respondents held an undergraduate college or university degree. The mean trip duration amounted to 11.4 days (Table 2.3).

Table 2.3: Overview of general characteristics of interviewed tourists.

characteristics	sample (N=379)
coach trip tourists:cruise ship tourists:individual tourists	41:27:32
female:male:n/a	56:42:2
biggest age group	51-65 yrs (32%)
biggest educational degree group	college/undergraduate degree (43%)
mean trip duration	11.4 days

Data analysis included generating a sustainability index for each interviewed person. The items 1 and 5 were reversed in the analysis (Table 2.2), so an additive index could be calculated and the respondents could be ranked according to their index value, which can be between 7 and 35. The index was utilized to undertake an analysis of variance (ONEWAY ANOVA) in order to investigate the differences between coach trip tourists, cruise ship tourists and individual trip tourists concerning their travel attitudes. Additionally, selected tourism behaviours on-site and the location of accommodation chosen by the three tourism segments were investigated. Here, a series of coefficients C were calculated.

2.4 Tourists at the Giant's Causeway

2.4.1 Sustainability attitudes

One of the main aims of this study was to analyse whether segment-specific travel attitudes with regard to sustainability issues exist. The empirical findings from the ONEWAY ANOVA reveal that there are significant differences between the three tourist segments investigated $F(2, 295)=4.942$, $p<.05$ (Table 2.4). The mean sustainability scores decrease from the segment of individual trip tourists (mean=26.4, SD=2.716), to the segment of coach trip tourists (mean=25.4,

SD=2.695) to the segment of cruise ship tourists (mean=25.2, SD=3.104). The homogeneity of variances is affirmed by using Levene's test. This shows that equal variances can be assumed (p=.428) (Cardinal & Aitken 2006). Hence, individual trip tourists can be identified as the group with the highest sustainability awareness, while cruise ship tourists are worried about sustainability issues while travelling the least[4].

Table 2.4: Sustainability score by tourist segment.

tourist segment	mean	SD	min.	max.	N	F	*p*
individual trip tourists	26.4	2.716	21	35	86	4.942	.008
coach trip tourists	25.4	2.695	20	32	132		
cruise ship tourists	25.2	3.104	17	32	80		

Tukey post-hoc analysis (Cardinal & Aitken 2006) reveals a significant difference ($p<.05$) between the sustainability scores of the individual trip tourists and the coach trip tourists (1.05550, 95% - CI[1.9748, .1361]) as well as the individual trip tourists and the cruise ship tourists (1.22936, 95% - CI[2.2599, .1989]). There is no significant difference between coach trip tourists and cruise ship tourists. Therefore, it can be assumed that variations between coach trip tourists and cruise ship tourists are negligible. Nevertheless, in this study the three tourist segments will be further analysed separately.

[4] This is confirmed by an MA-thesis that the author of this habilitation thesis supervised. Robra (2019) investigates the sustainability attitudes of German cruise ship tourists in comparison with the German population as a whole. For this purpose, a survey amongst German cruise ship tourists was conducted using a questionnaire that was partly based on a questionnaire utilized in a study of the German Federal Environmental Agency to evaluate sustainability attitudes of the German population. Robra's (2019) study reveals that cruise ship tourists are more negative about sustainability issues than the average German population: Robra, F. (2019). Kreuzfahrten und Nachhaltigkeit. Untersuchung zu Nachhaltigkeitseinstellungen von Kreuzfahrtreisenden. MA-thesis. Hildesheim.

2.4.2 Motivation to visit the Giant's Causeway and selected on-site practices

Studying the motivation to visit a rural tourism hotspot helps to provide information about the tourists' pre-visit knowledge about and their interest in the rural and the specific value of its localized natural and cultural heritage. Investigating whether they participate in a guided tour or not as well as the amount of money spent during the visit are aspects of on-site practices that give insights into the visitors' expectations of their stay and their behaviour at a rural tourism hotspot, and can be linked to sustainability issues.

The analysis of the reasons why tourists come to see the Giant's Causeway reveals that there is a significant moderate relationship between the tourist segment and the motivation to visit the World Heritage Site ($C=0.404$, $p<0.001$). On the one hand it can be seen that cruise ship tourists and coach trip tourists tend to visit the Giant's Causeway simply because it is a 'must see' in Northern Ireland and is part of their travel itinerary organized by tour operators. On the other hand, individual trip tourists come to the Giant's Causeway more often because they are interested in geology or because it was recommended to them by relatives and friends. Hence, it can be assumed that individual trip tourists look into the subject before their visit more profoundly than cruise ship tourists and coach trip tourists. Nevertheless, many individual trip tourists are also motivated to visit because the site is marketed as something special.

Here, power plays a role with reference to the personal hub. Tourists contribute to the trial by space through the motivation that lies behind their visit to the Giant's Causeway. Their motivation is strongly linked to their attitudes towards trip preparation. Uninformed tourists who more often tend to be cruise ship tourists and

coach trip tourists may not appreciate the fragility of such a site as much as tourists who are more prepared to engage with the meaning of a site beforehand, as individual tourists more regularly do. The former tourists may use the site as a 'tramplescape' to stage their ultimate holiday experience rather than carefully sense rurality. This can have a strong influence on the production of rural space as it alters the overall impression of the specific rurality.

Although there is no limitation to the length of stay at the Giant's Causeway, the Giant's Causeway visitor centre estimates the average tourist's visit duration as two hours (National Trust 2019b). While the visitor centre uses this time interval as a basis for calculating capacity limits for the site, it simultaneously affirms the observation of Reichel, Uriely & Shani (2008) that the average duration of stay at such tourism hotspots is relatively short. In order to understand the economic relevance of rural tourism hotspots like the Giant's Causeway, it is essential to analyse the spending patterns of the three different tourist segments under investigation during their stay. Here, on-site spending can be differentiated into the admission fees tourists pay to enter the site and further spending for souvenirs, meals, drinks etc. Taking into account that pre-booked group discount rates of at least 20% apply, as communicated on the Giant's Causeway website, it can be stated that admission rates for group members (i.e. coach trip tourists and cruise ship tourists) are cheaper than those for individual trip tourists. Green admission discounts apply for tourists who arrive by public transport, bicycle or on foot (National Trust 2019a, National Trust 2019c). However, analysis of the survey data shows that this type of discount is hardly used (12 of 379 interviewed visitors). In view of the disadvantages associated with coach trip tourists and cruise ship tourists, cheaper admission rates for these segments are surprising. Here, with reference to the material hub, money as a channel of power has a rather destructive

influence on the production of rural space with regard to sustainable rural change, as individual trip tourists are financially discriminated over the rest although their sustainability awareness is generally higher.

The tourism industry also has high expectations of visitors spending money at tourism hotspots besides their admission fee. At the Giant's Causeway 80% of the craft offered for sale is produced locally (National Trust 2019a). However, all tourists spend rather little money on meals, drinks and souvenirs: excluding admission, the vast majority of the tourists of all three segments spend less than 10 GBP during their stay at the World Heritage Site. There is a significant relationship between the tourist segments and their spending ($C=0.234$, $p<.01$) with a weak tendency for cruise ship tourists to spend the greatest amount of money while coach trip tourists spend the least. Individual trip tourists rank in the middle. Adopting the lens of the material hub again, the tourists' spending patterns reflect their ability and preparedness to support local enterprises such as crafters and thus influence the structure of the rural economy. Even though meals, drinks and souvenirs provide a possibility to sense rurality, here there is no indication of a genuine engagement.

Concerning visitor participation in a guided tour at the Giant's Causeway heritage site, there is a weak significant relationship between the tourist segment and the probability of taking part in an interpersonal tour on-site that provides information about the geology, the site's mythical legend and sustainability aspects interactively ($C=0.273$, $p=.000$). Hence there is a tendency that cruise ship tourists participate in a face-to-face guided tour more often than coach trip tourists. The latter, in turn, join such a tour more often than individual trip tourists who seldom seek to learn about the heritage site by using the option of guided interpretation.

Knowing that especially tourists on an organized itinerary, who are characterized by lower sustainability scores and who are less informed about the

site prior to their visit, take advantage of the possibility to participate in a guided tour, offers the chance to adapt such tours to the needs of these tourist segments with regard to education for sustainable development and sustainable rural change. Yet, while these findings add to the existing literature about guided interpretation in terms of the need for a segmented approach, it has to be taken into consideration that studies about the effectiveness of guided tours regarding the internalization of sustainability issues show mixed results (Orams 1997, Powell & Ham 2008, Poudel & Nyaupane 2013). Nevertheless, applying the immaterial hub, guided tours, especially for cruise ship tourists and coach trip tourists, provides rural tourism hotspots with the opportunity to communicate sustainability guidelines in order to actively govern the production of rural space by tourists.

2.4.3 Trip duration and locations of accommodation

The Giant's Causeway is considered a driver of regional development with an estimated revenue of 484.26 million GBP generated at the site in 2018 (National Trust 2019a). Nevertheless, besides the economic benefits that can be engendered at the sites themselves, UNESCO calls for World Heritage Sites to be managed in such a sustainable way that they have a function in the surrounding communities' everyday life and thus ensure socio-economic benefits for all (UNESCO 2019). The Giant's Causeway and Causeway Coast WHS Management Plan 2013-2019 recognizes the site's "failure to achieve effective community involvement" (Causeway Coast & Glens Heritage Trust 2012: 28) up to the first decade of the 21st century, but also sets out the goal to establish partnerships and enable local communities "to gain greater benefits" in the following decade (Causeway Coast & Glens Heritage Trust 2012: 30).

A sign of successful re-engagement with local communities would be if tourists decide to spend some time, at least one night, within the region in order to further experience and sense rurality by using other tourism services such as accommodation, gastronomy, transport or tourism activities. In order to evaluate this, the data was analysed with regard to the tourists' whole trip duration and the locations of their accommodation for the night before and the night after their visit to the Giant's Causeway. Here, the unit of analysis was the region of the Causeway Coast and Glens district that surrounds the Giant's Causeway and Causeway Coast World Heritage Site. In 2016, it had an area of approximately 2,000 km², 18 settlements and a total population of 143,500 (Causeway Coast and Glens Borough Council 2018).

Table 2.5: Trip duration by tourist segment (Welch's ANOVA).

tourist segment	mean	SD	min.	max.	N	F	*p*
individual trip tourists	8.91	6.008	1	35	101	38.865	.000
coach trip tourists	9.78	6.194	1	35	153		
cruise ship tourists	14.88	5.072	3	40	117		

Trip duration can be used as an indicator to analyse how much time tourists can potentially spend in a rural destination and thus engage in rural tourism activities that benefit the local economies. Empirical findings for tourists at the Giant's Causeway show that the trip duration differs statistically significantly for the different tourist segments according to Welch's $F(2, 236.94)= 38.87$, $p<.001$ (Table 2.5). Here, Games-Howell post-hoc analysis reveals a significant difference between the trip durations of the individual trip tourists and the cruise ship tourists and between the coach trip tourists and the cruise ship tourists. There is no significant difference between individual trip tourists and coach trip tourists. Thus, the holidays of cruise

ship tourists are clearly longer (average duration: 14.9 days) than those of individual trip tourists (average duration: 8.9 days) and coach trip tourists (average duration: 9.8 days). Nevertheless, it needs to be taken into consideration that these tourists spend most of the time on the cruise ships with shore leaves at different ports and usually cover much longer distances including different countries during their trip. Hence, with regard to cruise ship tourists it is unlikely to find potential for rural tourists spending more than a few hours within the region. Considering individual trip tourists and coach trip tourists potential exists, but their choices regarding the location of accommodation require in-depth analysis.

Table 2.6: Accommodation within the Causeway Coast & Glens district by tourist segment (N=359).

		at least one night in the Causeway Coast & Glens district		
		yes	**no**	**TOTAL**
tourist segment	**individual trip tourists**	48	66	114
	coach trip tourists	5	136	141
	cruise ship tourists	0	104	104
	TOTAL	53	306	359

With regard to accommodation, the calculation of coefficient C reveals that there is a moderately significant relationship between the tourist segment and the probability of whether a visitor to the Giant's Causeway stays within the surrounding region for at least one night ($C=.467$, $p<.001$). Not surprisingly, cruise ship tourists do not stay overnight within the region, but return to the cruise ship after their day trip to the Causeway Coast. Only a few coach trip tourists use accommodation in the area. However, even the majority of individual trip tourists do not recognize the Causeway

Coast and Glens district as a tourist destination where it is worth spending a night (Table 2.6).

The locations chosen by individual trip tourists and coach trip tourists before and after visiting the Giant's Causeway rather show that they prefer to stay in bigger cities such as Derry/Londonderry (65 km), Belfast (95 km) or even Dublin (265 km) (Table 7). Thus, a high tendency towards city-based rural tourism can be identified in both segments. Nevertheless, there is a greater propensity for individual trip tourists to use accommodation within the Causeway Coast & Glens district (C=.434, p<.001, see also Table 2.7). Thus, this segment is more open for a kind of tourism which benefits local tourism providers.

Table 2.7: Locations of tourists' accommodation before and after their visit to the Giant's Causeway (excluding cruise ship tourists) (N=265).

		CC&Glens	other rural regions in NI	Belfast/ (London-) Derry	Dublin	other	TOTAL
tourist segment	**individual trip tourists**	41	4	44	15	9	113
	coach trip tourists	4	7	101	37	3	152
	TOTAL	45	11	145	52	12	265

CC&Glens = Causeway Coast & Glens district

With regard to the accommodation choices of the vast majority of visitors to the Giant's Causeway and thus the limited amount of time these tourists seem to spend within the surrounding region, it needs to be acknowledged that there is still great potential for the management of the tourism hotspot to strengthen its engagement with the local community. However, in view of the trend towards city-based tourism, prospects for success might be rather limited. Again, the tourists' power over the production of rural space, here in a wider regional context, is at play. With reference

to the material hub – represented as money flows – and the personal hub – shown as the tourists' preferred accommodation locations – rural travellers visiting the Giant's Causeway rather hamper an easy integration of the rural tourism hotspot into the surrounding region.

2.5 Conclusion and recommendations

Using the Giant's Causeway as a case study, this paper aimed to decode the dynamics of rural tourism shaped by tourism hotspots in the countryside by focusing on the tourists' power to influence the production of rural space which is interpreted as both socially constructed and materialized (Cloke 2006, Halfacree 2006, 2007, Frisvoll 2012). The development of rural tourism hotspots as large-scale flagship attractions is often in stark contrast to the small-scale orientation of rural tourism that can usually be found in their surroundings. By means of a segment-specific sustainability approach with regard to tourists' sustainability attitudes on holidays, the goal of this study was to derive measures for sustainable rural change by investigating ways in which the rural idyll as perceived by tourists and sustainability in rural regions are contested.

The study revealed that the trial by space in the Giant's Causeway region is ongoing as the travel attitudes of cruise ship tourists, and to a lesser extent of coach trip tourists, are hardly in line with the expectations of regional tourism providers. A contradictory state of rural spatial coherence exists since the tourists' influence on the production of rural space is strong.

However, as long as mass tourism at rural heritage sites is favoured over low-intensity approaches (Healy, van Riper & Boyd 2016), green growth measures that cover ecological, economic and socio-cultural issues are the only option that can be drawn upon (Weaver 2012). Against this background and with a view to

collaborative tourism, a rural tourism hotspot such as the Giant's Causeway should function as a rural hub that coordinates and promotes regional tourism providers and initiatives in a network of rural tourism actors with established sustainability criteria for membership eligibility (Panzer-Krause 2017, Panzer-Krause 2019). Segment-specific sustainability strategies are then desirable due to the tourists' differing attitudes towards sustainability. Here the study revealed that the mean sustainability scores decrease from individual trip tourists to coach trip tourists to cruise ship tourists. The hypothesis formulated at the outset of this study was thus confirmed.

Hence individual trip tourists represent the tourist segment with the highest sustainability awareness. They are amenable for conventional rural tourism. Consequently, a rural tourism hotspot sustainability strategy for this tourist segment may include easy and bundled access to information, guidance and booking services with regard to nearby rural tourism providers such as accommodation, gastronomy, transport and tourism activities both in the planning stage of their visit and on-site.

On the other hand, coach trip tourists and especially cruise ship tourists are characterized by lower sustainability scores. They are not likely to spend much time within the area. Here, a concentration strategy at a rural tourism hotspot should be followed in order to avoid destruction and protect and conserve the natural and cultural rural landscape by employing rigorous measures in the most vulnerable areas on-site; these may include capacity limits, barriers and specific walkways that have to be used to move around the site (Weaver 2012). Although coach trip tourists and cruise ship tourists are less prepared for their visit to a rural heritage site, they show a greater interest in guided face-to-face interpretation than individual trip tourists and are, at least with regard to cruise ship tourists more willing to consume.

Therefore, in order to take account for the lower sustainability scores of these tourist segments as well as their reluctance to partake in conventional rural tourism that would benefit regional tourism providers, admission fees for members of organized groups should be, contrary to current practice, higher than those of individual trip tourists. Bearing in mind the sustainability challenges that accompany these two tourist segments, discounts on admission fees should be avoided. Additional earnings can be directed to conservation projects instead. Furthermore, packaged prices for admission and interactive guided tours on-site that include elements of education for sustainable development and sustainable rural change are advisable to further encourage participation of coach trip tourists and cruise ship tourists.

Moreover, with a view to the trend towards city-based rural tourism, especially for the segment of cruise ship tourists, but also for coach trip tourists who travel on a day trip, the regional network of tourism providers that forms around a rural tourism hotspot can offer tour operating services from bigger cities including transport to the rural tourism hotspot, a local guide on board, and optionally further activities and gastronomy. The sustainability ethics incorporated by the rural tourism network that forms around a rural tourism hotspot could thus be communicated more intensely while regional tourism providers benefit. This would allow genuine collaborative tourism, which can reduce social conflict within the rural communities and allow natural and cultural heritage sites influenced by mass tourism to develop a function in the surrounding communities' everyday life, as demanded by UNESCO (2019).

The rural idyll is to be considered as the tourists' image of authentic rurality that is closely linked to the concept of sustainability. However, this image is constantly shaped and re-shaped by tourists and not necessarily congruent with reality. Just as natural and cultural landscapes undergo changes and adaptations, so too does the image of the rural idyll. Yet, the pace of the change affecting real rurality may

greatly differ from the pace of change of visitors' perceptions of it. Tendencies for overtourism at a rural tourism hotspot and the sustainability challenges involved can change travellers' images of its natural and cultural landscape. However, sustainability issues are likely to arise before the visitors' perceptions of the rural adapt. Therefore, measures to avoid a loss of the rural idyll have to be seized well before this possibility has arrived in the tourists' imaginations.

This study provides a snapshot of the sustainability attitudes of tourists visiting a tourism hotspot in the countryside that is characterized by mass tourism. While methodological limitations due to the highly dynamic visitors' composition at such a site need to be acknowledged, further research is recommended with regard to visitors' general attitudinal change and the effects of segment-specific sustainability measures realized by rural tourism hotspots. Also, the transformational potential for moving towards degrowth approaches at natural and cultural heritage sites influenced by mass tourism should be evaluated. Finally, more insight into tourists' changing images of the countryside as a rural idyll is needed.

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3 Un-locking unsustainable tourism destination paths: the role of voluntary compliance of tourism businesses with sustainability certification on the island of Rügen

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Abstract

During the last 150 years the island of Rügen has developed into a mass tourism destination resulting in a continuing pressure on the island's environment and cultural heritage. Highlighting the need for a stronger consideration of ecological and social-cultural aspects of development in economic geography research, this paper uses an evolutionary approach to identify lock-ins in the Rügen tourism industry that hamper a sustainability transition and analyzes the role voluntary compliance of tourism businesses with sustainability certification can play to break away from these development paths. Focusing on the concepts of green growth and degrowth the paper provides indications that particularly in protected areas that are confronted with acceptance problems, an efficiency-driven green growth approach guided by a spirit of sustainability can be the basis for moving towards more sustainable modes of development. However, the study raises the question of time frames for regional sustainability transitions and the parameters these depend on.

Keywords: degrowth; evolutionary approach; green economy; lock-in; sustainability certification; sustainable tourism

Zusammenfassung

In den letzten 150 Jahre entwickelte sich die Insel Rügen zu einer Destination des Massentourismus, wobei sich der Druck auf die Umwelt und das kulturelle Erbe der Insel zunehmend verschärft hat. Diese Studie plädiert für eine stärkere Berücksichtigung ökologischer und sozio-kultureller Aspekte von Entwicklung in der wirtschaftsgeographischen Forschung. Sie nutzt einen evolutionären Ansatz, um Lock-ins der Rügenschen Tourismusindustrie aufzudecken, die eine Nachhaltigkeitstransformation behindern und analysiert die Rolle, welche freiwillige Nachhaltigkeitszertifizierungen von Tourismusunternehmen spielen, um diese zu überwinden. Aufbauend auf den Konzepten von green growth und degrowth zeigt die Studie, dass insbesondere in Schutzgebieten, die mit Akzeptanzproblemen zu kämpfen haben, ein effizienzorientierter green growth-Ansatz die Basis für die Etablierung nachhaltigerer Entwicklungspfade bilden kann. Allerdings wirft die Studie auch die Frage nach der Dauer regionaler Nachhaltigkeitstransformationen und entsprechenden Einflussmöglichkeiten auf.

Schlüsselworter: Degrowth; evolutionärer Ansatz; Green Economy; Lock-in; nachhaltiger Tourismus; Nachhaltigkeitszertifizierung

3.1 Introduction

While most research in the field of economic geography continues to deal exclusively with the influence of space and place on the economic performance of enterprises and the economic growth of regions, during the last few years an increasing number of scholars have started to consider ecological and social-cultural aspects, too, and have thus addressed issues of sustainability (Braun et al. 2003, Pröbstl-Haider & Haider 2014, Schulz & Bailey 2014, Klagge & Reimer 2016).

Sustainability as a concept, however, is characterized by a huge diversity of approaches (Robinson 2004, Faber et al. 2005). Nevertheless, in the literature, including that of economic geography, the main perspectives have shifted from a static to a dynamic as well as from an absolute to a relative concept (Faber et al. 2005). Yet, with regard to the limited results achieved so far, Robinson (2004: 370) has raised the question of whether "trying to achieve sustainable development amounts to trying to square the circle, in the sense of trying to achieve the impossible".

The discussion concerning strategies on how to realize more sustainable modes of development focuses on green growth and degrowth debates. On the one hand the concept of green growth expresses the need to delink economic growth and environmental degradation. It identifies technological innovations as an option to utilize natural resources more efficiently and substitute natural capital for other forms of capital (Stiglitz 1997, Pepper 1998, von Weizäcker et al. 2009). On the other hand, degrowth approaches argue that there is an insuperable conflict between economic growth and environmental protection. Thus, sufficiency-driven strategies based on avoidance and abstinence of consumption are recognized as the only possible way to implement sustainable development (Jackson 2009, Latouche 2010, Paech 2012).

Economic geographers who have turned their research interests to issues of sustainability mostly deal with the influence of political regulations on a certain business sector in a spatial context. While losing sight of businesses' voluntary compliance with sustainability criteria, their preferred fields of study continue to be industrial sectors such as the energy industry (Klagge & Reimer 2016). Sustainable tourism as a service sector, however, is a rather neglected field of research. With the exception of a study conducted by Strambach & Surmeier (2016) discussing the

evolutionary trajectories of tourism standards, theoretically based economic geographical perspectives on sustainable tourism are hardly existent.

Therefore, applying an evolutionary approach, this paper seeks to analyze what role tourism companies voluntarily complying with sustainability certification schemes can play in the process of un-locking unsustainable development paths in order to green the tourism industry. The paper focuses on the concepts of green growth and degrowth and evaluates promising strategies in order to establish more sustainable modes of tourism. Thereby the paper's rationale is based on a case study realized on the island of Rügen, which is one of the most popular tourist destinations in Germany.

The paper is structured in the following way: In Section 3.2, the evolutionary approach in geographical research is discussed against the background of green growth and degrowth strategies as well as sustainability certification to un-lock unsustainable tourism paths. The methodology of the study is then presented in Section 3.3. Section 3.4 re-constructs the development of the tourism industry on Rügen and identifies lock-ins with regard to the promotion of sustainability. It also discusses emerging sustainability efforts that go beyond political regulation by quantifying certified tourism businesses voluntarily engaging in sustainable tourism. In Section 3.5, the partner initiative of the Biosphere Reserve Southeast Rügen, which is the most significant certification scheme on the island in terms of membership, is investigated by looking closely at its evolutionary context, and by unraveling the partner businesses' sustainability motivations and the initiative's potential to contribute to a transformation of the Rügen tourism industry towards more sustainability. Section 3.6 draws a final conclusion.

3.2 Strategies to un-lock unsustainable tourism destination paths

3.2.1 The evolutionary approach in geographical research

Much of the literature has acknowledged that sustainability must be interpreted as a process in which a permanent adaption to changing environmental, economic and social-cultural frame conditions is crucial (Faber et al. 2005). Hence, sustainability cannot be regarded as a final status that, once achieved, symbolizes an end of a need for human concern and effort. Nevertheless, in order to be able to measure the sustainability performance of an entity, numerous studies have emerged during the last two decades identifying sustainability indicators for impact measurement (Gallego-Álvarez et al. 2015). This has also been the case in sustainable tourism research (Torres-Delgado & Saarinen 2014, Marzo-Navarro et al. 2015). However, there is a lack of studies adopting an evolutionary perspective in order to investigate how tourism destinations' pathways have developed in a sustainably unfavorable way, if sustainability certification schemes might be able to open up new trajectories for more sustainable modes of development, and how these schemes develop in terms of membership, certification criteria and consumer acceptance. This paper's intent is to make a contribution to this underexplored field of research by focusing on the voluntary compliance with sustainability certification of tourism businesses on the island of Rügen and its influence on the development path of the island's tourism industry.

In economic geography research, approaches of path dependency have gained much attention since the 1990s (Cooke 1995, Maskell & Malmberg 1999, Martin & Sunley 2006). Based on core arguments from the field of evolutionary economics these studies point out that economic systems on all spatial levels have a tendency

to change slowly over time whereby “the direction of this change is strongly shaped by past experiences, decisions, practices, relationships and accidents of history” (Gertler 2005: 24). While knowledge-based regional innovation systems are seen as engines for regional economic growth, the decline of old industrial areas is explained by institutional and cultural lock-ins (Grabher 1993, Hassink 2005). Concepts like the learning region that involve knowledge transfers from more successful regions were developed in order to assist firms and policy makers to un-lock unfavorable path dependencies (Gertler 2005). In this context, Maskell & Malmberg (1999) refer to a region’s ability to ‘un-learn’ in order to eliminate practices and institutions that hamper further development.

Brouder (2014) as well as Sanz-Ibáñez & Clavé (2015) call for evolutionary approaches in tourism studies. While the intention of early evolutionary models in geographical tourism research (Butler 1980) was to generalize the dynamics of tourism destinations, contemporary scholars point to the need to analyze stakeholder interactions and destination organization (Sanz-Ibáñez & Clavé 2015). And indeed, in this young field of research a few papers have emerged in recent years dealing with the path dependencies of destinations and options on how to break away from unfavorable development trajectories (Halkier & Therkelsen 2013, Gill & Williams 2014). This paper seeks to contribute to this body of evolutionary literature, explicitly focusing on possibilities to un-lock the unsustainable development paths of tourism destinations.

3.2.2 Sustainable tourism and sustainability certification

The tourism industry is regarded as one of the world’s leading 21st century industries, with annual growth rates of 4% or more since 2010 concerning international tourist arrivals (UNWTO 2016). It comprises numerous sub-sectors

such as gastronomy and food production, accommodation, activities and transport, and provides more than 220 million jobs worldwide (Saarinen et al. 2011). While its economic relevance is enormous, its ecological and social impacts have often been dramatically negative and cumulative during the last decades. At the same time the industry's economic well-being strongly depends on environmental intactness and a varied social-cultural heritage (Holden 2008[2]; Nicholls & Kang 2012). For this reason, sustainable tourism has become a major paradigm, both in tourism research and in tourism development practices since the late 1980s (Bramwell & Lane 1993, Hardy et al. 2002, Font & Harris 2004, Saarinen et al. 2011), whereat the discourse was catalyzed by the release of the Brundtland Report in 1987 and unfolded alongside, albeit separately, to the general debate about sustainable development (Ruhanen et al. 2015).

During the last 30 years of academic research in the field of sustainable tourism a huge body of literature of about 5,000 published works has emerged with an exponential growth in numbers. With regard to content the literature has shifted from definitional and conceptual works to empirically based studies, which shows the maturation of this field of research (Ruhanen et al. 2015). During the 1990s the focus of the academic research was strongly directed towards eco-nature-based tourism. This body of literature intensely criticized the phenomenon of mass tourism and advocated small-scale tourism instead. However, eco-nature-based tourism is not clearly in line with the concept of sustainable tourism as it reduces challenges in tourism to an ecological problem (Collins 1999).

With the start of the new millennium research was increasingly characterized by more holistic perspectives on sustainable tourism that included all three dimensions of the concept of sustainability and also considered mass tourism as a legitimate form of tourism (Weaver 2012, Ruhanen et al. 2015). Nevertheless, environmentally

oriented investigations including papers that focus on ecotourism or protected areas have received far more attention than social-cultural studies (Bodanowicz 2005, Pröbstl-Haider & Haider 2014). Also, during the last few years climate change has conquered the agenda of sustainable tourism research and thus has created a tie back to the environmentally-driven approach of the 1990s (Hanna et al. 2016, Scott et al. 2016). Overall, it is widely criticized that academic concepts have mostly failed to be transferred to applied tourism practices (Sharpley 2000, Hall 2011).

Research on sustainable tourism has not created direct links to the discourse about efficiency-driven versus sufficiency-driven sustainability approaches. However, the eco-nature-based tourism research of the 1990s that expressed harsh criticism of the phenomenon of mass tourism and questioned the necessity for everyone to travel can be characterized as sufficiency-driven. In contrast, the body of literature that has emerged since the turn of the century has not seriously questioned growth in the tourism industry and thus orientates towards the efficiency-driven idea. Additionally, the 2017 International Year of Sustainable Tourism for Development declared by the United Nations promotes sustainable tourism as a catalyst for development and positive change and thus supports the efficiency-driven perspective for tourism practices (UN General Assembly 2015).

Since the early 1990s formalized certification schemes have been established in the tourism industry in order to reduce the negative ecological and social-cultural externalities often produced by tourism and to enable tourism businesses to show their environmental and social-cultural commitment to customers. However, while more than 100 certification schemes now exist within the tourism sector worldwide, most of them focus exclusively on ecological criteria (Esparon et al. 2014, Ayuso 2007). Thus, such voluntary tools for the private sector are synonymously referred

to by many scholars as eco-certifications, eco-labels or more generally Environmental Management Systems (EMS).

Sustainability certification schemes can be characterized as either more achievement-oriented or more process-oriented. While achievement-oriented certification schemes request compliance to specific criteria, process-oriented certification schemes emphasize the improvement an organization shows over a certain period of time. Thus, process-oriented certifications can also be granted to tourism companies that do not meet certain criteria, which increases the risk of greenwashing. The most popular sustainability certification schemes in the German tourism sector are Viabono with around 300 issued certificates[5], DEHOGA Umweltcheck with nearly 100 issued certificates, and TourCert with approximately 200 issued certificates, mostly in Germany and Latin America (Viabono 2016, DEHOGA 2016, TourCert 2016). Moreover, Eco-Camping, a certification scheme specialized on camping sites, has 220 certified entities in several European countries including Germany (Ecocamping 2016), and the EU Ecolabel has registered 11 German accommodation facilities and camping sites in its database (RAL 2016). Furthermore, EMAS as a Europe-wide and ISO 14001 as an internationally recognized general certification for environmental management are also suitable for application to the tourism sector. While Viabono, DEHOGA

[5] Two BA-theses supervised by the author of this habilitation thesis analyse the Viabono certification in two different German travel destinations. Harries (2017) conducts both a standardized survey amongst tourists staying in Viabono certified accommodations and qualitative interviews with managers of such accommodations. The findings show that the Viabono seal is hardly relevant regarding the tourists' choice of accommodation. However, tourists emphasize that organic and regionally sourced catering is important for them. Nevertheless, the Viabono certification helps accommodation managers to enhance their sustainability engagement: Harries, V. (2017). Viabono – Ein relevantes Umweltsiegel für den nachhaltigen Tourismus? Betrachtung der Relevanz des Umweltsiegels „Viabono" für den nachhaltigen Tourismus in der Reiseregion Lüneburger Heide. BA thesis. Hildesheim.

Using qualitative interviews with managers and staff of Viabono certified accommodations in the Eifel region, Sielaff (2018) reveals that accommodation facilities there primarily seek Viabono certification as a means of certification as an official 'Nationalpark Gastgeber' (National Park hosts), a much better known regional trademark: Sielaff, L. (2018). Die Bedeutung der Viabono-Nachhaltigkeitszertifizierung für die Betriebe. Durchführung qualitativer Interviews in zertifizierten Unternehmen im Bereich des Nationalparks Eifel. BA thesis. Hildesheim.

Umweltcheck, EU Ecolabel and EMAS are achievement-oriented, Eco-Camping and ISO 14001 are process-oriented. When considering the numbers of certified businesses and comparing them to the total number of 226,196 tourism businesses of the accommodation and gastronomy sectors in Germany alone (Destatis 2016a), it becomes apparent that sustainability certification in the tourism sector is not well-established at all but is rather acutely exceptional.

In the literature a growing number of studies dealing with eco-certification in the tourism sector can be identified. Thereby, various papers address the consumer perceptions of certification by exploring travelers' green attitudes and behaviors (Fairweather et al. 2005, Susskind & Verma 2011, Karlsson & Dolnicar 2016). Most scholars agree that the proliferation of eco-certification schemes has resulted in a great deal of intransparency, confusing customers and impeding them from making well-informed environmentally ethical decisions (Medina 2005, Esparon et al. 2014). Against this background it is not surprising that there has been but little progress regarding the enhancement of "green consumerism" despite the fact that environmental awareness in tourism has generally increased (Leslie 2012, Miao & Wei 2013, McKercher et al. 2010). As sustainability certification schemes typically focus on the tourism providers and fail to regard the tourists' particular travel behavior Job (1996) developed the travel star (Reisestern) as an analytical tool based on five sets of indicators which reflect the three dimensions of sustainability. It aims at enabling tourists to evaluate to what extend a planned journey can be considered sustainable (Job 1996, Becker et al. 1996). However, since it is difficult to access reliable data the practical usability of this theoretical model for travelers is still limited.

Another important subject of analysis is whether certification schemes have a positive impact on the ecological performance of tourism enterprises. While a

number of papers agree on a positive connection between eco-certification and environmental benefits (Black & Cabtree 2007, Font & Bukley 2001) and thus articulate a need for more certification, other scholars question this argument (Zielinski & Botero 2015, Pizam 2009, Chen et al. 2005). For example, Chen et al. (2005: 67) show in a study of German hoteliers' efforts to prevent environmental degradation "that accredited and non-accredited hotel properties show only a few differences in environmentally sound practices". Instead, Chen et al. (2005: 67) argue that "for many hotels promoting a greening image is undoubtedly seen as a means of increasing market segment". Other identified incentives to adopt formalized eco-certification by providers of tourism products are an altruistic or personal concern for the environment or the tourism businesses' response to customer demands (Bodanowicz 2005, Ayuso 2007). While these studies' focal point is the ecological performance of specific tourism businesses in the global north, Strambach & Surmeier (2016) assess the spatial diffusion of sustainability standards between the global north and the global south. However, none of the papers analyze whether sustainability certification schemes have the potential to initiate wider processes of greening a whole region's tourism industry. This paper seeks to explore this question.

3.3 Methodology

As to the best of the author's knowledge no study yet exists that broaches the issue of the potential of sustainability certification on the island of Rügen, an explorative evolutionary research design was applied, whereby the methodological design of the study was threefold.

First, the evolution of Rügen's tourism industry was re-constructed by means of desk and documentary research as well as an analysis of statistical data. This

included literature about the development of the historical seaside resorts on Rügen as well as the evaluation of tourism data provided by the statistical office of Mecklenburg-Western Pomerania. Thus, different stages of growth-induced path dependency and, as far as re-constructible, relevant negative ecological and social-cultural effects concerning unfavorable developments in terms of sustainability were identified.

Second, the tourism businesses on Rügen that voluntarily comply with sustainability certification schemes were quantified, again with the help of desk and documentary research. Hence, the websites and other documents of the operators of the most important certification schemes identified in Section 3.2 were analyzed to pinpoint members located on the island of Rügen as of October 2016. This included investigation of all businesses of the core tourism value chain including gastronomy, accommodation, transport and activities.

Third, the island's most significant sustainability certification scheme in terms of membership, the partner initiative of the Biosphere Reserve Southeast Rügen, was analyzed by re-constructing its formation process and evaluating its characteristics and hitherto performance. Official documents provided by the biosphere reserve's administration were thus investigated and 25 semi-structured interviews with partner businesses and the coordinator of the initiative conducted during September and November 2016 were analyzed. The interviews lasted between 11 and 58 minutes. For the partner businesses they mainly included questions about their motivation to join the initiative, the individual criteria for certification and the certification process as experienced from the businesses' point of view, the partners' engagement in any of the initiative's committees or events and activities, and the partners' opinion about the prospects of the initiative in the coming years. The interview with the initiative's coordinator focused on the administrative side of the partner initiative. The

interviews were audio-recorded, transcribed and evaluated by means of Mayring's (2015[12]) qualitative content analysis.

3.4 The development of the tourism industry on Rügen and the emergence of sustainability efforts beyond political regulation

3.4.1 From the origins of tourism to the establishment of mass tourism in the Socialist era

Following the example of English seaside resorts of the 18th century, which ascribed a curative effect to stays at the sea and bathing in ocean water, the first seaside resort on Rügen was established in 1816 in Putbus and nearby Lauterbach in the southeast of the island. In the following years it became a place of noble tourism, which was visited by German aristocrats and the upper classes (Zschauer 2004, Hüls 1999[2], Theel 2002). However, in the middle of the 19th century, the medical motive for coming to Rügen was replaced by the travelers' desire for recreation and experiences of nature. Thus, beach holidays became more important and, consequently, places in the northern part of the island of Rügen located at the open sea and offering beautiful beaches attracted tourist development initiatives, while Putbus-Lauterbach's relevance decreased due to its rather disadvantageous bay location (Zschauer 2004, Theel 2002).

The first tourist boom on the island of Rügen can be dated to between 1870 and 1914. The seaside resorts of Sassnitz and later especially Binz, Sellin and to a smaller extent Göhren benefitted strongly from this development in an economic sense. Often on behalf of external investors, particularly in Binz and Sellin, hotels, private villas and societal buildings were constructed in an architectural style known

as Bäderarchitektur. They massively changed the former fishing villages (Zschauer 2004). In Binz, the first maximum of guest arrivals was reached in 1911 when 25,678 holiday makers were registered (Gehrke 1993).

After World War I, tourism recovered only slowly in the 1920s, but experienced a second maximum just before the world economic crisis (Hüls 1999[2]). In the 1930s, the National Socialist Regime planned five 'Kraft durch Freude' (KdF) seaside resorts at the German North Sea and Baltic Sea, one of them near Prora in the northwest of Binz. An accommodation complex built parallel to the beach with a length of 7 km for a total of 20,000 guests was envisaged (Rostock & Zadniček 2012[9]). Although only 4.5 km of the Prora resort were completed before the beginning of World War II, this project must be regarded as a strategic orientation towards mass tourism on Rügen. It also resulted in an immense intervention in the island's landscape (Helfer 1993, Spittler 1996, Theel 2002).

Although Prora was turned into a military zone in the GDR, Rügen's tourism industry was further developed towards mass tourism in the Socialist era, primarily by the federation of trade unions FDGB. Subsequently, the island became the GDR's most important holiday destination (Rostock & Zadniček 2012[9], Gehrke 1993). In the 1960s and 1970s accommodation capacities were highly expanded by setting up a number of camping grounds and erecting a holiday complex with a total of 3,800 beds in Binz. Thus, the annual number of tourists increased from 150,000 in 1957 to 915,000 in 1989, each generally staying for an FDGB organized holiday of 14 days (Gehrke 1993, Helfer 1993, Spittler 1996). Thus, from the 1950s Rügen had an image of being hopelessly overcrowded by tourists (Spittler 1996). Consequently, the island turned from a rather elitist to a mass tourism destination, which resulted in environmental destruction such as air and water pollution, litter pollution, splinter development and coastal erosion. Yet, in contrast to many West-

German coastal regions, environmental disturbance was relatively small due to a lack of capital in the GDR which limited the realization of bigger tourism projects (Helfer 1993).

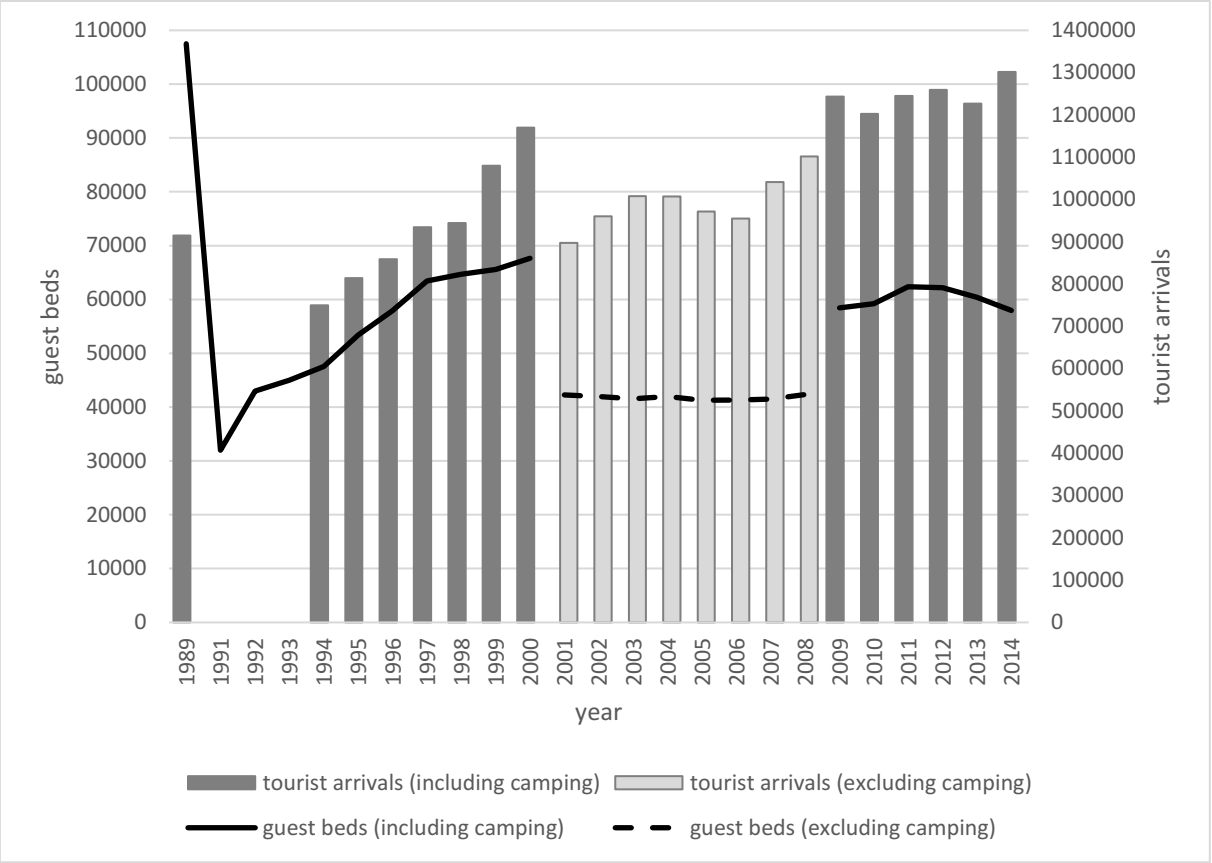
3.4.2 Tourism development since German reunification

In the course of German reunification and the opening of the Rügen tourism sector to the market economy, there was a great risk that the uniqueness of Rügen's nature and landscapes would suffer from short-term economic and political interests going hand-in-hand with large-scale projects to create bed capacities, thus enforcing splinter development and landscape destruction. At the same time many external investors showed great interest in the island (Helfer 1993). Against this background, in 1990, in the course of German reunification, a historical decision was made to set up two national parks and one biosphere reserve on Rügen as part of the so-called National Park Program, these areas were then approved by West-German legislation and created the basis for environmental conservation on the island (Knapp 2013[2]). This resulted in the creation of the National Park Vorpommersche Boddenlandschaft with a total size of 786 sq. (although only a small part belongs to Rügen), Jasmund National Park (30.7 sq.) and the Biosphere Reserve Southeast Rügen with a size of 228 sq. (BfN 2016, BfN 2017). While in national parks nature is supposed to be left to its own natural dynamics and human influence is to be minimized as much as possible, biosphere reserves aim at harmonizing environmental conservation and human economic and social activities. Thus, they are model regions for sustainable development.

In addition to the designation of these nature reserves, a 1993 tourism concept suggested the island's tourism sector should focus on quality rather than quantity by reducing capacities instead of extending them and upgrading tourism

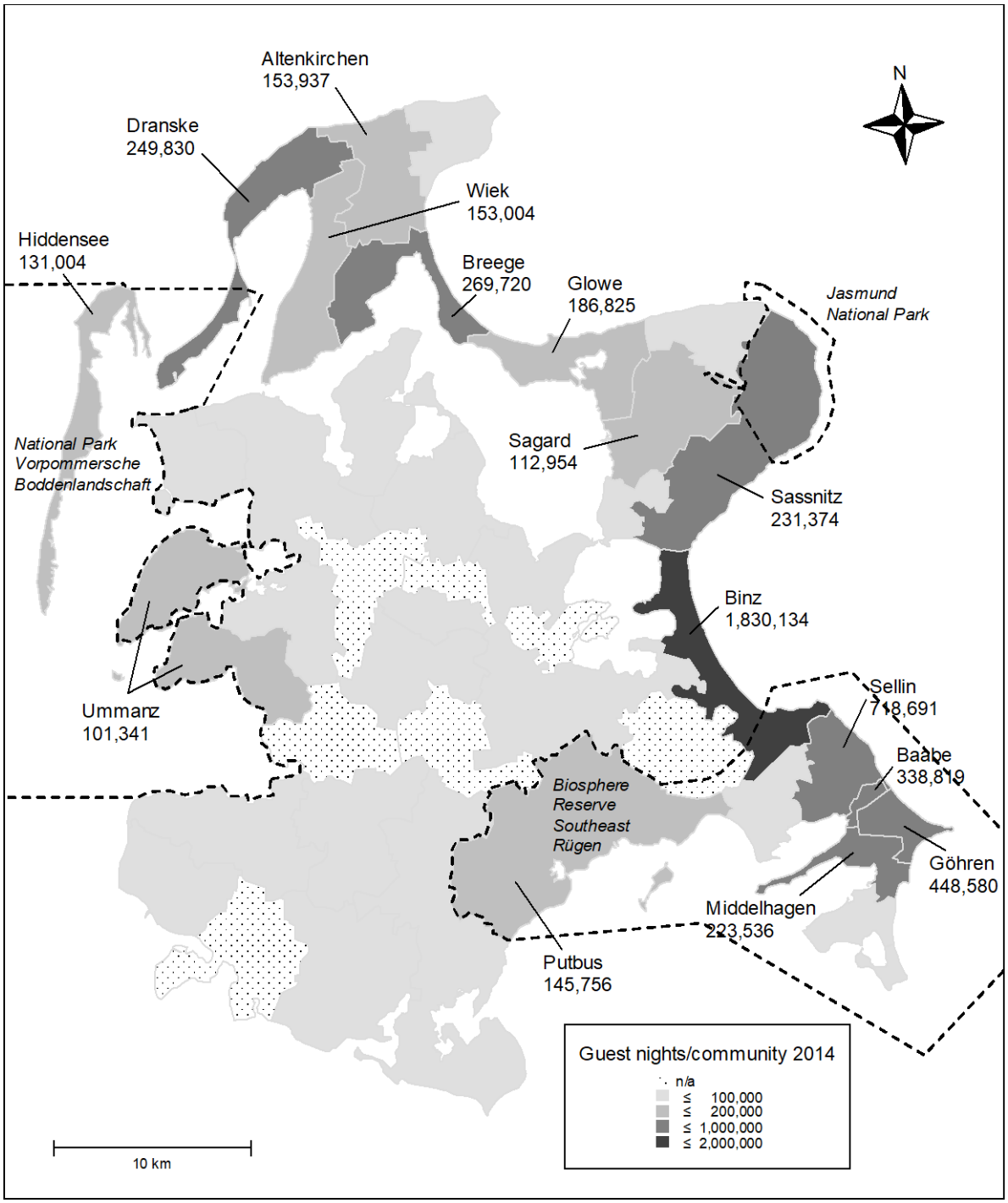
infrastructure (Freyer 1993). Nevertheless, the years after German reunification were characterized by a "second Wilhelminian time"[6] (Jung 1998: 53) with a number of large-scale projects being realized such as the holiday resort 'Dünenpark' in Binz, and the big Bäderarchitektur holiday village and the indoor adventure pool in Sellin. Many non-locals participated in re-shaping the island (Zschauer 2004, Rostock & Zadniček 2012[9]). Thus, strong tensions developed between big parts of the business sector willing to expand tourism activities on the one hand and nature conservation authorities which tried to enforce their particular restrictions and were supported by environmental protection groups on the other hand. This resulted in an atmosphere of confrontation and mistrust (Theel 2002, Knapp 2013[2]). Pro-tourism growth actors argued that nature conservation would hinder economic development, which was considered inacceptable, especially against the background of high unemployment rates on the island of Rügen. As many of these actors were active in local politics, planning permits were often issued, even when, due to the size or the character of a project, a higher state-level mandate was compulsory (Bramwell & Meyer 2007). Although the federal level protected-area organizations, the Nationalparkamt and Biosphärenreservatsamt, are regarded as influential players on the island, they have continuously faced acceptance problems. One result of this conflict of antagonistic interests is the inability to establish a long-proposed and politically agreed-upon nature park, a less strict category of protected areas, that would cover the whole island of Rügen (Lichtenberg 2003, Bramwell & Meyer 2007).

[6] Orginial quotation: „zweite Gründerzeit" (Jung 1998: 53).



Source: data provided by Helfer (1993); Theel (2002); Statistik-MV (2016).

Fig. 3.1: Guest beds and tourist arrivals on Rügen between 1989 and 2014.



Source: data provided by Statistik-MV (2016).

Fig. 3. 2: Guest nights in Rügen‘s communities (2014) (communities with more than 100,000 guest nights are labelled).

Nevertheless, in total the number of guest beds on Rügen has fallen from approximately 107,500 in the 1980s to about 58,000 in 2014. But at the same time

the number of tourist arrivals increased from 915,000 in 1989 to more than 1.3 million in 2014 (Figure 3.1), while the average duration of stay significantly fell from 14 days in 1989 to 4.6 days in 2014. Since the early 1990s, the number of guest nights steadily increased from 3.5 million in 1994 up to 6.58 million in 2000, and then fell slightly to 6.02 million guest nights in 2014 (Helfer 1993, Theel 2002, Statistik-MV 2016). Most guest nights were registered in the northern parts of the island, in the northwest including Hiddensee and especially in the southeast of Rügen including the historic seaside resorts Binz, Sellin and Göhren (Figure 3.2).

According to surveys realized by Job et al. (2013, 2016) approximately 5,288,000 tourists visited the Biosphere Reserve Southeast Rügen within a 12 months period in 2011/2012, while Jasmund National Park was frequented by around 679,000 visitors within a 12 months period in 2013/2014. On the basis of the money spent by these tourists during their stays in the two protected areas Job et al. (2013, 2016) account for 14,281 and 1,583 income equivalents related to the Biosphere Reserve Southeast Rügen and Jasmund National Park respectively.

The high number of short stays on Rügen implies an immense turnover of tourists, especially during the summer season. While in the 1970s about 50% of the tourists travelled by train, after German reunification the railway system degenerated to play a supplementary role. Instead, traffic became strongly oriented towards individual modes with around 90% of all visitors using their car or caravan to travel to and around Rügen. This results in a highly tense traffic situation which the island's infrastructure can hardly cater for. This is not only a burden for locals and holiday-makers alike, but also leads to further land consumption caused by road development and creates emissions that contribute to environmental pollution (Spittler 1996, Landkreis Rügen 2002, Job et al. 2016). Hence, Ziener (2002) proposed a model for a tourist-orientated public transport system for the island of

Rügen at the beginning of the 21st century, which concentrates on the directions tourists take. It identifies major tourist attractions as well as the transport corridors tourists usually move along and derives bus lines, ship lines and transport frequencies. During the last few years, a concept of modular mobility has been established on Rügen, which focuses on tourists' needs. Yet, as car drivers are commonly not well-informed about public transport options it remains a great challenge to re-direct them to alternative modes of transport[7].

Also, tourism intensity on the island of Rügen, reflecting the number of guest nights per 1,000 inhabitants, increased rapidly in the 1990s and early 2000s. It more than doubled between 1994 and 2009 from 43,497 to 91,316. Since 2009, the tourism industry has been consolidating on a high level, which is reflected by a stabilized tourism intensity of 94,099 in 2014 (Statistik-MV 2016). Compared to other German coastal regions at the North Sea and the Baltic Sea this value is enormous and is only clearly topped by the East Frisian Islands. Also, it is much higher than the Balearic Islands' tourism intensity of 59,082 (LSN 2014). In contrast, Germany as a whole has an average tourism intensity value of 5,250 (Table 3.1). This shows the immense pressure Rügen is exposed to by the tourism industry[8].

[7] A BA thesis supervised by the author of this habilitation thesis analyses whether car sharing can contribute to more sustainable inner-destination transport. For this purpose, a survey was carried out amongst visitors to a tourism trade show in Germany in 2017. However, the findings show that none of the interviewed persons had gained any experience with car sharing on holidays and that the majority did not consider it a suitable mobility option on holidays. Thus, the study's outcomes support the findings here on challenges with regard to sustainable mobility in destination areas: Wilde, J. (2018). Nachhaltige Mobilität auf Reisen: Kann CarSharing einen Beitrag dazu leisten? BA thesis. Hildesheim.

[8] The subject of a BA thesis under the supervision of the author of this habilitation thesis in 2014 was a survey amongst tourists on the island of Rügen investigating tourists' views on sustainability on holidays. The study informs that holidaymakers are often aware of sustainability challenges. However, in terms of the tourists' actual behaviour, it becomes obvious that more sustainable tourism on the island of Rügen is in its infancy: Friedberg, J. (2016). Nachhaltiger Tourismus auf Rügen. Eine Umfrage unter den Urlaubern. BA thesis. Hildesheim.

Tab. 3.1: Tourism intensities for destinations at the German Baltic Sea and the North Sea, for entire Germany and for the Balearic Islands (Spain).

Destination	*Tourism intensity 2014 (guest nights*/1,000 inhabitants)*
Rügen/Hiddensee (MWP)	94,099
Western Pomerania (MWP)	22,240
Mecklenburg Baltic Sea (MWP)	16,283
East Frisian Islands (LS)	371,397
North Sea Coast (LS)	14,379
North Sea (SH)	55,805
Baltic Sea (SH)	16,425
Germany	5,250
Balearic Islands (Spain)	59,082 (2012)

MWP=Mecklenburg-West Pomerania, LS=Lower Saxony, SH=Schleswig-Holstein
*Official statistics of guest nights only capture accommodations with more than ten beds.

Source: data provided by Destatis 2016b; Statistik-MV 2016; Statistikamt Nord 2016; LSN 2016; LSN 2014

In summary, regarding the greening of the Rügen tourism industry, three institutional and cultural lock-ins can be identified. First, for the last 150 years the island's tourism sector was considerably shaped by external actors, including both economic investors (especially during the Wilhelminian era and the post-Socialist era) and political actors (particularly the National Socialist regime and the Socialist GDR regime) who favored large-scale projects in order to create bed capacities and thus developed Rügen to a mass tourism destination. Second, conflicts between state authorities trying to enforce conservation regulations and the business sector aiming to expand tourism activities since German reunification have created an atmosphere of confrontation and mistrust. Third, changes in tourists' mobility behavior since the early 1990s have resulted in an immense volume of traffic that has increased parallel to the rising numbers of tourist arrivals.

3.4.3 Certified businesses voluntarily engaging in sustainable tourism

While enforcing political conservation regulations has caused manifold conflicts on the island of Rügen in the last 25 years, the voluntary compliance of tourism businesses with sustainability certification might help ease tensions. In the Rügen tourism industry sustainability certification is, as in Germany in general, an acutely exceptional case (Table 3.2).

Tab. 3.2: Sustainability certifications in the Rügen tourism sector by certification scheme (10/2016).

Certification scheme	*Certified entities*
Viabono	2
DEHOGA-Umweltcheck	0
Eco-Camping	1
TourCert	0
EU Ecolabel	0
ISO 14001	n/a
EMAS	0
Partner initiative Biosphere Reserve Southeast Rügen	28 (1 also Viabono-certified)
Partner initiative National Park Jasmund	1
Partner initiative National Park Vorpommersche Boddenlandschaft	1 (in the Rügen part of the national park, 13 in total)

Source: calculated on the basis of data provided by Viabono 2016, DEHOGA 2016, Eco-Camping 2016, TourCert 2016, RAL 2016, DIHK 2016, Biosphere Reserve Southeast Rügen 2016, Nationalpark Jasmund 2016, National Park Vorpommersche Boddenlandschaft 2016

Concerning the certification schemes mentioned in Section 3.2, only two Viabono-certified tourism companies and one Eco-camping certified camping site were identified on the whole island in October 2016. With regard to the other sustainability certification schemes no tourism company on Rügen was certified. Taking into account that there were 662 registered accommodation facilities alone in 2014

(Statistik-MV 2016), which only represent one of the tourism industry's sub-sectors, this reveals that sustainability certification is not at all well-established on the island[9].

However, Table 3.2 also shows that there are three regional sustainability initiatives on Rügen which are closely linked to protected areas. All of them are related to the European Charter for Sustainable Tourism in Protected Areas of the EUROPARC Federation, the European umbrella organization for protected areas. Its ecologically focused partner initiative project was founded in 2001. In 2013, 107 partner initiatives existed with more than 390 certified members in total (EUROPARC Federation Deutschland 2013). While the partner initiative of Jasmund National Park on Rügen and the partner initiative of Vorpommersche Boddenlandschaft National Park only have one member each – at least within the Rügen part – the initiative of the Biosphere Reserve Southeast Rügen had 28 partners in October 2016. As it is the only noteworthy sustainability certification scheme used by the tourism sector on Rügen it will be analyzed in the following section with regard to its potentials for greening the tourism industry on the island[10].

3.5 Potentials for greening the tourism industry: The partner initiative of the Biosphere Reserve Southeast Rügen

3.5.1 Evolutionary context

In 2008 the Interreg project 'Parks&Benefits' was launched with the main objective of establishing modes of sustainable tourism in protected areas in different countries of the Baltic Sea region. Thus, in a number of national parks, biosphere reserves and nature parks in Germany, Denmark, Latvia, Estonia, Lithuania and Norway the

[9] For ISO 14001 certification no information about certified entities is available.

[10] A BA thesis supervised by the author of this habilitation thesis presents an overview of the important characteristics of all partner initiatives of Nationale Naturlandschaften, the umbrella organisation of protected areas in Germany: Bengsch, B. (2019). Die Partnerinitiativen der Nationalen Naturlandschaften in Deutschland. Ein Vergleich von Struktur und Arbeitsweise. BA thesis. Hildesheim.

European Charter for Sustainable Tourism in Protected Areas by the EUROPARC Federation was to be implemented until 2012. The Biosphere Reserve Southeast Rügen was one of the protected areas that strived towards certification as a sustainable tourism destination (AfBR 2011).

The Biosphere Reserve Southeast Rügen, acknowledged by the UNESCO program 'Man and the Biosphere' in 1991, is a model region for sustainable development. With a territory of 228 sq., only about half of which is land area, it comprises the peninsula Mönchgut, the seaside resorts Sellin, Baabe and Göhren as well as parts of Binz, and territories around Putbus including the Isle of Vilm. While its core zone only covers 1.5% of the total area, the transition zone represents 82%. Thus, the biosphere reserve does not comply with the UNESCO minimum standards regarding area and zoning which has been an ongoing issue and puts pressure on the reserve's administration (Knapp 2013², MAB-Nationalkomitee Deutschland 2013). At the same time it has faced serious problems gaining acceptance from economic actors and the general public (Theel 2002, aixplan 2012). Hence, the voluntary compliance of tourism companies with sustainability certification could raise acceptance and facilitate political regulation as expected by the UNESCO.

Certification as a charter park of the EUROPARC Federation requires the development of a five-year strategy and action plan for sustainable tourism on a participative basis, including all relevant tourism actors in and around a protected area. Following an external evaluation, a charter committee decides on awarding the charter certificate. Awarded protected areas must re-certify every five years (EUROPARC Federation 2016).

According to these requirements a participative process was launched in the Biosphere Reserve Southeast Rügen by founding a public forum in December 2009,

which was attended by approximately 40 regional stakeholders of the tourism sector such as municipalities, federations, and local tourism companies. In 2010 a steering committee as well as three working groups discussed issues of tourism, traffic and culture, aiming to prepare a common regional concept. In late 2010, a second forum meeting took place, in which the sustainable tourism concept was advanced and subsequently adopted officially. On the basis of this concept and further discussion a strategy and action plan could be concluded in 2011 (dwif 2011, AfBR 2011). The following third-party assessment finally led to the biosphere reserve's approval as a charter park in 2012. In the course of this participative process the acceptance of the biosphere reserve by the local public could be raised significantly (aixplan 2012).

While the adoption of a strategy and action plan is referred to as part I of the charter by the EUROPARC Federation (2016), it also comprises two further parts. Part II, the partner initiative program, envisages that regional businesses, especially businesses of the tourism sector, are certified as partners of the protected area in order to act as accredits for sustainable development and sustainable tourism. A certified charter park is authorized to agree on criteria for certification with the EUROPARC Federation in order to self-dependently conduct certifications of regional businesses (EUROPARC Federation 2016). In Germany, minimum standards were developed by a working group of the EUROPARC Federation's German section (partner initiative coordinator 2016).

In 2011, a partner initiative was launched in the Biosphere Reserve Southeast Rügen accrediting five partners in the first year with the label 'Partner of the Biosphere Reserve Southeast Rügen'. By October 2016, the number of partners had risen to 28 (aixplan 2012, AfBR 2016)[11].

[11] An MA-thesis supervised by the author of this habilitation thesis investigates tourism providers' approaches to cooperation in the Biosphere Reserve Southeast Rügen in an early stage of the development of the biosphere reserve's partner initiative. The study reveals that the partner initiative's organisational structure hardly

They covered a wide spectrum of different sizes, organizational forms and fields of activity ranging from an organization dependent on sponsoring to a company with more than 200 employees. Table 3.3 systemizes the partners with regard to the tourism sub-sectors making clear that many of the members orientated their activities to classical sectors of the tourism industry such as gastronomy, accommodation and tourist activities, but ten of the 28 partners were fully or at least partly engaged in the sector of food production or food retail, one partner acted as a tourism agent, and another one worked in the publishing sector. This illustrates that not all of the initiative's partners were related to the tourism industry in a narrower sense, but rather engaged in the tourism fringe market, whereas the relevance of close relationships between tourism and food processing for the success of regional brands promoting sustainable development in biosphere reserves was already pointed out by Kraus et al. (2014) for the German Rhön Biosphere Reserve.

Tab. 3.3: Business activities of the 28 initiative partners regarding tourism sub-sectors (multiple nominations possible).

Gastronomy	*Accommodation*	*Tourist activities*	*Transport*	*Intermediation*	*Food*	*Publishing*
10	8	10	3	1	10	1

An agreement between the biosphere reserve's administration and particular partner businesses serves as the basis for cooperation. The biosphere reserve's administration offers marketing for the whole group, and the possibility for partners to use the common logo and to take part in events and trainings. On the other hand, the partner businesses commit themselves to the principles of a biosphere reserve, to provide information about sustainable tourism to their guests and clients, and to

encourages cooperation amongst the actors: Dormeier, M. (2015). Nachhaltiger Tourismus im Biosphärenreservat Südost-Rügen. Eine Netzwerkanalyse. MA-thesis. Hildesheim.

cooperate with the biosphere reserve's administration and the initiative's other partners. In order to get certified as a partner, sound practices concerning environmental orientation, regional identification, quality, information and cooperation are considered, taking into account the disparities between different sectors of the tourism industry (AfBR 2016). However, there are neither fixed criteria which have to be fulfilled nor written target agreements for future developments concerning sustainability standards. Thus, the partner initiative must be regarded as an utterly low-threshold certification scheme that is neither achievement-oriented nor progress-oriented. The fact that only 0.5 job equivalents and an annual budget of 18,000 EUR are available for the partner initiative and all tourism related activities (coordinator 2016, Merlin 2017) shows how limited the biosphere reserve's administration's capacities are.

Part III of the EUROPARC Federation's program for sustainable tourism in protected areas aims at including sustainable tour operators. Accordingly, since 2014 the French section of the EUROPARC Federation has offered certification to tour operators undertaking journeys to protected areas. By 2016, 15 tour operators had been certified. However, part III of the EUROPARC Federation program only exists in France so far. Furthermore, cooperation between the administrations of protected areas and tour operators is not envisaged (EUROPARC Federation 2016). Hence, the administration of the Biosphere Reserve Southeast Rügen has not dealt with this subject yet.

3.5.2 The partners' motivation for joining the initiative

With regard to the partners' motivation to become members of the partner initiative two main fractions can be identified. On the one hand there were a number of businesses that consider the Biosphere Reserve Southeast Rügen's administration

as a nature conservancy authority that has the task to keep down uncontrolled growth within the biosphere reserve's territory by means of political regulation. These companies can be regarded as the conservative fraction. They were either strictly conservative or – if not quite as resolute – semi-conservative and became members of the initiative in order to express their sympathy with the regulative idea of a biosphere reserve and to show support for the biosphere reserve's administration. They were rather small in size, did not intend to grow economically and tended to be early members of the initiative. Their main interest was to preserve the nature and culture of the region by means of avoidance. For instance, one strictly conservative partner business, that has been trying to impede investors from gaining permission to build three-storey holiday apartment complexes in its street in the future, explained that in the 1990s "[…] we applied for a three-storey construction of [our] building, got the [expected] denial from the building authority, and now have tied that down […] for the whole street. And don't dare that someone gets a building permit. Then I will start proceedings!" (partner business_10 2016)[12]. Consequently, these members can be characterized as sufficiency-oriented. In the interview transcripts conservatives were identified by searching for statements such as 'fight for the Biosphere Reserve', 'live in harmony with nature', 'no more uncontrolled growth', 'stand up for the uniqueness of the island', 'have a responsibility as ancestors have lived on the island for several hundred years'. On the other hand, there were numerous partners that interpreted the biosphere reserve's partner initiative as a marketing tool that enables them to foster a green image in order to increase sales. These businesses represented the idea of a harmonization of economic growth and environmental conservation. These ecological modernists –

[12] Original quotation: "[…] haben wir [einen dreistöckigen Ausbau] beantragt, haben die [erwartete] Ablehnung vom Bauamt gekriegt und haben damit […] für die ganze Straße alles festgezurrt. Und wehe, es kriegt einer eine Baugenehmigung. Dann klage ich dagegen!" (partner business_10 2016).

either strict or semi – were rather new members, bigger in size and regarded the partner initiative much more as a chance for networking and creating market opportunities than the businesses of the conservative fraction. They also tended to be more innovative with three of the modernist businesses holding a total of four registered intellectual property rights versus one registered intellectual property right on the conservative side. Moreover, many of them were led by non-local managers. The modernists were identified by searching the interview transcripts for statements like ‘being a partner is an image thing’, ‘sustainability is a unique selling proposition for the island’, ‘sustainability as a topic is en vogue regarding customer preferences’, ‘networking with business partners’, ‘make a difference by getting engaged’.

Tab. 3.4: Ideological orientation of interviewed initiative partners.

	Strict conservatives	*Semi-conservatives*	*Semi-modernists*	*Strict modernists*
Number of initiative partners	8	5	3	8
Year of acceptance in partner initiative	2011: 3x 2012: 3x 2013: 2x	2011: 1x 2012: 2x 2013: 1x 2014: 1x	2011: 1x 2012: 1x 2015: 2x	 2012: 2x 2013: 1x 2014: 1x 2015: 2x 2016: 2x
Average number of full-time equivalent, paid staff	3,1	2,2	74,5	35,8
Number of intellectual property rights	1	0	2	2

In October 2016, both fractions were similar in size (Table 3.4), however, the modernist fraction had been growing lately, and tensions had started to surface: “There are a lot of partners who foster the ‘Higher! Further!’ by expanding […]. But

that is trying to square the circle" (partner business_7 2016)[13]. Thus, this partner business argues similarly to Robinson (2004).

3.5.3 Un-locking unfavorable tourism development paths by means of green growth or degrowth?

The majority of the initiative's members, regardless of their ideological orientation, appreciated the fact that the partner initiative did not force strict sustainability criteria. In effect, the initiative was seen as a group of businesses that embody a spirit of sustainability, following the idea of a biosphere reserve, although the meaning of sustainability was interpreted and lived out differently. Considering the enormous acceptance problems the Biosphere Reserve Southeast Rügen had faced since the 1990s, the decision of the biosphere reserve's administration to opt for a 'sustainability light' approach seems reasonable in order to build up trust and to win tourism businesses over to its side. A slow rise of acceptance is especially symbolized by the increasing number of modernist members intending to combine economic growth and environmental conservation, this could be a basis for further steps towards more sustainable modes of development. In the following, the internal structure of the partner initiative is analyzed in order to identify potential for un-locking unfavorable tourism development paths.

The internal structure of the partner initiative is simple. The forum which was formed in 2009 in the context of the 'Parks&Benefits' project still serves as the main body. The biosphere reserve's administration invites the partner businesses to different kinds of events on a regular basis and the forum is supposed to stimulate cooperation between the initiative's partners. Thus, trips to the Isle of Vilm and the

[13] Original quotation: "Bei den Partnern […] sind ja auch viele dabei, die dieses 'Höher! Weiter!' noch mehr fördern, indem sie expandieren […]. Aber das ist eben die Quadratur des Kreises" (partner business_7 2016).

Isle of Oie were undertaken, or lectures and workshops regarding specific environmental topics were conducted. Also, numerous partners presented themselves in two 'Sustainability Weeks' organized by a wide range of Rügen tourism actors in the autumns of 2015 and 2016. However, not all partners use the chance for exchange with their co-partners regularly: "I try to get [the partners] together three to four times a year, and just under half of them do participate. […] But sadly, it's not where it should be, I honestly admit. […] I wish there was more commitment on the other side. It is a partner initiative, but only one side initiates things" (partner initiative coordinator 2016)[14]. Moreover, the partner initiative's coordinator is also engaged in working groups of the EUROPARC Federation's German section in order to learn from the experiences of other protected areas. In this context, opportunities are created for the partner businesses to exchange with other partner initiatives' members, however, participation is modest: "Get to know others? Rather no. I don't actually know why it is like that" (partner business_16 2016)[15]. Many of the partners explain their restrained engagement by the large workloads their businesses entail, especially during the summer season.

In addition to the forum the biosphere reserve's administration coined a council that evaluates potential new candidates and re-certifies established candidates, despite being authorized to decide on the acceptance of initiative partners solely by the EUROPARC Federation. The council consists of seven members including, for instance, the Rügen district administrator, the chamber of commerce, but also a member of the biosphere reserve's administration and a representative of the partner businesses. Nevertheless, the biosphere reserve's administration as the

[14] Original quotation: "Ich versuche, [die Partner] drei- bis viermal im Jahr zusammen zu holen und es kommt die knappe Hälfte. […]. Aber es ist leider nicht da, wo es eigentlich sein sollte, gebe ich ehrlich zu. […] Ich wünsche mir, dass da auch mal ein bisschen von der anderen Seite kommt. Es ist eine Partnerinitiative. Und wenn immer nur einer schubst…" (coordinator 2016).
[15] Original quotation: "Uns etwas anderes anschauen? Eher nein. Ich weiß gar nicht, warum das so ist" (partner business_16 2016).

initiative's coordinator and first contact partner pre-selects potential candidates and therefore still has a great influence on the acceptance of initiative partners. Hence, the reserve's administration continues to function as a gatekeeper and regulator and thus preserves its image as a restrictor.

So far the partner initiative of the Biosphere Reserve Southeast Rügen has focused on raising the number of members and on undertaking representative functions. However, the internal structure does not allow content-oriented engagement to establish sustainable development paths, i.e. there are no working groups that could bring urgent sustainability issues of the tourism sector in the Biosphere Reserve Southeast Rügen to the agenda and discuss them in order to find solutions and eventually un-lock unsustainable trajectories.

Hence, the three main sustainability lock-ins that were identified earlier in this study and that have developed over varying amounts of time in the Rügen tourism industry can only be tackled to a limited extent by the Biosphere Reserve Southeast Rügen's partner initiative. First, the fact that many external actors, both political and economic stakeholders, have shaped the island's tourism sector which led to the creation of a mass tourism destination, cannot be reversed by the partner initiative. However, the initiative has started to build up and strengthen the partners' identification with the island's unique landscapes, environment and culture. As they function as multipliers there is an increased chance that the need to preserve the island's fragility will be authentically communicated to a wider audience. Thus, for the partner initiative, as an identity-generating regional sustainability certification scheme, it is much easier to support a transition towards sustainability than for national or international certification schemes.

Second, the partner initiative serves as a tool to de-escalate the conflict that had built up between the state-led biosphere reserve administration and many economic

actors in the southeastern part of Rügen since the 1990s. Voluntary compliance with a ‘sustainability light’ certification scheme might be the foundation for further steps towards stronger modes of sustainability. Thus, more cooperation between the state authority and economic actors could result in more support for expanding the biosphere reserve’s territory and core zone in order to comply with the UNESCO minimum standards and ensure the UNESCO biosphere reserve status in the long-term. Nevertheless, cooperation instead of confrontation implies shared responsibilities. By transferring more responsibility to the partners the biosphere reserve’s administration could foster relations on an equal footing and further acceptance. Surely this requires partners willing to become actively involved and to ‘un-learn’ unfavorable practices regarding sustainability issues from other regions.

The traffic issue as the third identified lock-in has not seriously been dealt with by the biosphere reserve’s partner initiative so far und thus remains a great challenge in the future. The partner initiative alone cannot un-lock this problem, however, in cooperation with other actors on the island, concepts of modular mobility are to be advanced and tourists need to be encouraged not to solely focus on car mobility during their holidays.

In summary, the partner initiative of the Biosphere Southeast Rügen represents a new form of cooperation between the state and economic actors aiming at greening the island’s tourism industry. As a hybrid organization, characterized by mutual dependencies, it follows a ‘sustainability light’ approach. However, this raises the question of time frames for regional sustainability transitions and the parameters these depend on, as well as the issue of time limits in order to prevent environmental disaster.

3.6 Conclusion

The evolutionary analysis of tourism development on the island of Rügen revealed three main lock-ins that have hampered a sustainability transition. First, for the last 150 years the island's tourism sector was considerably shaped by external actors, including both economic investors and political stakeholders who favored large-scale projects that led to mass tourism and were accompanied by considerable environmental problems. Second, conflicts between state authorities trying to enforce conservation regulations and the business sector willing to expand tourism activities since German reunification have created an atmosphere of confrontation and mistrust. Third, changes in the tourists' mobility behavior since the early 1990s have resulted in a highly intense traffic situation with negative ecological externalities. This paper analyzed the role that the voluntary compliance of tourism businesses with sustainability certification can play in order to un-lock these unfavorable development paths.

The study showed that – as in Germany in general – in the Rügen tourism industry sustainability certification is the absolute exception with only three identified tourism companies holding a national or international sustainability certification. Nevertheless, the Biosphere Reserve Southeast Rügen's partner initiative, founded in 2011 as a regional sustainability certification scheme based on the principles of the European Charter of Sustainable Tourism in Protected Areas by the EUROPARC Federation, had certified 28 member businesses by October 2016. Yet, the partner initiative must be regarded as an utterly low-threshold sustainability certification scheme that neither enforces the meeting of fixed criteria for membership nor negotiates written target agreements concerning sustainability standards with candidates. Instead, a spirit of sustainability is expected.

Within the group of partner businesses, a conservative and a modernist fraction can be identified. While the conservatives are sufficiency-driven, for a growing number of modernist partners the green economy in the Rügen tourism industry is the leading strategy for future development. The internal structure shows that the biosphere reserve's administration continues to function both as a restrictor and an initiator, controlling the partner initiative's activities. However, at the same time the partner businesses' engagement is considered to be low, i.e. there are no working groups that could foster the discussion of specific sustainability issues.

Despite representing a 'sustainability light' approach, the partner initiative has some potential to support a breakaway from unfavorable trajectories concerning sustainability on Rügen. As a regional identity-generating initiative it has already contributed to building up and strengthening the partners' identification with the island. Since the partners function as multipliers there is an increased chance that the need to preserve the island's fragility will be authentically communicated to a wider audience. At the same time, the biosphere reserve's administration has been able to win businesses over to the nature conservation authority's side and has thus eased existing tensions. These new forms of cooperation between the state and economic actors could result in more support for expanding the biosphere reserve's territory and core zone in order to comply with the UNESCO minimum standards and ensure the UNESCO biosphere reserve status in the long-term.

In general, this study provides indications that the efficiency-driven approach, especially in the form of a 'sustainability light' approach, qualifies to initiate processes of sustainability transitions in the tourism sector. Particularly in protected areas that are confronted with acceptance problems, an efficiency-driven 'sustainability light' approach can be the basis for moving towards more sustainable modes of development. Thus, this study has wider applicability for research

concerned with un-locking unsustainable tourism development paths. However, in order to seriously break away from unsustainable development paths, such initiatives then need to be upgraded in both quantity and quality including the expansion of efforts in order to 'un-learn' unsustainable practices. In summary, the 'sustainability light' approach raises the question of time frames for regional sustainability transitions and the parameters these depend on as well as the issue of time limits in order to prevent severe environmental disturbance. Hence, further studies in this field of research, especially regarding the dynamics within the actors' network and their influence on the development of more sustainable modes of tourism are to be encouraged.

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4 Networking towards sustainable tourism: Innovations between green growth and degrowth strategies

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Abstract

This paper uses a network analysis to investigate features of a regional network of tourism enterprises in rural Ireland. In contrast to the economic-driven networks literature it focuses on socio-ecological goals alongside the economic goals. Acknowledging the heterogeneity of sustainable entrepreneurs, member businesses are categorized by their ideological orientation towards sustainability ranging from strict green growth to rigid degrowth approaches. The paper argues that sustainability networks support rural areas' efforts for change, however, degrowth strategists need to be represented as key actors of communication and joint activities in the long-term to realize a clear shift away from business as usual.

Keywords: regional sustainability transition; networks; evolutionary approach; green growth; degrowth; business-led grassroots innovations

4.1 Introduction

Since the 1980s an immense body of literature has emerged in the social and economic sciences, as well as regional sciences and economic geography, considering entrepreneurial networks crucial for the economic success of businesses and the development of regions (Aldrich, Rosen & Woodward 1987,

Besser & Miller 2011, Grabher 1993, Granovetter 1983, Malecki, 2012)[16]. According to this literature, business networks enable enterprises to access resources such as information and advice. By exchanging and collaborating within a network of businesses, the creation of social capital and subsequently innovations is stimulated and competitive advantages on the markets can be generated by the network members. Hereby, many scholars have highlighted that spatial proximity facilitates this process (Porter 2000).

In the light of increasing global challenges like environmental degradation and social injustice, however, calls have become louder for a great transition towards more sustainable modes of living that are not only based on economic 'success' but are also socio-ecologically compatible (Raskin, Electris & Rosen 2010). Against the background of these challenges, scholars in economic and social sciences have also identified new types of entrepreneurs who are viewed differently by the various authors but have general characteristics in common: e.g. the ecopreneur who focuses on ecological innovations, the social entrepreneur whose goal is to create social benefits or, more holistically, the sustainable entrepreneur who pursues both ecological and social goals to varying degrees (Bull 2008, Schaltegger & Wagner

[16] For further examples of network studies in contexts such as migration and urban district development, see Taha Basch & Panzer-Krause (2016) and Lammers, Lübcke & Panzer-Krause (2014). Taha Basch & Panzer-Krause (2016) reconstruct the migration processes of refugees from Syria to Germany and analyse what role different types of informal networks play: Taha Basch, H. & S. Panzer-Krause (2016). Auf der Flucht! Die Bedeutung persönlicher Netzwerke für den Wanderungsprozess syrischer Flüchtlinge nach Deutschland, *Hildesheimer Geographische Studien, 6,* 1-25.

In the light of the problems that many German communities have to adequately finance the design and maintenance of urban greenery, Lammers, Lübcke & Panzer-Krause (2014) discuss what contribution urban networks composed of private and public actors can make, specifically in disadvantaged urban neighbourhoods: Lammers, L., Lübcke, J. & S. Panzer-Krause (2014). Gestaltung und Pflege von Grunanlagen in benachteiligten Stadtquartieren: Welchen Beitrag leisten Stadtteilnetzwerke?, *Hildesheimer Geographische Studien, 4*, 56-87.

Moreover, the author of this habilitation thesis supervised an MA-thesis that dealt with the importance of networks for the promotion of sustainable mobility in metropolitan regions analysed by means of electric mobility in the German metropolitan region Hannover Braunschweig Göttingen Wolfsburg. It concluded that the governmental support programme 'Schaufenster Elektrobilität' contributed to the development of a successful organisational network structure within the region that will help to promote electric mobility in the future: Scheb-Wetzel, F. (2014). Nachhaltige Mobilität. Das Schaufenster Elektromobilität in der Metropolregion Hannover Braunschweig Göttingen Wolfsburg. MA thesis. Hildesheim.

2011)[17]. Here, too, businesses voluntarily pursuing goals of sustainability are often organized in regional networks (Collins et al. 2007).

Yet, while scholars in regional studies identify sustainability transitions as one of the 'key strategic concerns facing regional development theory and policy' (Turok et al. 2017: 7), there is a lack of understanding regarding the functioning of entrepreneurial sustainability networks on a regional level that not only promote economic development but also strive for ecological and social targets. This paper provides an insight into this underexposed field of research. It concentrates on the tourism industry, which has been characterized by massive worldwide growth during the last decades. This has been of enormous economic importance, but it has simultaneously revealed immense socio-ecological challenges for many destinations (Holden 2008). The study analyzes the development and structure of the Burren EcoTourism Network (BEN), an entrepreneurial network of tourism businesses in the Burren and Cliffs of Moher region in rural Ireland. Hence, it aims to identify facilitating conditions for creating social capital and innovations in a regional sustainability network influenced by the members' ideological orientation towards either green growth or degrowth strategies. Thus, it follows the evolutionary project, a multi-faceted research framework, that has become influential in economic geography and regional sciences in recent years since academics have started to focus their analysis on factors that stimulate change instead of merely describing the dynamics of regional development (Kogler 2015, Martin & Sunley 2015). Simultaneously, this paper seeks to advance the evolutionary approach as it contributes to a sustainability perspective with regard to network theory, in particular

[17] A comprehensive literature review with regard to sustainable entrepreneurship specifically in rural regions is provided by Schreiber (2103): Schreiber, J. (2013). Sustainable Entrepreneurship – Entwicklungspotential für ländliche Räume? BA thesis. Hildesheim.

network structure and governance over time by considering the actors' sustainability orientation as a specific member attribute.

The remainder of the paper proceeds as follows. The next session addresses the network approach in the context of sustainable entrepreneurship. In the third section the methodology of the empirical part of this study is presented, and the two following sections are dedicated to the analysis of BEN. The last section concludes by discussing implications for the practice of sustainability and specifies areas requiring further research.

4.2 The network approach in the context of sustainable entrepreneurship

4.2.1 Networks, innovations and entrepreneurial success

Economic actors tend to exchange and collaborate within networks of businesses, either formally or informally, due to opaque markets and the entrepreneurs' social embeddedness guided by trust and reputation. Hence, many studies show that networks facilitate access to resources such as information and advice and thus create business opportunities (Miller & Besser 2011, Lans, Blok & Gulikers 2015). These resources, which are not generated by an individual actor but can only be created within a group of actors and are therefore to be interpreted as a collective good, are referred to as social capital (Coleman 1988, Putnam 2000). Social capital, in turn, facilitates the generation of innovations which are considered crucial for the economic success of businesses and thus the economic development of societies and social welfare (Arthurs et al. 2009).

While early social capital scholars like Granovetter (1983) or Burt (1992) highlight certain structural features of successful networks like the 'strength of weak ties' or 'structural holes', Anderson & Jack (2002: 207) point out that "social capital

is not a 'thing' but a process", bringing to light the organic nature of bridge-building between individuals, which is constantly re-constructed and re-shaped.

In regional sciences and economic geography, the significance of social capital for the development of regions has clearly been recognized (Malecki, 2012, Fritsch & Storey 2014). Here, much of the debate has been related to the positive effects of spatial proximity. Concepts like industrial districts (Piore & Sabel 1984), creative milieus (Cooke & Morgan 1994) and clusters (Bathelt, Malmberg & Maskell 2004, Porter 2000) suggest that the co-location of entrepreneurial businesses – as easily provided in cities – promotes the creation of social capital by enabling, through face-to-face contacts, the acquirement of knowledge, and subsequently facilitates the generation of innovations. In contrast, rural regions are often seen as disadvantaged due to the lower density of economic actors and greater geographical distances between them. Nevertheless, in recent years, the theory has expanded as empirical evidence has shown that temporary proximity can be sufficient to build up trust and generate social capital, and also that geographical proximity can – at least partly – be substituted by other forms of proximity such as cognitive or social proximity (Boschma 2005)[18].

Hence, it has also been suggested that social capital is created in rural areas, too. Moreover, in the sense of "smaller is better" (Putnam 2000: 205), numerous scholars argue with regard to civic engagement that rural communities have more social capital than urban areas. However, Sørensen (2014) notes that actors in rural regions mainly generate bonding social capital, referred to as intra-community social

[18] An in-depth analysis of relationships between businesses focusing on renewable energies and their financing banks provided by Panzer-Krause (2015) shows that trust can partly substitute for geographical proximity between the partners and facilitate the businesses with access to financing in rural regions suffering from the geographical consolidation of bank branch networks branch closures. Especially, more robust forms of trust help to reduce transaction costs and prevent rural businesses from financial exclusion: Panzer-Krause, S. (2015). Renewable energies and rural development in Germany: Business finance and the role of trust illustrated by two case studies from Brandenburg. In Dannenberg, P. & E. Kulke (Eds.). *Economic development in rural areas. Functional and multifunctional approaches* (pp. 109-129). Farnham, Burlington: Ashgate.

capital that is inward-looking and excludes external actors who could contribute new ideas. Despite this negative notion of rurally generated social capital, Scott (2013) suggests studying if rural networks supported rural regions to restructure after the recent economic crisis by developing new pathways that allow increasing concerns about an ecological crisis to be dealt with. Thus, he highlights that evolutionary resilience thinking as a conceptual lens offers the opportunity to explore regional strategies for sustainability transitions.

4.2.2 Entrepreneurship and networks in the context of sustainable tourism

In the tourism literature, innovation research is still a young field of academic study (Rodríguez, Williams & Hall 2014). Here, unlike with manufacturing industries, which have been the focus of traditional innovation studies, it is problematic to measure innovations since intellectual property rights like patents are of little relevance and there is a lack of appropriate alternative concepts. Hence, Hjalager (2010: 2) points out that scholars have adopted a relatively straightforward way of collating data by being "willing to accept that innovation is generally characterised by everything that differs from business as usual or which represents a discontinuance of previous practice in some sense for the innovating firm". As in traditional innovation research, this can be related to a new service or good, process, marketing method or organizational method. Here, too, numerous studies highlight the relevance of social capital generated in entrepreneurial networks for the creation of innovations in the tourism sector (Erkuş-Öztürk 2010, Sørensen 2007).

In sustainable tourism research in particular, an increased interest in network studies can be observed over the last two decades. For instance, Carlson & Edwards (2008) describe three tourism initiatives from Arizona and identify networking as the driver for sustainability innovations. Hede & Stokes (2009)

investigate a farmers' market in Australia as a tourism event network and explore its potential to establish sustainable tourism. While mainly focusing on economic sustainability they conclude that the strong relationships and the inward-looking character of the network must be regarded as threats to the market's longevity. In her study about alternative food networks analyzed in two tourism destinations in the UK, Sims (2009) comes to the conclusion that food producers can contribute to sustainable tourism by promoting local foods as authentic and iconic products by means of developing a brand collaboratively. In the Irish context Conway & Cawley (2012) illustrate the rise and decline of an ecotourism network, emphasizing the dependence of many sustainable tourism networks on external funding.

Despite the progress that has been made, Albrecht (2013) points out that findings in sustainable tourism network research are comparable to the results of general network studies. In contrast, with few exceptions (Beaumont & Dredge 2010), knowledge concerning specific issues of sustainability governance and sustainability transitions is scarce. Thus, Albrecht (2013) formulates a research agenda based on an international think-tank workshop held in 2010. One of the points made is that the role of the specific attributes of actors involved in tourism collaboration should be illuminated since network studies have one-sidedly focused on the actors' relationships within networks. Furthermore, the need to gain more knowledge about dynamics and change in networks is identified.

4.2.3 The networking businesses' ideological orientation towards sustainability

When looking at entrepreneurially induced processes towards more sustainable modes of living, it is essential to discuss different concepts of sustainability. In the literature the main focus has shifted from a static to a dynamic, as well as from an

absolute to a relative perspective (Faber, Jorna & Engelen 2005). Yet, there is a huge diversity of contesting approaches and economic strategies most of which, however, open out into two contradicting discourses.

On the one hand, the transition studies literature (Geels 2002, Truffer & Coenen 2012) draws on the concept of the green economy, often synonymously referred to as green growth, which expresses the need to delink economic growth and environmental degradation. Although Bailey & Caprotti (2014) plead for a nuanced understanding of different theoretical strands within the green economy literature, the concept does not question growth as such. Adopted by the United Nations at the 2012 Rio+20 summit (UN 2012), it usually identifies technological innovations as an option to utilize natural resources more efficiently and substitute natural capital for other forms of capital (von Weizäcker et al. 2009). Applying a multilevel-approach, transition studies scholars emphasize the role of niches that are protected from normal market selection and thus facilitate the generation of innovations.

However, as a weak conception of sustainability, the green economy is increasingly criticized and opposed by a strong conception of sustainability expressed in degrowth approaches on the other hand. This diverse body of literature (Jackson 2009, Latouche 2010) argues that there is an insuperable conflict between economic growth and environmental protection and thus promotes an ‘alternative turn’ (Bina & La Camera 2011) that offers a clear shift away from business as usual (Ferguson 2014). Thus, sufficiency-driven strategies based on a downscaling of production and consumption are recognized as the only possible way to implement sustainable development. Here, although still in the fledging stages, new forms of innovation are discussed. Feola & Butt (2015) refer to grassroots innovations as bottom-up innovations emanating from social movement initiatives that involve change agents who strive for sustainable development. Similarly focusing on

grassroots innovations, Seyfang & Longhurst (2013) transfer the transition studies literature's concept of niche development to a civil society context. Their findings indicate that the development and diffusion of grassroots innovations differ from market-based innovations, for instance in terms of formalized learning. Thus, they plead for a modification of niche theories to adjust them to the civil society context.

The transition studies scholars concentrate their research on high-tech firms and their resource-efficient innovations and presume that sustainability entrepreneurs are synonymous with green growth strategists. The degrowth-oriented grassroots innovation literature focuses on non-economic actors of the civil society. The missing link between the two strands of literature leads to a neglect of the variety of businesses that exist beyond growth-oriented high-tech firms and consequently to a lack of a more differentiated understanding of the nature of green growth and degrowth strategies at the business level. At the same time, existing typologies reflecting the discourses about green growth and degrowth mostly argue on a policy-making meso- or macro-level disregarding the micro-level of the firm (Gibbs & O'Neill 2016). An exception is Panzer-Krause's (2017) framework for categorizing businesses according to their ideological orientation towards sustainability as an actor's attribute. The framework is based on previous typologies, but explicitly addresses the enterprise-level. Developed in the context of an analysis of tourism companies of a sustainability network in the Biosphere Reserve Southeast Rügen, Germany, it proposes that according to their attitudes and actions sustainable entrepreneurs can be positioned somewhere between the two extremes of green growth and degrowth approaches. The typology distinguishes four categories: strict modernists as rigid green growth strategists, semi-modernists, semi-conservatives and strict conservatives as resolute degrowth strategists. Thereby, three sets of tensions on the business-level are examined: (1) ego-

centrism versus altruism, (2) focus on expansion versus willingness for consolidation and downsizing, and (3) openness to collective efforts with regard to economic aspects versus openness to collective efforts with regard to socio-environmental aspects. However, although Panzer-Krause (2017) identifies an increasing number of green growth strategists in the Southeast Rügen tourism network, there is still a lack of understanding about how entrepreneurial networks striving towards sustainability should be configured in terms of the members' ideological sustainability orientation in order to generate social capital and innovations for sustainability transitions.

Even though conventional innovation research in tourism studies lags behind other innovation research disciplines and the tourism sector might not be highly innovative in a classical sense, this offers a chance to strike a new path in innovation research based on the investigation of regional sustainability networks of the tourism sector. Hereby, the entrepreneurial approach can be opened up to new forms of innovations that are not merely aimed at creating business opportunities, but also at creating socio-ecological benefits. Against the background of increasing numbers of attempts to implement sustainability transitions in rural tourism by means of entrepreneurial networks, and the above-illustrated shortcomings with regard to network research in sustainable tourism, this paper applies an evolutionary perspective to explore advantageous and disadvantageous network features in terms of the composition of tourism businesses according to their ideological orientation towards sustainability and subsequent potential for the generation of social capital and innovations.

4.3 Methodology

The paper explores the case of the Burren and Cliffs of Moher region in Ireland with its Burren EcoTourism Network (BEN). The Burren and Cliffs of Moher region is a 530 km² rural landscape of high natural and social-cultural value located on the west coast of Ireland. It is internationally recognized for its geological uniqueness, richness of flora and archaeological heritage, as well as its approximately eight-kilometer-long Cliffs of Moher coastline, famous for its spectacular views (O'Rourke 2005). With 1.1 million visitors in 2014, the Cliffs of Moher were the most visited natural tourism attraction in Ireland (Fáilte Ireland 2015).

In 2011, the Burren and Cliffs of Moher region secured UNESCO Global Geopark status in the course of which BEN, as a network of regional tourism businesses, was founded. By June 2014, 47 tourism companies had become members of BEN.

In order to reveal advantageous and disadvantageous features of BEN's structure and governance in time, three methods were used in this study. First, the institutional context of tourism in the Burren and Cliffs of Moher region was re-constructed by means of documentary research. The business network was then investigated in detail by employing a qualitative and a quantitative network analysis, an approach extensively used in regional sciences and economic geography over the last decade (Glückler & Doreian 2016). Thus, BEN's evolution and current structure with regard to green growth and degrowth strategies and its potential for the generation of sustainability innovations were unraveled. For this purpose, in a second step, semi-structured interviews were conducted with the manager and the assistant manager of the Burren and Cliffs of Moher Geopark as well as with 16 of the 47 BEN member businesses in June 2014. The interviews with the geopark staff focused on the geopark's role in promoting sustainable tourism within the region,

the relationship between the geopark and BEN as well as the certification process for new BEN member candidates. The main topics of the interviews with the member businesses were their motivation to join the network, the certification process, their engagement with the network and collaboration with other network members. The interviews lasted between 23 and 111 minutes and were transcribed and evaluated by means of a qualitative content analysis. Thus, the interviewed BEN members' ideological orientation towards sustainability was extracted from the data. Thereby, the transcripts were scanned for statements concerning the following aspects: altruistic vs. ego-centric behavior, willingness for business consolidation or downsizing vs. expansive orientation, and openness for collective efforts with regard to environmental/societal aspects vs. openness for collective efforts with regard to economic aspects. According to the nature of the statements, for each aspect a score between 1 and 4 was assigned. Finally, every evaluated member business was allocated to one of the four categories according to its average score with 1 being 'strictly conservative', 2 being 'semi-conservative', 3 being 'semi-modernist' and 4 being 'strictly modernist'. Furthermore, important structural features of the network and collaborative entrepreneurial activities aiming to promote sustainable tourism were identified from the interview material. Thus, additionally to the categorization of member businesses as a snapshot for June 2014, the evolution of the network was re-constructed in order to capture the organic nature of social capital. This included the BEN members' perception of changes in the process of member admittance as well as changes in the organizing of network activities.

Third, in June and July 2014, a standardized survey amongst the BEN members was conducted focusing on the members' networking activities, in which 22 of the 47 network members participated. Here, despite its potential negative effects (Kilduff & Krackhardt 2008), a fixed choice approach was used in order to ease respondent

burden. Thus, in particular, data about each member's three most important network partners concerning the exchange of information and the engagement in joint activities was collated. The data was processed with the help of statistical social network analysis (SNA) methods, especially by calculating centrality measures (Borgatti, Everett & Johnson 2013). Missing data was re-constructed as far as possible using the available case analysis method (Little & Rubin 2002), a strategy that originates from standard statistics and was transferred to the social network analysis context. Here, a symmetry of incomplete dyads was assumed, i.e. it was expected that BEN members who did not participate in the survey, but who were chosen by another member would use one of their three choices to select this network actor in return. Applying the available case analysis method is an alternative to fully discarding identified network actors and their relations due to missing data and hence represents a possibility to better reflect the structure of a network. The results were linked back to the ideological orientation towards sustainability of the interviewed members.

4.4 Evolution and characteristics of BEN

4.4.1 Institutional context

With more than eight million international visitors in 2014 (Fáilte Ireland 2015) the Irish tourism industry has developed into one of the country's key economic sectors, and tourism has played a vital role in the recovering of the Irish economy after the 2008/2009 financial crisis (Department of Transport, Tourism and Sport 2015). Thereby, coach tourism has become a significant segment with around one million tourists participating in organized coach tours in 2013 (ITIC 2015).

Healy, Rau & McDonagh (2012) emphasize that understanding Irish tourism development requires comprehension of the political environment with its strong central government. Thus, the selection of tourism destinations within Ireland, its marketing in and beyond the country, decision-making regarding individual developments such as interpretative centers, and thus the channeling of tourism flows have mostly been exclusive to governmental bodies. Recent shifts towards more participatory forms of governance that involve actor groups with diverse interests in order to realize a substantial kind of power sharing, are mostly regarded as "tokenistic consultation" by Healy et al. (2012: 466).

This development is reflected in the Burren and Cliffs of Moher region. Due to their attractiveness, a highly commercialized state-led visitor centre was built at the Cliffs of Moher between 2005 and 2007[19] with the responsible county council granting itself the necessary planning permission (Healy et al. 2012, O'Rourke 2005). The new visitor attraction boosted tourist numbers and thus helped to achieve the growth-oriented governmental goals. However, the Cliffs of Moher and the adjacent Burren were rather a 'drive-through' for coaches going to more intensely marketed tourist destinations in the north and south of the country. Consequently, the majority of holidaymakers came to the Cliffs of Moher and the Burren as day visitors and regional tourism companies had difficulties benefitting from the crowds of tourists that passed through the area (Saunders 2015). This resulted in a mismatch between mass tourism at the Cliffs of Moher significantly influenced by coach tours, and a small-scale structured tourism sector in the hinterland.

[19] The sustainability concept of the Cliffs of Moher Visitor Experience and how tourists perceive it was the subject of a BA thesis supervised by the author of this habilitation thesis. The study evaluates the visitor centre's sustainability concept positively. It concludes that the great majority of tourists at the Cliffs of Moher endorse the sustainability measures taken by the centre: Rentz, A.-K. (2015). Tourismus und Nachhaltigkeit. Umsetzung des Konzepts der Nachhaltigkeit am Beispiel des Cliffs of Moher Visitor Experience, Irland. BA thesis. Hildesheim.

Against this background, BEN as a regional tourism business network mainly funded by the local county council was quite a novelty regarding its participatory approach which was based on a partnership between the state and the business sector. Its roots can be traced back to 2008 when, in the course of the erection of the new Cliffs of Moher visitor centre, the decision was made to also apply for geopark status. UNESCO Global Geoparks aim at protecting geological heritage and promoting sustainable development in rural areas. Receiving geopark status requires a bottom-up approach to sustainable development, hence, the regional tourism industry was involved by erecting a tourism business network. Thus, simultaneously with the approval as a Global Geopark by the UNESCO in 2011, BEN was officially founded with 18 initial member businesses including the Cliffs of Moher visitor centre (Geopark 01).

4.4.2 BEN's sustainability concept and general structure

By mutual agreement, the Burren & Cliffs of Moher Geopark and BEN decided to use the term 'eco-tourism' in the network's constitution as defined by The International Ecotourism Society, which focused on nature conservation and the empowerment of local communities (BEN 21). Applied to the specific regional context, the BEN members' overall understanding of sustainable tourism in the Burren and Cliffs of Moher region was to empower the small-scale structured tourism businesses in the area and attract tourists to the hinterland while behaving responsibly with the natural resources. The forms of tourism that were promoted can be characterized as slow tourism, food tourism and cultural tourism (BEN 05, BEN 16, BEN 25, BEN 47). In contrast, network members mainly opposed the mass tourism to the Cliffs of Moher provided by coach tour operators and criticized its negative socio-ecological effects (BEN 01, BEN 12, BEN 32, BEN 43):

> *For years, people around here saw buses and buses of tours coming into the Cliffs of Moher, leaving their business there and then going their way again. And the rest of the Burren was forgotten about. […] There was a lot of damage done. [Tourists] were taking stones, they were taking flowers, [...] they were decimating the Burren (BEN 37).*

Although BEN was an independent entrepreneurial network it had an intensely intertwined relationship with the Burren and Cliffs of Moher Geopark. This power sharing concerned all structural aspects of the network. While the criteria for membership eligibility were set and controlled by the geopark, the formulating and monitoring of ongoing membership obligations was conducted by the BEN executive, a committee elected by the BEN members. Of benefit to the members were the joint marketing campaigns organized by the network itself, even though they were co-funded by the geopark. Political lobbying of regional tourism interests, however, was mainly conducted by the geopark administration (Geopark 01, Geopark 02, BEN 01, BEN 21)[20].

By June 2014, the network had grown considerably to 47 members who had been accepted in a total of three waves of admittance (BEN 01). They covered the key parts of the tourism supply chain including gastronomy, accommodation, tourist activities and transport and also segments of the tourism fringe market such as food, education or souvenirs.

In the first two waves of admittance each BEN candidate had to obtain a third-party sustainability certification by EcoTourism Ireland, an Irish certifier chosen for cooperation, prior to acceptance. However, the geopark altered the formalities for eligibility in order to reduce costs and facilitate handling of the heterogeneous group

[20] The network's strong dependence on the Burren and Cliffs of Moher geopark's personnel and financial resources that are administered by the county council as a state actor, is confirmed by Hipkins (2016) who assesses the Burren EcoTourism Network's relevance within the Burren region: Hipkins, D. (2016). Nachhaltiger Tourismus in der Burren-Region, Irland: Eine Netzwerkanalyse des Burren EcoTourism Network. BA thesis. Hildesheim.

of regional tourism enterprises, many of which did not fit well into the tourism activities-focus of EcoTourism Ireland's certification scheme. Thus, in the off-season of 2013/2014 the achievement-oriented third-party certification was replaced by a less cost-intensive process-oriented in-house 'verification scheme' characterized by less ambiguous standards. BEN candidates now only had to go through a sustainability training set up and organized by the geopark, and comply with an ecologically-oriented code of practice also developed by the geopark. Furthermore, within five years of admittance to the network they had to be willing to present nationally recognized third-party sustainability certification awarded to them by certifying organizations such as EcoTourism Ireland or the Green Hospitality Programme. The majority of members appreciated this change (Geopark 02, BEN 01, BEN 21).

Ongoing obligations for accepted member businesses included paying a moderate annual membership fee according to the size of the business and showing commitment to the business network, for example by volunteering in one of the network's working groups, by mentoring new member candidates or by participating in events or projects. However, there were only reluctant attempts to keep track of such activities (BEN 01, BEN 21).

In sum, the role of the county council was highly ambivalent. It walked a tightrope along a precarious course, attempting to serve both the UNESCO requirements to promote sustainable tourism pushed by many local actors, and the growth-oriented governmental goals. Thus, the county council was the network's initiator and driver aiming to grow the group to around 100 members (Geopark 02). However, as the organizer of external funding and in order to avoid greenwashing without poleaxing regional tourism businesses that were willing to get engaged in sustainable tourism, it also acted as the gatekeeper who set up the rules for member

admittance. Finally, it was the authority responsible for mass tourism development at the Cliffs of Moher.

4.5 The BEN members as sustainability actors and their networking activities

4.5.1 The network members' ideological orientation towards sustainability

Against the background of BEN's interpretation of sustainable tourism, the network members' ideological orientation towards sustainability was quite heterogeneous in June 2014. Applying Panzer-Krause's (2017) framework, the member businesses were categorized as follows. With a total of six, the semi-conservative faction dominated the group of interviewed members, while the group of strict conservatives was the smallest with two BEN members. Both the semi-modernist group and the strict-modernist group were equally represented by four members. Hence, the interviewed BEN members were spread relatively evenly across the four categories, showing a balanced representation of different concepts of sustainability in terms of green growth and degrowth strategies (Table 4.1).

Table 4.1: Aspects of BEN members' ideological orientation towards sustainability.

Aspects of ideological orientation	**Prime examples from the interviews**			
	strict conservative	*semi-conservative*	*semi-modernist*	*strict modernist*
altruistic vs. egocentric	"It takes people working with a selfless rather than a selfish nature, trying to develop the network for the network's sake and in that you are developing your own business, not just looking at your own little part of it, at least not concentrating solely on that" (BEN 09).	"Since the beginning here, we have always been aware of not wasting and recycling […]. We market our organic vegetable garden, […] our home-cooked food […]. We sell what we do, if you like, as a holiday […] We didn't make a decision: 'That should become an eco-centre, so we can make more money' [...]. It's what we do" (BEN 05).	" […] we encourage in our group tour business to come either early or late to get a cheaper price […] It avoids our peak, but also sensitizes them to stay locally" (BEN 21).	"It's a good fit to be ecologically-minded, for two reasons: 1. I have to protect what's outside the window […] because without this I would have no business […]. And 2. [….] a lot of people are looking for [ecologically-friendly holidays] now" (BEN 25).
consolidating/downsizing vs. expansive	-	"[…] I would like to see […] when you bring in visitors, that the numbers are low, that you have a relationship between the host, the provider of the service [and the tourists], and limited amounts of people. It would be better for the region to have small numbers […]" (BEN 40)	"Hopefully, we can expand to become a bigger business […]. Looking at statistics […], ecotourism is the way. But we are that type of person anyway" (BEN 02).	"The other thing we have talked about is creating a [regional] booking engine […] Because that would generate revenue for the network as well [...]" (BEN 21).
open to collective efforts with regard to environmental/societal aspects vs. economic aspects	"We knew, within a couple of generations that if something wasn't done, we would have no Burren left […]. It took 10 to 12 years for the group to come together in the form it has. Beforehand groups were coming and going, but none lasted [...]. But it wasn't then a group of people that was really passionate about the Burren and protecting the Burren and knew the value of what we have here" (BEN 37).	"We [as a network] can create our own [sustainability certification] […]. We attended the training sessions and I myself helped with some of the training for some of the other businesses so they could achieve their code of practice" (BEN 33).	"We just felt good things were happening [in terms of environmental protection], it was a good idea [to join], it was time for us to participate and bring ourselves into it [in order to benefit economically]" (BEN 16).	"If we all work together, you know, we can actually capture more of the business" (BEN 27).
number of BEN members:	**2**	**6**	**4**	**4**

The analysis of the interviews with the aim of grouping the BEN members into one of the four categories faced various challenges. Thus, in a few cases the interview material did not provide statements for all three aspects of ideological orientation

under consideration. In some other cases, the actors' statements could not be clearly assigned to one of the three aspects of ideological orientation, but instead had to be related to more than one aspect – illustrating the interconnectedness between the assessment criteria. On rare occasions, network members expressed somewhat contradictory statements. Hence, although prime examples from the interview material were identified for every interviewed BEN member, the evaluation of each of the three aspects of the sustainability orientation, mostly involved considering a compilation of several statements. With regard to the range of categories – distinguishing between strict conservatives, semi-conservatives, semi-modernists and strict modernists – the framework showed a practicable differentiation. Only in the case of the businesses' focus on either consolidation and downsizing or expansion was it not possible to identify an interview statement for the strict conservatives' group.

4.5.2 Communication and collaborative action within the network

4.5.2.1 Creating social capital and sustainability innovations?

To explore the creation of social capital and sustainability innovations, both the patterns of communication and the patterns of collaborative action evoked within the network were investigated against the background of the members' ideological orientation towards sustainability. While the patterns of communication exposed the potential for social capital within the group, the patterns of collaborative action revealed its actual outcome in terms of innovations. Following Hjalager (2010), all activities jointly established by the network members were considered innovative.

With regard to density, taking into account the fixed choice approach of data collation, 83 of 96 possible relationships were mentioned by the business members, suggesting well-established communication within the network. Despite a moderate

in-centralization index of $C_{indeg}=0.23$ indicating a relatively balanced structure of communication in terms of hierarchy, two actors had higher indegree centrality than the others with indegrees of *indeg=10* (BEN 32) and *indeg=9* (BEN 21) respectively. These businesses can be regarded as the network members with the greatest prestige and as particularly influential in terms of communication. While BEN 21 was a semi-modernist business, BEN 32 was categorized as semi-conservative (Figure 4.1a).

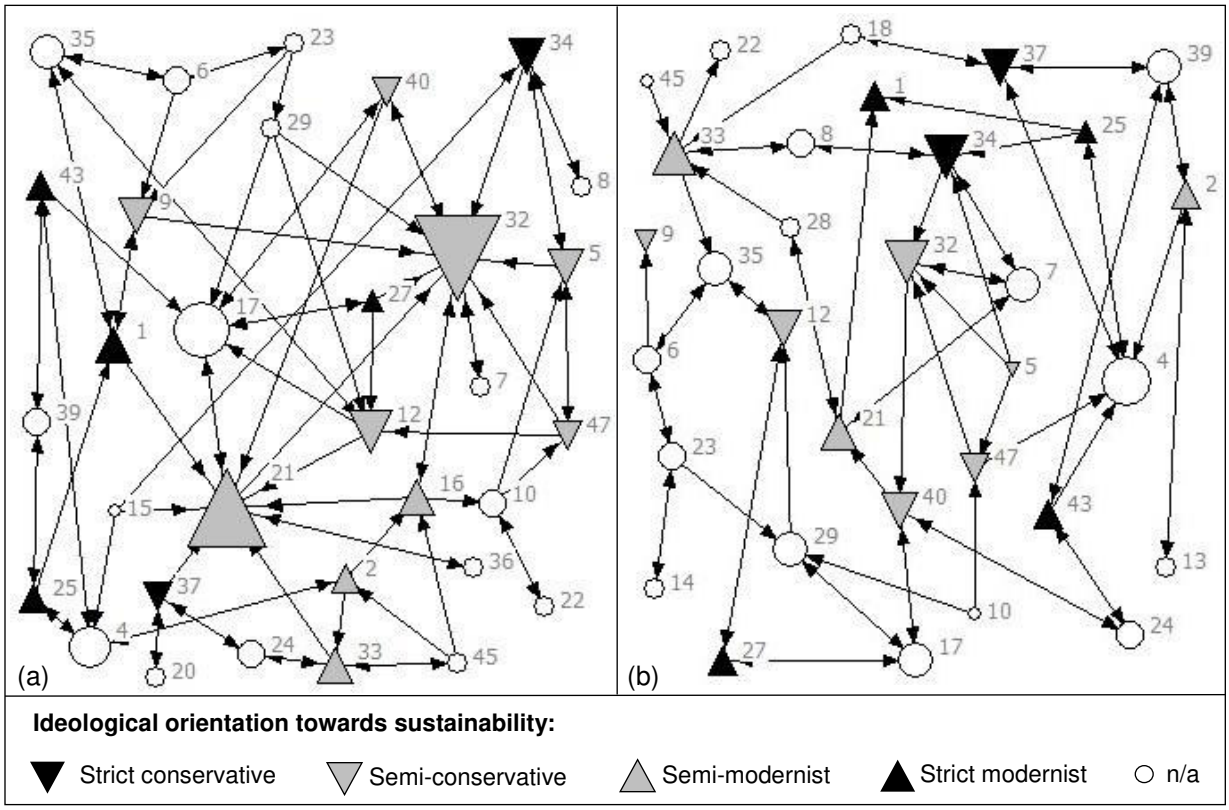

Figure 4.1: Indegree centrality regarding communication (a) and collaborative action (b) (N=32) and BEN members' ideological orientation towards sustainability (N=16).

The second and third waves of member admittance led to communicational challenges within BEN due to a gradient of trust between the previous and the new members. Moreover, it became obvious that in a continuously growing group it was impossible to establish close relationships between all the actors:

> *For the original BEN members, it was very difficult to see the next group coming in. We had become really close. […] And now there is a third group. […] And you hear people, when you go to an event: 'I am a member of BEN'. And you go: 'Really? I don't know you' (BEN 34).*

The growing fragmentation of the group brought with it the risk of an increasing anonymity and subsequently less willingness of the members to engage in network activities which were regarded as an essential part of the initiative. In view of this, most of the earlier BEN members showed great determination to integrate new members and to adapt to the changing network environment (BEN 32, BEN 33, BEN 34).

Although communication within the network was well-constituted and showed a high potential for the generation of social capital, joint activities were less pronounced. Here, the network density was lower with only 69 out of 96 possible choices being made. Also, the in-centralization index amounted to only $C_{indeg}=0.09$ indicating that no noticeable hierarchical pattern existed. Instead, a total of four BEN members turned out to be somewhat important concerning the realization of collaborative activities: BEN 33 (*indeg=4*, semi-modernist), BEN 32, (*indeg=4*, semi-conservative), BEN 34 (*indeg=4*, strictly conservative), BEN 04 (*indeg=5*, n.a) (Figure 4.1b). Despite the semi-modernist BEN 21 showing a slightly lower indegree of *indeg=3*, the two key actors in terms of communication also played an important role regarding collaborative action. In fact, because of their moderate sustainability positions they facilitated collaborative action and thus the generation of innovations involving BEN members of both the green growth and the degrowth faction.

4.5.2.1 Entrepreneurial activities vs. not-for-profit commitment to the network

With respect to innovative collaborative activities within BEN, a differentiation between conventional entrepreneurial activities and voluntary, particularly socio-ecological commitment to the network seems meaningful. Hence, BEN members that belonged to the conservatives' side tended to engage in voluntary working groups, dealing with the region's socio-ecological matters more often than members from the modernists' side (Figure 4.2).

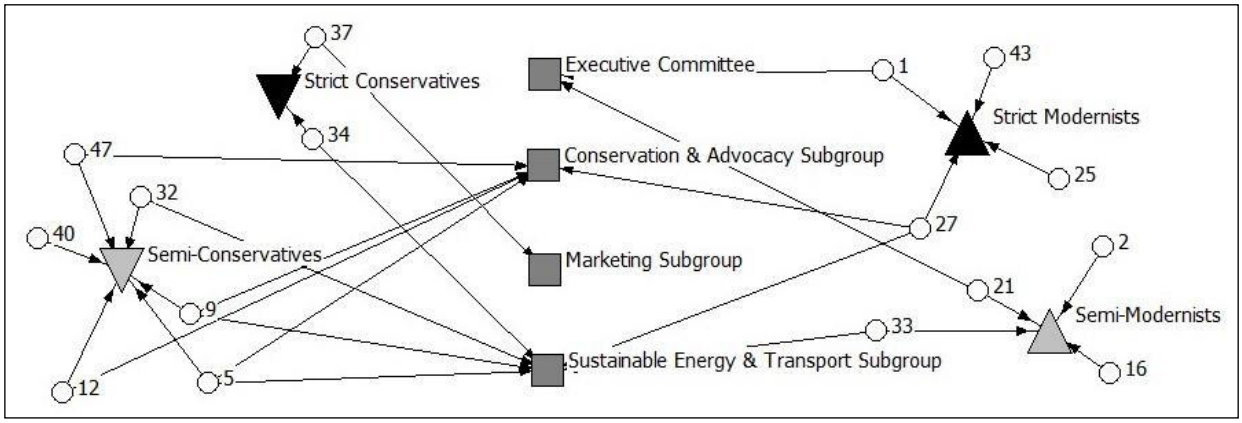

Figure 4.2: BEN members' engagement in working groups and their ideological orientation towards sustainability (N=16).

Within BEN's organizational structure, there were three active working groups. The Conservation & Advocacy Group pursued ecologically focused projects in the Burren and Cliffs of Moher region like the 'Adopt a Hedgerow' scheme; this involved member businesses clearing litter dumping and reporting on invasive species for a defined section of street hedgerow within the area (BEN 05, BEN 47). The Marketing Group developed and organized BEN's marketing campaigns emphasizing the sustainability aspects of the network (BEN 37). Finally, the Sustainable Transport Group entered into negotiations with regional and national transport providers in order to make the area more accessible by public transport:

> *There is no money in this for anybody, but it's the right thing to do. If we are trying to promote sustainable tourism you have to be able to come in here without renting a car (BEN 09).*

Despite being initiated and realized by businesses, the working groups' innovative activities were characterized by their not-for-profit nature and aimed to conserve the environment and restructure the tourism sector towards more sustainable modes. Here, tourism businesses dedicated business resources towards promoting sustainability without following a rigid economic target. Similar to social grassroots movements, these companies functioned as change agents in processes of sustainability transitions. Hence, these business-led grassroots innovations were generated in the context of the innovators needing to manage their businesses to ensure business survival while simultaneously dedicating resources to non-profit sustainability efforts.

On the other hand, within BEN a number of entrepreneurial activities were developed that made use of socio-ecological arguments to raise revenue. Here, members of the modernists' side tended to engage more actively. Thus, business projects like the Burren Food Trail or the Burren Adventure Trail were successfully established. The Burren Food Trail was BEN's most prosperous tourism product initiative (BEN 21). It aimed to engage and create emotional responses from visitors with local food, uncovering the routes taken 'from farm to fork' (www.burren.ie 2017, October 16). As regional producers and service providers were highly interested in participating in this initiative it even became a means of attracting new members to the network and making them commit to its sustainability principles:

> *I said: 'I want to be in the Food Trail. I want to be part of this. […] [Joining BEN] is just the way we have to go' (BEN 43).*

While the majority of the first BEN group was rather conservative and 'naturally doing what people were considering to be new radical changes in recycling and being an ecotourist' (BEN 34), newer members tended to be more growth-oriented. This altered the group's internal dynamics as increasingly more emphasis was put on joint business activities rather than on voluntary commitment to the network:

> *We don't want to put in too much work. […] [But] promotional things we are happy to get involved in (BEN 02).*

Considering these activities in the light of the network's goal of establishing a responsible form of tourism that empowers regional SMEs and ensures nature conservation while reducing mass tourism at the Cliffs of Moher, it needs to be acknowledged that this goal has not yet been fully realized. Although there is evidence that BEN has been able to generate social capital in order to empower regional tourism SMEs dedicated to responsible tourism in the hinterland of the Cliffs of Moher, mass tourism has continued to expand at the Cliffs of Moher. Here, the county council has rather pushed for green growth, a practice that complies with Gibbs & O'Neill's (2016: 3) observation that for policy makers the green economy seems to be a "source of new growth and jobs and the basis of a new round of capital accumulation".

4.6 Discussion and conclusion

Recognizing sustainability transitions as a key strategic concern of future regional development (Turok et al. 2017), this study investigated the structure and dynamics of BEN as a sustainability network of tourism businesses located in the Burren and Cliffs of Moher region in rural Ireland using an evolutionary approach. Against the background of the members' ideological orientation towards either green growth or degrowth strategies as an actor attribute, it identified advantageous and

disadvantageous features for the creation of social capital and innovations in the context of a sustainability transition.

The analysis revealed a relatively balanced mixture of strict modernists as rigid green growth strategists, semi-modernists, semi-conservatives and strict conservatives as resolute degrowth strategists within the network. Despite communicational challenges due to the rapid growth of the network the potential for a high amount of bonding social capital was limited which contrasts with Sørensen's (2014) findings. The study brought two key communication actors to light who represented moderate sustainability positions. They facilitated collaborative action involving BEN members of both the green growth and the degrowth factions.

As a consequence, joint innovative activities took various shapes. On the one hand, members on the modernists' side tended to engage more often in conventional entrepreneurial activities making use of socio-ecological arguments to raise revenue. On the other hand, BEN members on the conservatives' side were likely to show commitment in voluntary working groups that created business-led grassroots innovations characterized by their non-for profit nature and that aimed at profoundly restructuring the regional tourism sector towards sustainability.

However, although BEN has been able to generate sustainability innovations in order to empower regional tourism SMEs dedicated to responsible tourism and has thus supported the region's recovery from economic crisis, mass tourism at the Cliffs of Moher has continued to expand. Hence, the restructuring forces, particularly represented by the degrowth strategists, have not been influential enough to shake well-established tourism structures on a regional level. Accordingly, a clear shift away from business as usual (Ferguson 2014) cannot be identified and seem little more than a distant prospect given the increasing number of modernist businesses

within the network. Thus, the Burren and Cliffs of Moher region has not shown resilience in terms of creating completely new pathways.

Against the background of these findings and following up on Scott (2013) it becomes apparent that sustainability networks can support rural areas to recover from economic crisis. However, business networks can only be of significance for an 'alternative turn' (Bina & La Camera 2011) towards sustainability if degrowth strategists are represented in adequate numbers and have influence in terms of communication and joint activities in the long-term. Here, a rapid growth of membership has a rather negative effect. As processes of cooperation in order to generate business-led grassroots innovations appear to be different from conventional innovations, sustainability networks offer the chance to integrate both green growth and degrowth strategists and facilitate cross-faction learning. Hereby, even though the establishment and development of sustainability networks is often dependent on public funding, governmental bodies should be restrained from wielding power over them. Thus, similarly to Seyfang & Longhurst (2013) this study ascribes a new role to processes of learning.

In order to come to terms with the challenges of a great transition, regional network research concerning sustainable development needs to be strengthened. Future research should focus on three aspects. First, the identification and measurement of the varieties of regional sustainability actors and their roles within sustainability networks should be improved. Second, investigation of the evolvement of regional sustainability networks over longer periods of time is needed, including of resulting changes to their internal structure. Third, more clarification of the differences between rural and urban settings and the geographical diffusion of regional sustainability networks is essential.

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5 Growing degrowth-oriented tourism? CSR-certified tour operators as change agents

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Abstract

Tour operators have a substantial influence on the tourism industry as they act as intermediaries and select different individual tourism offers along the tourism supply chain and bundle them to packages. Using an evolutionary approach, this study investigates whether German tour operators that have gained the CSR-certification "TourCert" have the potential to act as change agents and upscale the downscaling idea of degrowth in tourism to embrace more of the tourism market and thus further a reformist pathway to structural change. For this purpose, the study analyses the tour operators' sustainability and audit reports. The analysis reveals, that current CSR-certification schemes do not seem to genuinely foster the restructuring of the tourism market within the capitalist system, but can only marginally advocate and diffuse certain elements of degrowth-oriented tourism. On the one hand, CSR-certification schemes rather lack the influence necessary for a paradigm shift. On the other hand, at present the approach of degrowth-oriented tourism seems unsuitable for mainstream application.

5.1 Introduction

Incredible growth in recent decades has led tourism to be one of the largest and most booming industries worldwide (UNWTO 2019). However, tourism has faced criticism since the late 1970s concerning its vast negative ecological and socio-cultural impacts. The increasing number of tourist arrivals in ever-new destinations

oftentimes leads to their dramatic transformation by extensive tourist infrastructure, destroying landscapes and habitats (Moscardo & Murphy 2014, Hall 2016). Travel-induced, high-carbon modes of transport, especially air travel, that contribute to climate change are another major problem (Hall & Gössling 2013, Gössling & Peeters 2015). Finally, the socio-cultural consequences associated with tourism, such as all-too-often externally-controlled tourism development, the explosion of real estate prices, labour exploitation or the inappropriate behaviour of tourists towards local customs, have evoked scepticism or even an anti-tourism position in many host-communities (Gürsoy 2019, Milano et al. 2019, Adityanandana & Gerber 2019).

One effect provoked by the debate about the downsides of tourism in the past 20 years is the development of sustainability certification schemes for tourism providers, also referred to as Corporate Social Responsibility (CSR)-certification. These schemes assess tourism companies that voluntarily follow a sustainability ethos beyond political regulation and award them with a certificate if the specific sustainability requirements are fulfilled. These CSR-certification schemes can be process-oriented or criteria-oriented or combine both approaches (Panzer-Krause 2017). Besides other things, they often motivate tourism companies to comply with elements that can be categorized as degrowth-inspired aspects of tourism. Andriotis (2018) describes this sufficiency-driven form of tourism as one that enables travellers to engage with a destination's natural and cultural heritage, while empowering local communities and reducing CO_2 emissions by using low-carbon means of transport.

With regard to a degrowth-oriented transition of the tourism industry, for which more and more scholars plead (Andriotis 2018, Fletcher et al. 2019, Hall 2010, Higgins-Desbiolles et al. 2019), CSR-certified tourism companies may function as

change agents. Especially tour operators could play an important role since they act as intermediaries and select different individual tourism offers along the tourism supply chain and bundle them to packages in order to sell them to their customers. Thus, they have a substantial influence on the tourism sector. This is underpinned by the fact that in Germany, for example, 43% of all vacation trips are booked as package or modular tours organized by tour operators (FUR 2019).

This study seeks to add to the literature concerning the transformation of the tourism sector towards genuinely sustainable modes. Using an evolutionary approach as a theoretical lens, it analyses whether German tour operators who have gained the CSR-certification “TourCert” and have committed themselves to harmonizing ecological, socio-cultural and economic goals concerning their tour planning operations, have the potential to upscale the downscaling idea of degrowth in tourism to embrace more of the tourism market and thus to further a reformist pathway to structural change.

The chapter is structured as follows. Section 5.2 forms the chapter’s theoretical basis, and Section 5.3 outlines the methodology of the study. While Section 5.4 presents and discusses the results of the analysis, Section 5.5 offers a conclusion.

5.2 Degrowth in tourism?

5.2.1 Degrowth as an alternative for a booming sector?

The tourism industry has been massively growing worldwide for the last seven decades with international tourist arrivals increasing from approximately 25.2 million in 1950 to about 1.4 billion in 2018. Tourism receipts amounted to 1.4 trillion US dollars in 2018 (UNWTO 2019). As a consequence, many destinations like the coastal regions of the Mediterranean have experienced a stampede of tourists and

quickly developed into mass tourism destinations with rapid and mostly unplanned urbanization accompanied by dramatically negative environmental and socio-cultural impacts since the 1950s. Tourism in such mass tourism destinations is large-scale and the tourists travelling to these regions are usually considered sun, sand and sea tourists who are physically rather passive and do not show much interest in the region's landscape and culture (Bramwell 2004, Blásquez-Salom et al. 2019).

In the late 1970s, criticism of this type of tourism became louder and small-scale tourism as an alternative to mass tourism was advocated. In contrast to mass tourism, small-scale tourism is ideally developed by local people and thus locally controlled. The aim is to prevent drastic changes and thus severe damage to natural and cultural heritage and to ensure that benefits remain within the local context. Small-scale tourism is often located in rural and economically underdeveloped regions, and in many rural areas this form of tourism is used as a conservation tool to protect the natural and cultural countryside (Powell & Ham 2008, Cortes-Vasquez 2017). Hence, small-scale tourism is closely linked to sustainable development and is seen by many scholars and practitioners as the "antithesis of mass tourism" (Lane & Kastenholz 2015: 1139). Nevertheless, the countryside has experienced increasing popularity, too, and following capitalist logic, there has also been an immense growth of small-scale tourism (Becken 2005, Paunović & Jovanović 2017, Panzer-Krause 2020).

Meanwhile, ever-new destinations emerge on the international tourism horizon oriented somewhere between the two extremes of large-scale and small-scale tourism, but generally growth-driven. Despite at times high leakage with respect to local value added, for many destinations tourism is an important, often even the most important economic pillar. Also, UNWTO (2019) regards tourism as a

favourable option to promote sustainable development, especially for poorer communities in the Global South. Growth-oriented sustainable tourism is considered a catalyst for development and positive change. Concerns about the ecological and socio-cultural capacity of destinations are dismissed by highlighting that the quantity of tourists is not the problem, it is rather the case that new strategies for adequately managing the increasing tourist numbers are required (Rifai 2017).

However, there has been increased questioning of such green growth strategies that claim to be able to combine sustainable development and economic growth. Following scholars who declare that continuous growth will lead to collapse due to the planet's finite ecological and economic capacity (Jackson 2009, Latouche 2009, Kallis 2018), Andriotis (2018), amongst others, argues that a degrowth-oriented approach needs to be applied in the tourism sector in order to rightsize or downscale tourism activity. Although he notes that there is no coherent understanding of the key aspects of degrowth in a tourism context and that the concept lacks clarity and precision, he identifies several characteristics that he links to degrowth-inspired travelling from a consumer perspective. Accordingly, degrowth-inspired travelling is characterized by its low-carbon means of transport, as for example used by backpackers who do not attach value to quickly getting from one point of interest to the next. Furthermore, degrowth-inspired tourism "embraces philosophies of life reflecting non-materialistic sources of satisfaction and a minimally 'sufficient' material standard of travelling" (Andriotis 2018: 192). In this sense degrowth-oriented tourism concentrates on non-mainstream travellers who seek to see rather unknown places that are not crowded with tourists and offer an unspoilt environment. The tourists who visit such hidden gems request only simple facilities such as hostels or camping sites or a public transport system. Generally, they reject being objects of commercialization (Andriotis 2018). Degrowth-oriented tourism

instead aims to bring more benefits to local communities by following the idea of empowering civil society and aspects of commoning (Büscher & Fletcher 2018, Fletcher et al. 2019, Adityanandana & Gerber 2019, Navarro-Jurado et al. 2019). Here, Chassagne & Everingham (2019) as well as Renkert (2019) see parallels to the concept of Buen Vivir, which originates from the indigenous communities of Latin America and prioritizes the growth of social and environmental wellbeing instead of economic growth. However, to a large extent it remains unclear what degrowth in tourism and the pathway to it might look like.

With regard to these principles, it can be ascertained that the degrowth tourism approach assembles key ideas of concepts such as rural tourism (Panzer-Krause 2019), slow tourism (Heitmann et al. 2011), staycation (James et al. 2017), responsible tourism (Leslie 2012), eco-tourism (Fennell 2015[4]), heritage tourism (Park 2013) and religious tourism (Griffin & Raj 2017), and also adds the note of a general need for less production and consumption.

Yet, as Fletcher et al. (2019) and others stress, degrowth-oriented tourism is not to be mistaken for an anti-tourism position. Instead, it pleads for tourism to be differently scaled and organized. In this context, Gascón (2019) condemns the frivolity of many tourists and stakeholders who claim that tourism is a human right.

Beyond this, Hall (2009, 2010) calls for a steady-state understanding of tourism and urges that tourism needs to be integrated into a circular economy, which Daly (1991) defines as a non-growth society with a stable throughput of resources. Here, degrowth as a form of rightsizing the tourism industry is necessary to move towards this equilibrium, in which then, Hall (2009, 2010) argues, both the degrowth-oriented sufficiency approach and the green growth-oriented efficiency approach as sustainability strategies are required.

With regard to realizing degrowth in a booming sector, numerous scholars demand a radical political-economic reorganization which embeds tourism into a post-capitalist system (Fletcher et al. 2019, Higgins-Desbiolles et al. 2019). This transformation shall be characterized as a civil society based triple movement "with pushes for systemic structural change at global and societal levels combined with more localized and individual practices contributing to downsizing on the ground" (Fletcher et al. 2019: 1754). Blázquez-Salom et al. (2019) support this radical view. In a study realized in Spain they observe that pursuing degrowth within the capitalist system by means of market-led territorial and tourism planning instruments only leads to an unfavourable exclusive and elitist use of space in tourism destinations rather than to socio-environmental justice.

However, in a world where a sudden disappearance of the growth ethos seems to be unrealistic in the foreseeable future and where, especially in Western societies "policy-makers will avoid taking unpopular decisions" (Font 2017: 210), a transition of the booming tourism industry to a more degrowth-oriented sector seems to require a less radical evolutionary approach to change. Against this background, a successful attempt to degrow tourism largely depends on its capacity to upscale degrowth-inspired travel from a niche to a wider context.

While the next subsection lays the theoretical foundations for an evolutionary approach to foster tourism degrowth without radical change, the empirical study explores the practical capacities for growing degrowth-inspired travel in the tourism sector. In contrast to Andriotis' (2018) contribution, here the focus is on the producer side.

5.2.2 Strategies for a degrowth transition and tour operators as change agents

Scholars advocating degrowth-inspired travelling associate this form of tourism with characteristics such as non-mainstream, small-scale and less consumptive (Andriotis 2018, Fletcher et al. 2019, Higgins-Desbiolles et al. 2019). However, Weaver (2012) doubts that small-scale and non-mainstream tourism is applicable for the whole sector and strives for a pragmatic approach with regard to developing strategies to establish sustainable mass tourism destinations. Here, management approaches developed and tested in isolated rural tourism hotspots that are surrounded by an otherwise small-scale tourism sector can offer test fields for acquiring new practices (Panzer-Krause 2020).

This being said, a great variety of sustainability strategies can be identified. While they all are mostly contextualized between the two extremes of the efficiency-driven green growth approach (von Weizäcker et al. 2009, UNWTO 2019) and the sufficiency-oriented degrowth approach (Jackson 2009, Latouche 2009, Kallis 2018), many scholars agree that sustainability has to be regarded as a process (Faber et al. 2005). Consequently, the transformation of the tourism industry towards a genuinely sustainable sector with degrowth-oriented travelling as a key element in order to rightsize the industry has to be guided by an evolutionary approach that involves exploring and analysing reformist pathways that lead to sustainable change.

Degrowth scholars bemoan that the common understanding of the term ‘sustainability’ is closely linked to green growth (Higgins-Desbiolles 2018, Higgins-Desbiolles et al. 2019, Fletcher 2011, Fletcher et al. 2019). However, based on the general degrowth discourse, they argue that radical change of the tourism sector

and the entire capitalist conception as such is necessary in order to achieve a paradigmatic shift towards degrowth-oriented tourism. According to this view, degrowth within the capitalist system marks an “impossibility theorem” (Foster 2011) which can only be overcome by a post-capitalism that rejects the general growth ethos. Yet, currently it seems unrealistic to think of finding majorities for radical change to the capitalist system. On the one hand, this would mean Western societies dispensing with economic hegemony. On the other hand, also many societies in the Global South give priority to their economic development (Foster 2011). Hence, under the current circumstances and despite all the challenges, strategies for non-radical, reformist change within the current capitalist system need to be explored and theoretically substantiated.

Ma & Hassink (2013) propose applying the evolutionary approach in the tourism sector as developed in Evolutionary Economic Geography, a new paradigm in contemporary economic geography (Boschma & Martin 2010). This theoretical lens provides an opening to investigate the rise and fall of tourism destinations. In contrast to Butler’s (1980) deterministic tourism area life cycle model, the evolutionary approach takes an actor-oriented perspective and thus enables theoretical explanations for diverging pathways of tourism destinations. Panzer-Krause (2017, 2019) adopts this evolutionary approach to theoretically unravel the pathways and coevolutionary processes concerning sustainability transitions in the tourism industry. Brouder (2017) also recognizes potential for explaining sustainability transitions in the tourism sector by means of an evolutionary lens.

Voluntary CSR-certification that goes beyond political regulation has become a strategy for tourism companies to get engaged in sustainable change and communicate their sustainability commitment. During the last two decades, several hundred certification schemes have been established worldwide (Balàš & Strasdas

2015). Panzer-Krause (2017, 2019) suggests that such certification schemes applied in specific destinations might be able to initiate new trajectories for more sustainable modes of tourism development. In two empirical studies she investigated networks of tourism businesses that voluntarily and regularly undergo a CSR-certification process in order to comply with a general sustainability ethos and follow certain ecological, socio-cultural and economic aspects in their business activities (Panzer-Krause 2017, 2019). The studies were realized on the island of Rügen, Germany, and the Burren, Ireland, which represent two vulnerable destinations that are under pressure from drastic tourism development and that show signs of overtourism due to ecological and socio-cultural capacity limits. Although the two certification schemes can be regarded as utterly low-threshold they established quite different certification processes and internal structures. Nevertheless, in both local tourism networks a spectrum of different sustainability orientations amongst the actors was identified that ranged from strict green growth approaches to rigid degrowth approaches. Panzer-Krause (2019) argues that degrowth strategists need to be key actors in innovation networks of the tourism sector to realize a clear shift away from business as usual. However, she also highlights that the “sustainability light” approach followed in the two destinations raises concerns about the pace of sustainability transitions and possible time limits that need to be acknowledged in order to avoid severe socio-environmental disturbance.

So far, the focus of academic studies regarding the development of more sustainable modes of tourism has been mainly destination-centred. The number of destinations where networks of tourism businesses have been established that follow a sustainability ethos and promote sustainable tourism within the local context has risen significantly during the last decade. Nonetheless, the impact of regional

efforts to transform tourism within specific destinations is spatially limited. Additionally, most tourists travelling to these areas are not aware of their existence (Balàš & Strasdas 2015).

For this reason, this study aims to consider the whole value chain of tourism product creation. CSR-certified tour operators that bundle tourism services along the tourism supply chain might be more influential with regard to a change towards more degrowth-oriented tourism. In Germany, nearly half of all vacation trips are organized by tour operators (FUR 2019). Thus, with regard to a re-configuration of tourism, tour operators may act as change agents. This chapter seeks to investigate this.

5.3 Methodology

5.3.1 The TourCert certification scheme

For this study, TourCert, a German-based and internationally recognized non-profit certification system for sustainable tourism, was used to investigate whether CSR-certified tour operators act as change agents for a transition towards degrowth-inspired tourism. TourCert was founded in 2009. In 2019 the certification scheme had reached 330 certified tourism companies and destinations all over the world, especially in Germany and Latin America (TourCert 2019a). TourCert considers the whole tourism value chain, hence tour operators that bundle tourism offers to packages are, with 195 certified tour operators in 2019, the key target group. It is a primarily process-oriented certification scheme and operates in conformity with international standards, developed for example by the Global Sustainable Tourism Council (GSTC) (TourCert 2019b).

According to its process-orientation, which generally hides the risk of greenwashing (Panzer-Krause 2017), there are only a few requirements for the initial certification, which mainly consist of transparent sustainability reporting including ecological, socio-cultural and economic indicators. However, annual improvement targets and action plans have to be set by every certified partner. After two and for each further period after three years, the businesses have to be recertified (TourCert 2019b).

In a study carried out by Verbraucher Initiative e.V. & Zenat (2016), TourCert certification for tour operators was ranked the best German sustainability certification scheme in the tourism industry amongst the 36 certification systems analysed.

5.3.2 Data collection and analysis

The empirical study was realized by a documentary and desktop research. 59 German tour operators that held full TourCert certification in 2019 were identified (ID 1-ID 59). The study drew on the tour operators' detailed sustainability reports or alternatively the summarized audit reports which mainly comprise key sustainability indicators. Certified tour operators with at least five full-time equivalent employees are supposed to publish their reports on their websites in order to ensure transparency (TourCert 2015). However, only the reports of 26 of the 59 tour operators were accessible online. The other companies were contacted and invited to transmit their reports. Thereupon, another ten reports of nine businesses were received. 21 tour operators did not react, and five businesses explained that due to the small size of their business, either a formal CSR-certification had not been conducted or they were not obliged to hand over their report to a third party.

Altogether, 37 sustainability and 14 audit reports of a total of 35 TourCert-certified tour operators could be included in the analysis.

The reports had very different elaboration dates. While the most recent reports of 20 businesses were up-to-date, the most current reports of 15 tour operators had been worked out before 2017 even though recertification is usually due after two to three years and thus reports should not be older than that. Furthermore, for 26 of the 35 businesses under investigation only the most current report was accessible. Hence, the reports included in the study drew on data generated between 2010 and 2018. The poor data situation complicated both a process-oriented and a comparative approach to the analysis.

To probe the TourCert certification process as well as the tourism companies in order to identify degrowth-inspired elements of tour organization and evaluate their potential for upscaling, the reports were used for both a quantitative and a qualitative analysis. As far as possible the tour operators' key sustainability indicators were extracted and compared. These included indicators such as the CO_2 emissions per guest per night, the value-added share that remains within the toured destinations, a sustainability index concerning the product design, a client satisfaction index, a sustainability index concerning partner agencies, a sustainability index concerning accommodations and a sustainability index concerning tour guides. Additionally, the descriptive sustainability reports, where available, were investigated qualitatively following Mayring (2015) by using categories such as 'ambitions for business growth', 'choice of destinations, mode of travel and CO_2 compensation', 'cooperation with suppliers', or 'community involvement'. The aim of this qualitative content analysis was to summarize, explicate and structure the sustainability reporting material.

The study was complemented by means of an analysis of relevant documents of industry specific German associations and research organisations such as Forum anders reisen (2019) and Forschungsgemeinschaft Urlaub und Reisen (FUR 2019).

5.4 CSR-certified tour operators pushing towards degrowth-oriented tourism?

5.4.1 Characteristics of the German TourCert-certified tour operators

50 of the 59 German tour operators that are certified with TourCert are simultaneously members of 'Forum anders reisen', the German association of sustainable tour operators. Guidelines and criteria for sustainable travel organization are worked out within the association. The TourCert certification scheme also emanated from 'Forum anders reisen', and members are encouraged to gain certification (Forum anders reisen 2019).

The TourCert-certified tour operators under investigation in this study are mainly very small or even micro-sized businesses. 16 tour operators were identified as businesses with less than five full-time equivalent employees, another five businesses had between five and under ten full-time equivalent employees. Only two tour operators employed between 50 and 99 people, and another two had more than 100 employees (Table 5.1). Six tour operators served less than 1,000 travellers in their annual reporting periods. Another five businesses served between 1,000 and less than 10,000 tourists. Only two businesses planned the travel of more than 50,000 tourists (Table 5.2).

Tab. 5.1: Number of full-time equivalent employees (N=33).

number of full-time equivalent employees	1-<5	5-<10	10-<20	20-<50	50-<100	100+
number of TourCert tour operators	16	5	4	4	2	2

Tab. 5.2: Travellers served annually (N=24).

travellers served annually	<1,000	1,000-<10,000	10,000-<20,000	20,000-<50,000	50,000+
number of TourCert tour operators	10	8	1	2	3

With respect to the destinations selected for travelling, 27 of the 35 CSR-certified tour operators investigated in this study focus their business activities mostly on destinations outside mainland Europe, many of them being rather exotic and remote destinations such as Trinidad and Tobago, Madagascar, Mongolia or Oman, whereat 14 of the tour operators specialized in only one or a few very specific destinations.

While, comparable to this study, in 2018 about 94% of the approximately 1,500 German tour operators had less than 50 employees (Kirstges 2018), the destinations preferred by German tourists differed considerably with Spain being the top international destination and only 8% of all trips being long-distance trips (FUR 2019). In addition, the total number of nearly 50 million trips sold by German tour operators in 2018 (Kirstges 2018) also suggests that TourCert-certified tour operators represent only a small niche of the German tour operating market.

5.4.2 Transparency of the certification scheme

Verbraucher Initiative e.V. & ZENAT (2016) attested a very high transparency rate of 92% for the TourCert certification scheme for tour operators, even though there remains unclarity with respect to how this value was calculated. However, the

present study raises concern regarding the scheme's transparency for the following reasons.

First, for consumers, transparency is limited with regard to general access to tangible CSR-related information as the certification scheme has developed different options for certified businesses to leave their customers in the dark. Thus, micro-sized enterprises with less than five full-time equivalent employees only have to complete a simplified certifying and recertification process and are not obliged to publish any reports or indicators (TourCert 2015). On the one hand, a slim certification process for these businesses seems sensible with regard to the explanatory power of certain indicators for them and the resources absorbed with respect to data collection. On the other hand, these tour operators usually do not reveal their business size to the public which makes it an unclear policy from the perspective of the customer. Furthermore, businesses with at least five full-time equivalent employees, which are obligated to publish their certification results, can waive up to three indicators with which they are not content. Finally, it is not clear why some of the reports that are published are older than three years although recertification is due after this timespan.

Second, further unclarity pertains with regard to the ten TourCert CSR-indicators that are supposed to illustrate business performance. These include, for example, the value-added share that remains within the toured destinations or the carbon emissions per guest per day, and in addition also indices comprising several indicators of a certain field, e.g. product design (TourCert 2018). However, neither TourCert nor the businesses' reports themselves outline what data flows into the calculation of these indices or to what extent. Also, when measuring the key indicators, tour operators may consider only a certain segment of their business activities in which a larger share of the turnover is generated (TourCert 2015). Here,

the data chosen to be included in the analysis may vary from assessment to assessment.

Third, a significant lack of transparency is evoked by the heart of the TourCert certification, its process-oriented character. On the basis of its key indicators each certified business develops an action plan with targets for the time until recertification is due in order to continuously improve its CSR-performance (TourCert 2015). Yet, it remains unclear what a good indicator value is and what the minimal requirements are in order to gain certification. Moreover, an improvement in CSR-performance does not seem to be necessary for re-certification. Two of the tour operators, for which at least two data sets for different reporting periods were available, were even recertified despite a massive deterioration in their CSR-performance regarding several indicators. Additionally, no information is given about the consequences if measures of the action plan are not realized within the specified timeframe.

Especially for micro-sized businesses, the time and effort needed for the TourCert certification process are high in relation to the resources they can provide. Yet, this group of tour operators forms the main TourCert-certified faction, hence special arrangements for them diminishes the relevance of the certification scheme and thus also encourage certified tour operators to do ‘business as usual’ (Ferguson 2014) rather than push for a shift towards degrowth in tourism.

5.4.3 The paradox of growing degrowth

The sustainability or audit reports of many of the 35 tour operators under investigation explicitly reveal their intention for business growth:

> *"The overall very positive past years' development of sales continues in 2015. We expect sales to grow more than 20%" (ID 1 2015: 16).*
>
> *"[We] continue to consistently follow our business growth path" (ID 35 2017: 5).*
>
> *"The business has continuously grown since its inception. […] In the current reporting year it is also worth mentioning that new product lines in the field of group tours were established with the aim of expanding our offerings and especially of reaching new target groups" (ID 39 2016: 7).*

This growth ethos contradicts the idea of degrowth in tourism. However, in the sense of Schumpeterian creative destruction (Schumpeter 1942), it may still lead to a restructuring of the tourism market if innovative elements of degrowth-inspired travel are realized in the certified businesses tour operating activities and if these have the potential to be upscaled to wider parts of the market and thus force out conventional tourism offers. In the following this will be evaluated with regard to the modes of transport on organized tours and the holiday design at the destinations travelled to.

Forum anders reisen (2019) set up guidelines for the length of stay at a destination depending on the distance that needs to be covered by air travel. These guidelines were incorporated by TourCert. Accordingly, for one-way flight distances of more than 3,800 km, tour operators should adhere to a length of stay of at least 14 days for their planned tours. With regard to flight distances between 800 and 3,800 km, holidays should last one week as a minimum. Air travel to destinations less than 800 km away should be avoided. The analysis shows that TourCert-certified tour operators normally comply with this guideline. Nevertheless, their holidays, even in far-away and remote destinations, usually do not last longer than three weeks. While Forum anders reisen (2019: 4) refers to a "justifiable relation" between distance and length of stay, the criteria for this remain unclear.

In accordance to the policy of Forum anders reisen (2019) adopted by TourCert, the certified businesses' mean air kilometres per tourist for a three-week holiday can be as high as 23,137 km (ID 4). As this obviously contributes neither to sustainable change nor a positive image for a CSR-certification scheme, the certified tour operators are additionally encouraged to compensate CO_2 emissions generated by their clients' air travel. As suggested by Forum anders reisen (2019) and likewise adopted by TourCert, most of the tour operators inform their clients about the possibility of CO_2 compensation and leave the decision and the costs up to them:

> *"Each client is informed about the carbon balance of a tour during the booking process and has, thanks to our cooperation with atmosfair, the possibility to compensate the trip's carbon production financially" (ID 4 2017: 20).*
>
> *"[We cooperate] with the climate protection initiative atmosfair and recommend our customers donate to atmosfair for the CO_2 emissions they cause" (ID 14 2015: 5).*
>
> *"We design our tours to be as climate-friendly as possible and offer our customers the possibility for compensation by means of a donation to 'atmosfair'" (ID 38 2016: 9).*

Only two tour operators fully and nine partly include the costs of CO_2 compensation in their travel packages. For this policy one tour operator was even awarded the atmosfair Bronze Award in 2010 and 2011 (ID 31).

Increasing awareness of CO_2 compensation by the tour operators' customers has allowed all nine tour operators under review, for which at least two sets of data were accessible, to reduce their CO_2 footprint per guest per night over the last few years. However, this can only be considered a cosmetic recalculation, not a genuine reduction of CO_2 emissions in the sense of degrowth and has rather to be referred to as a strategy of greenwashing. In contrast, a degrowth-inspired reduction of CO_2

emissions can be realized in two ways. First, when resorting to air travel as a mode of transport, tour operators can choose destinations that are closer to the customers' country of origin in order to diminish air kilometres. However, for many tour operators a restructuring of their often very specific destination profiles is not up for debate:

> *"[…] the analysed tours are exclusively long-haul trips whereby the long distances have to be covered by aeroplane" (ID 13 2018: 14).*
>
> *"In view of the destinations offered, clients mainly travel by aeroplane" (ID 35 2017: 17).*
>
> *"As a provider of long-haul tours, unfortunately, air travel is indispensable for our business" (ID 39 2016: 20).*

Second, tour operators can opt for other modes of travel, which cause less emissions such as buses, trains, sailing boats or bicycles. With respect to the average length of travel, which continues to be very limited, for many overseas destinations this is not a practicable alternative:

> *"As our travel areas are located far away, there is mostly no realistic alternative to air travel" (ID 11 2015: 5).*
>
> *"Due to the long distance to our destinations, there is virtually no alternative to travelling by aeroplane" (ID 27 2019: 2).*

Yet, there are two of the 35 TourCert-certified businesses under investigation that organize home stays in other countries with the purpose of learning a new language and cultural exchange. In contrast to most other journeys organized by the tour operators, these are indeed more degrowth-oriented if they include longer stays. In sum, however, although long-distance travel is one of the characteristics of the TourCert-certified tour operators, upscaling it is not in line with a degrowth-oriented

restructuring of the tourism market. Here, the CSR-certified tour operators under investigation are not in a position to act as change agents.

With regard to the holiday design at the destinations, TourCert-certified tour operators realize numerous aspects of specific forms of small-scale tourism such as slow tourism, ecotourism or rural tourism. The tour operators, although to different extents, cooperate with local partner agencies, accommodation and tour guides and aim to avoid external providers at the same time. Five tour operators could be identified that even partly or fully dispense with hotels and accommodate their clients in host families instead, although three of them only do this as a tourist highlight for one or two nights. In the sense of commoning tourism (Fletcher et al. 2019), this measure ensures an authentic holiday experience for the tourists as well as generating benefits for the host communities. Altogether, significantly higher amounts of value added remain within the destinations and capital drain to external, international companies is reduced. In addition, five TourCert certified tour operators put emphasis on selecting CSR-certified accommodation providers. Another 16 tour operators that work with a specific supplier Code of Conduct could be identified. Furthermore, within the destinations, the tour operators try to use environmentally friendly modes of transport which also benefit the local communities such as public buses and trains, taxis, bicycles and cycle rickshaws or boats. Hence, in this respect, they mostly act as change agents and multiply their vision of sustainability to more tourism actors along the tourism supply chain. Nevertheless, 12 of the 35 tour operators under investigation state that they need to fall back on domestic flights in order to get from one holiday region to the next.

The holiday experiences of the tour operators under investigation mostly include active elements such as walking, cycling or getting in touch with the local communities, but simultaneously renounce activities like helio-skiing or quad-driving

that are environmentally harmful (Forum anders reisen 2019). As tour guides are encouraged to include sustainability information in their guiding, the holiday product is additionally enriched with varying amounts of information about the natural and cultural heritage. While these are elements of degrowth-inspired tourism, it is not desirable that CSR-certified tour operators who travel to remote and so far unspoilt places function as change agents in terms of transferring them to the mass market, since managing large quantities of tourists in vulnerable natural and cultural landscapes is beset with many difficulties. An increasing number of rural tourism hotspots around the world already struggle with these challenges of overuse (Panzer-Krause 2020). Apart from that, the CSR-certified tour operators consciously distance themselves from mass tourism and consider their tourism activities as niche products:

> *"Class instead of mass" (ID 38 2016: 9).*
>
> *"[…] a specialist for individual travelling far away from mass tourism" (ID 47 2015: 6).*

Finally, community involvement at the destinations forms an important part of many TourCert-certified tour operators' activities. While 24 of the tour operators financially support a wide range of community and environmental projects and thus demonstrate their commitment to promoting socio-environmental justice at the destinations indirectly, four even enable their clients to get involved in certain projects themselves. The former is applicable to the mass tourism market, and CSR-certified tourism businesses can be change agents to diffuse this practice. With regard to the latter, however, the success of this form of volunteer-tourism is critically debated (Forum anders reisen 2019). Additionally, upscaling it to the wider tourism market is neither favourable nor feasible.

The analysis of the tour organizing activities of TourCert-certified tour operators exposes the paradox of growing degrowth-oriented tourism. Some elements of degrowth-inspired tour operating can be identified that have the potential to be upscaled to wider parts of the market and entail positive effects of rightsizing, such as close cooperation with local partners and the indirect support of environmental and community projects. However, there are a number of practices that would lead to the contrary and thus vast negative effects, if widely diffused. These include long-distance air travel and the visit of vulnerable, so far unspoilt places, as is popular within this sector, and active involvement in vulnerable communities and environments. Even with regard to the niche market CSR-certified tour operating represents at the moment, this needs to be critically reflected upon. At the same time, it is doubtful whether the general growth ethos the CSR-certified businesses have internalized will lead to creative destruction as described by Schumpeter (1942) and thus to a restructuring of the tourism market.

Hence, with a view to the paradox of growing degrowth-oriented tourism, either the demand to restructure the tourism industry of entire societies or the approach of degrowth in tourism itself needs reconsideration. On the one hand, reorganizing tourism in accordance with a non-mainstream concept entails selective and thus in some way elitist access to travel. On the other hand, upscaling degrowth with regard to the characteristics associated with it currently, will not lead to rightsizing the tourism industry.

5.5 Conclusion

Using an evolutionary approach (Ma & Hassink 2013) and thus acknowledging that sustainability needs to be regarded as a process (Faber et al. 2005), this study has evaluated the potential of CSR-certified tour operators in Germany to act as change

agents and grow degrowth-inspired tourism. Hence, the study followed Hall's (2009, 2010) argument of a circular economy in the tourism sector which requires initial downsizing by means of degrowth-inspired tourism (Andriotis 2018, Fletcher et al. 2019, Higgins-Desbiolles et al. 2019).

Referring to German tour operators that have gained the CSR-TourCert certification, the study analysed the tour operators' sustainability or audit reports, as far as these were accessible, by means of a qualitative and quantitative analysis. The analysis revealed that the TourCert-certified tour operators follow various measures, although to different extents, that are in line with degrowth-inspired travelling as described by Andriotis (2018). This especially applies to elements concerning the socio-cultural dimension of tourism, including close cooperation with local partners. By continuously increasing their engagement in these fields and communicating them to the whole sector, CSR-certified tour operators can indeed act as change agents pushing towards a more sustainable tourism industry, and even some aspects of commoning. However, especially concerning the choice of destinations and the selected mediums of transport in order to reach them, TourCert-certified tour operators, in general, do not set a good example. They tend to choose rather remote destinations, which require long-distance travel, in most cases realized by air travel. While they are typically not willing to reconsider their tour destinations, they opt for CO_2 compensation, but mainly by only informing their clients about this option. Attempts to upscale this course of action to a greater target group would not be a suitable pathway in terms of rightsizing tourism[21]. On the contrary, this would quickly lead to environmental collapse. This paradox of growing

[21] In a BA thesis supervised by the author of this habilitation thesis, Filbrandt (2017) evaluates whether German TourCert-certified tour operators internalize aspects associated with degrowth in their everyday business activities. For this purpose, the study employs a questionnaire and comes to a mostly negative result: Filbrandt, H. (2017). Der degrowth-Ansatz bei TourCert-zeritifizierten deutschen Reiseveranstaltern. Eine standardisierte Befragung. BA thesis. Hildesheim.

degrowth implies that a clear differentiation between the mass market and a small-sized alternative travel sector is necessary. It is a contradiction to attempt to upscale small-sized tourism for sustainability purposes. However, it remains to be seen whether the strict travel restrictions temporarily put in place by nations all over the world in the cause of the COVID-19 pandemic in 2020 may lead to a radical change of the tourism industry. This may especially include a profound restructuring of the international airline sector on the one hand and a stronger desire of tourists to choose nearby holiday destinations on the other hand.

Furthermore, this study shows that the German TourCert-certified tour operators only represent a very small niche of the whole tourism market. The majority of the businesses under investigation serve less than 10,000 clients annually. Compared to the nearly 50 million trips sold by German tour operators in 2018 (Kirstges 2018) this is extremely small. Thus, their potential to restructure the tourism industry in Germany towards degrowth is very limited[22]. Additionally, the TourCert certification scheme lacks a great deal of transparency since there are special arrangements for micro-sized tour operators, the main faction of certified businesses. This rather encourages the tour operators to do "business as usual" (Ferguson 2014) without feeling guilty about it. Here, 'best practice' is constructed by a niche sector that generally claims to be more sustainable than the rest of the industry (Valdivielso & Moranta 2019).

[22] Horn (2017) analyses the sustainability strategies of four of the biggest, in terms of revenue, German tour operators, none of which holds official third party sustainability certification. Qualitative interviews with the companies' sustainability managers reveal that there is an awareness for sustainability issues and that a variety of measures are realized, for example sustainable resource management in group-owned hotels and clubs, support of the green counter initiative or financial support of socio-ecological projects at the destinations. However, the tour operators emphasize the lack of certified suppliers within the destinations with whom they could cooperate and the limited willingness among tourists to pay more for further sustainability engagement: Horn, J. (2017). Nachhaltiger Tourismus aus Sicht deutscher Pauschalreiseveranstalter. BA thesis. Hildesheim. This thesis was awarded with the university's Sustainability Award 2017.

Further insight on the sustainability strategy of TUI as one of the biggest tour operators in Germany, illustrated by the example of the Turkish Riviera destination, is presented by Yilmaz (2013): Yilmaz, H. (2013). Tourismus und nachhaltige Entwicklung an der türkischen Riviera. BA thesis. Hildesheim.

In sum, it has to be acknowledged that current CSR-certification schemes do not seem to genuinely foster the restructuring of the tourism market within the capitalist system, but can only marginally advocate and diffuse certain elements of degrowth-oriented tourism. On the one hand, CSR-certification schemes rather lack the influence necessary for a paradigm shift. On the other hand, at present the approach of degrowth-oriented tourism seems unsuitable for mainstream application.

Thus, the question remains open how the tourism industry as such can be transformed towards a steady state economy (Hall 2009, 2010) within the capitalist system. If the COVID-19 pandemic does not lead to a profound restructuring of the international travel sector, a radical renunciation of tourism seems unrealistic in the foreseeable future and thus, non-radical change continues to be inevitable.

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Appendix A: List of German TourCert-certified tour operators (as at December 2019) and sustainability reports / audit reports

ID	tour operator	certified since	website	year of issue of sustainability report (sr) / audit report (ar)
1	a&e erlebnis:reisen	2010	www.ae-erlebnisreisen.de	2010 (sr), 2012 (sr), 2015 (sr)
2	Accept-Reisen	2010	www.accept-reisen.de	
3	Akwaba Afrika	2018	www.akwaba-travel.de	2018 (ar)
4	America Andina	2011	www.america-andina.de	2013 (sr), 2017 (sr)
5	Amitabha Reisen	2015	www.amitabha-reisen.de	
6	atambo tours	2010	www.atambo-tours.de	
7	AVENTERRA	2012	www.aventerra.de	
8	avenTOURa	2009	www.aventoura.de	2017 (sr)
9	Bayerisches Pilgerbüro	2015	www.pilgerreisen.de	2015 (sr), 2017 (sr)
10	Biketeam Radreisen	2011	www.biketeam-radreisen.de	2015 (ar)
11	biss Aktivreisen	2010	www.biss-reisen.de	2013 (sr), 2015 (sr), 2018 (sr)
12	Boundless	2018	www.boundless-reisen.de	
13	Chamäleon Reisen	2013	www.chamaeleon-reisen.de	2013 (ar), 2015 (sr), 2018 (sr)
14	CHINA BY BIKE	2010	www.china-by-bike.de	2015 (sr)
15	Cilentano	2010	www.cilentano.de	2018 (sr)
16	Club Aktiv	2013	www.club-aktiv.de	2012 (sr), 2015 (ar)
17	Daktari Travel	2011	www.daktaritravel.de	
18	Dein Marokko	2019	www.dein-marokko.de	2019 (ar)
19	drp Kulturtours	2015	www.drp-kulturtours.de	
20	For Family Reisen	2009	www.familien-reisen.com	
21	France écotours	2010	www.france-ecotours.com	2018 (ar)
22	Gebeco	2011	www.gebeco.de	2019 (sr)
23	Geotoura	2011	www.geotoura.com	

24	Ghana Reisen	2014	www.kasapa.eu	
25	Hauser Exkursionen	2012	www.hauser-exkursionen.de	
26	Hummel Reiseideen	2018	www.hummel-reiseideen.de	
27	Island Erlebnisreisen	2017	www.islanderlebnis.de	2019 (sr)
28	Israel mal anders	2017	www.israelmalanders.de/	
29	Kolibri-Reisen	2010	www.kolibri-reisen.de	2015 (sr)
30	Laade Gartenreisen	2010	www.laade-gartenreisen.de	
31	lernen & helfen Sprachreisen	2011	www.lernenundhelfen.de	2011 (sr), 2013 (sr), 2016 (ar), 2019 (ar)
32	Lupe Reisen	2011	www.lupereisen.com	
33	MITourA	2017	www.mitoura.com	
34	Natours Reisen	2011	www.natours.de	2013 (sr)
35	Neue Wege Seminare & Reisen	2009	www.neuewege.com	2017 (sr)
36	nomad	2009	www.nomad-reisen.de	2019 (ar)
37	OCEANO MEERZEIT Reisen	2010	www.oceano-whalewatching.com, www.oceano-meerzeit.com	2014 (sr)
38	OLIMAR Reisen	2016	www.olimar.de	2016 (sr)
39	Papaya Tours	2011	www.papayatours.de	2016 (sr)
40	Picotours	2012	www.picotours.de	2014 (sr)
41	Radissimo Radreisen	2009	www.radissimo.de	2017 (ar)
42	REISEN MIT SINNEN	2009	www.reisenmitsinnen.de	2018 (sr)
43	ReNatour	2009	www.renatour.de	2014 (sr), 2017 (sr)
44	ROTH REISEN	2017	www.rothreisen.de	
45	Rucksack Reisen	2009	www.rucksack-reisen.de	2015 (ar), 2018 (ar)
46	SAPIO Kulinarische Entdeckungsreisen	2010	www.sapio.de	2015 (sr)
47	seabreeze.travel	2010	www.seabreeze.travel	2015 (sr)

48	Sento Wanderreisen	2014	www.sento-wanderreisen.de	
49	SKR Reisen	2011	www.skr.de	2018 (sr)
50	Solecu Tours	2010	www.solecu.de	
51	Tour Exquisit	2011	www.tourexquisit.de	
52	Travel To Life	2011	www.traveltolife.de	⌿011 (sr)
53	travel-to-nature	2009	www.traveltonature.de	2017 (ar)
54	Urlaub & Natur	2009	www.urlaubundnatur.de	
55	Ventura TRAVEL	2011	www.venturatravel.org	
56	Via Verde	2011	www.via-verde-reisen.de	2015 (sr)
57	Wikinger Reisen	2013	www.wikinger-reisen.de	2018 (sr)
58	Windbeutel Reisen	2018	www.windbeutel-reisen.de	
59	ZeitRäume	2014	www.zeitraeume-reisen.de	

6 Conclusion

Sustainability transitions are of strategic concern for future development on all geographical scales (Turok et al. 2017, UN 2012). Thus, this habilitation thesis seeks to investigate how transitions towards more sustainable paths of development can be initiated and fostered. By focusing on tourism in rural regions it analyses what influence particularly tourists and tourism businesses have on the production of rural space with regard to sustainability and rural tourism resilience and what role rural regions may generally play in sustainability transition processes. In doing so, this habilitation thesis contributes to several underexplored fields of research. This final chapter summarizes and further develops the key research outputs of Chapter 2, Chapter 3, Chapter 4 and Chapter 5 and draws overall theoretical conclusions.

6.1 Sustainability orientations between green growth and degrowth at the micro-level

6.1.1 Sustainability orientations as an attribute of tourism actors

Tourism has experienced an enormous growth worldwide in recent decades (UNWTO 2021), and rural tourism has been growing in popularity, too (Lane & Kastenholz 2015). Thus, in many rural regions rural tourism cannot be interpreted as a small-scale alternative to mass tourism anymore, as was the idea when it was introduced in the 1970s. Rather, socio-ecological sustainability challenges as experienced in many typical mass tourism destinations such as the coastal areas of the Mediterranean since the 1960s, are now also found in destinations that in fact officially offer alternative rural tourism (Weidenfeld 2010, Panzer-Krause 2019). Here, both tourists and tourism businesses are key actors with regard to the production of rural space. Hence, their sustainability orientations strongly affect their

tourism practices at the destinations and beyond, and understanding such orientations can form the starting point for managing sustainable rural change (Panzer-Krause 2017, Panzer-Krause 2019, Panzer-Krause 2020, Panzer-Krause 2021).

As presented in Chapter 2, rural tourists are diverse. Although they all generally seek authenticity and a connection with the land and the local people in one way or another, they show different levels of actively engaging with such activities. The analysis of the sustainability orientations of tourists who visited the Giant's Causeway, a rural tourism hotspot in Northern Ireland, revealed that such orientations significantly differ with the tourists' form of holidaying. Individual trip tourists were identified as the group with the highest sustainability awareness. Coach trip tourists and particularly cruise ship tourists are less worried about sustainability issues while travelling. Hence, a segment-specific approach to guiding tourists along processes of sustainable rural change is meaningful. Individual trip tourists with higher levels of sustainability awareness are amenable for conventional rural tourism. They seek an intense connection to the landscape and its people with all their senses, are likely to spend some time at the rural destination and thus can be directly integrated in local approaches to tackling socio-ecological challenges if they are provided with easy access to relevant information. In contrast, for tourist segments with less interest in sustainability challenges, a concentration strategy at rural tourism hotspots, including rigorous measures such as capacity limits, should be realized in order to avoid destruction and conserve the vulnerable natural and cultural rural landscapes. Here, sustainability awareness can be raised by guided interpretation to which these tourist segments are more open than individual trip tourists (Panzer-Krause 2020).

Similarly, the studies of tourism business networks in the Biosphere Reserve Southeast Rügen, Germany, and in the Burren and Cliffs of Moher Geopark, Ireland, in Chapter 3 and Chapter 4 showed evidence that tourism businesses that voluntarily comply with sustainability criteria following certain sustainability certification schemes have differing ideological orientations towards sustainability. The actors range from strictly conservative degrowth strategists to strictly modernist green growth strategists. The former are more altruistic, open to efforts with regard to socio-environmental aspects and focus on rather consolidating or even downsizing their business activities, while the latter are more egocentric and concentrate on economic and expansive activities in their business development. Hence, the two studies proved that sustainability entrepreneurs have a variety of sustainability orientations. This research thus filled a lack in the existing literature and offers a differentiated understanding of sustainability strategies at the business level (Panzer-Krause 2017, Panzer-Krause 2019).

In both tourism business networks under investigation, the sustainability criteria for eligibility to the networks were low, and member businesses were rather expected to embody a general sustainability ethos. This was welcomed by the majority of the member businesses, regardless of their ideological orientation towards sustainability. While such a ‘sustainability light’ approach may ease the formation of a sustainability-driven partnership between the state and economic actors, it raises the question of acceptable timeframes for regional sustainability transitions in rural regions (Panzer-Krause 2017, Panzer-Krause 2019).

The studies identified and acknowledged the need for a differentiated perspective on sustainability actors as key actors for the production of space at the micro-level and developed frameworks for measuring actors’ sustainability

orientations. Thus, a significant contribution to the sustainability literature has been made.

6.1.2 Sustainability orientations and the evolution of rural tourism businesses' sustainability networks

While the evolutionary approach has been well-established in general economic geography research, strongly influenced by the field of evolutionary economics and thus one-sidedly economically driven (Maskell & Malmberg 1999, Hassink 2005, Martin & Sunley 2006), it has only in recent years just begun to gain specific attention in tourism geographies and regional sustainability studies (Halkier & Therkelsen 2013, Coenen & Truffer 2012, Schulz et al. 2020). Particularly, the studies in Chapter 3 and Chapter 4 contributed to a better understanding of the development paths of rural tourism destinations and lock-ins that hamper sustainable change. Hence, the economic dimension of regional change was not the only central aspect of this research, it was rather also complemented by ecological and social aspects. Moreover, the studies in Chapter 3 and Chapter 4 gave insights into the evolution of sustainability networks composed of regional tourism businesses that voluntarily comply with sustainability criteria, and thus go beyond political regulation. Patterns of interaction and the generation of social capital and innovations in such networks and their members' influence in accordance with their sustainability orientation were unravelled.

Thereby, the analysis of the two rural sustainability networks of tourism businesses revealed that in the early stages of the network evolution more degrowth-oriented businesses are attracted to the networks. These are often businesses that see a business sustainability network as presenting opportunities to radically restructure the regional tourism sector with respect to sustainability

issues. In later stages of the network evolution, membership shifts towards green growth-oriented businesses when they become aware of the sustainability networks' advantages for raising revenue. However, the degrowth-oriented businesses are particularly the ones that take the initiative in generating and fostering business-led grassroots innovations. This involves a type of innovation, whereby businesses direct resources to establish more sustainable modes of tourism, characterized by their not-for-profit nature. They have the potential to profoundly restructure the regional tourism sector towards sustainability. For this reason, network management needs to ensure that degrowth-oriented tourism businesses are not overruled and marginalized within the networks in the long term. Instead, the proportion of green growth strategists and degrowth strategists within a network should be balanced so that the network can benefit from the strengths of both factions (Panzer-Krause 2017, Panzer-Krause 2018).

The findings from the studies in Chapter 3 and Chapter 4 illustrated that in processes of regional sustainability transitions it is necessary to consider actors' different sustainability orientations at the micro-level. This allows active engagement with the composition of rural tourism business networks with regard to their strengths and weaknesses in creating social capital and innovations. At the same time, it became apparent that it is not easy to shift away from 'business as usual' (Ferguson 2014) towards strengthening regional sustainability resilience with a view to rural tourism, and further efforts are hence needed.

6.2 Managing the production of rural space and the significance of sustainability governance

6.2.1 Actors' influence on the production of rural space

Tourists, tourism businesses both within specific destinations and tour operators that create packages by combining different tourism services along the tourism supply chain and sell them to their customers are all key stakeholders of tourism in rural destinations and thus have a strong influence on the production of rural space (Panzer-Krause 2017, Panzer-Krause 2019, Panzer-Krause 2020, Panzer-Krause 2021).

More and more rural tourism destinations that promote a small-scale alternative to mass tourism by explicitly offering activities that allow a connection to the landscape and local culture face increasing socio-ecological challenges due to rapidly rising visitor numbers and a rising proportion of tourists who do not meet the expectations of tourism providers at these destinations. However, even though tourists are heterogeneous they usually seek to experience a rural idyll in such destinations, as this is the socially constructed image of authentic rurality (Lovell & Bull 2017). This image of rurality is closely related to the concept of sustainability. Nevertheless, the changes in rural tourism may alter rurality at these destinations and also the visitors' perception of it, and lead to distinct socio-environmental destruction. Thus, concerted strategies for sustainable rural change that enhance rural tourism resilience are essential.

In many rural tourism destinations, trial by space (Halfacree 2006, 2007) has been flaring up in recent years or is ongoing with respect to sustainability issues as there is a lack of congruence between the three facets 'rural localities', 'formal representations of the rural' and 'everyday lives of the rural' that comprise rural

space. An increasing number of visitors, especially those who are non-individual trip tourists, show travel attitudes that are not harmonious with the expectations of many regional tourism providers who offer small-scale rural tourism activities and seek tourists who evince an interest in experiencing the rural with all their senses. Additionally, in numerous rural tourism destinations, sustainability business networks have been formed recently and more tourism businesses are increasingly receptive for a general sustainability ethos. However, here, too, a growing number of tourism businesses that engage with regional sustainability networks are green growth-oriented and in favour of constant raising growth, which is often coupled with increasing tourist numbers (Panzer-Krause 2017, Panzer-Krause 2018, Panzer-Krause 2020). The same applies for sustainability-oriented tour operators that are mainly green growth-driven. As the investigation of TourCert-certified Germany-based tour operators in Chapter 5 made additionally evident, such tour operators generally tend to select rather remote destinations, which require long-haul trips. Clients are usually only presented the option of voluntary CO_2 compensation, while this is seldom automatically included as part of a booked holiday. Hence, these tour operators cannot fully act as change agents who push towards more sustainable modes of travel (Panzer-Krause 2021).

6.2.2 COVID-19 as a chance for a restart?

6.2.2.1 The challenge of tourists' desire to travel and mainly growth-oriented rural tourism

Since the concept of small-scale rural tourism is only limitedly scalable, two problems become apparent. First, the concept conflicts with tourists' ever-growing desire to travel and the growing popularity of rural tourism as shown in the studies of this habilitation thesis. While crises such as the 9/11 terrorist attacks or the 2008

global financial crisis led to a temporary downturn in international tourist arrivals and tourism has thus shown vulnerability, after each crisis it rebounded quickly and grew stronger than ever before. In fact, the tourism industry has been successfully used as an engine for the recovery of national economies. Hence, in economic terms the tourism system has shown a high degree of mid- and long-term resilience towards external shocks (UNWTO 2021, Gössling, Scott & Hall 2020, Brouder 2020). Whether this will also be the case in the aftermath of the COVID-19 pandemic cannot be fully appraised yet. However, with a loss of 74% of international tourist arrivals in 2020 compared to the prior year (UNWTO 2021), the impact of this tremendous shock on the sector is much more severe than any other crisis since the enormous expansion of tourism in the mid-20th century (Gössling, Scott & Hall 2020).

Findings from current studies examining the impact of the COVID-19 pandemic on tourists' travel intentions indicate that intention to travel is related to the tourists' risk perceptions, which are linked to subjective judgements of danger during a potential holiday, and are also determined by tourists' belief in the controllability of such risks. Both factors may lead tourists to alter or even cut down travel plans (Sánchez-Cañizares et al. 2021). This was evidenced in studies that analysed empirical data of Dutch, Spanish and French tourists' intentions to travel during the COVID-19 crisis, especially in the summer of 2020 when governmental travel bans were relaxed temporarily after the first corona lockdown (Isaac & Keijzer 2021, Sánchez-Cañizares et al. 2021, Lebrun, Corbel & Bouchet 2021). However, as investigated by FUR (2021) for the German market, the desire to travel has only decreased moderately from 57% in 2019/2020 to 51% in 2020/2021. As a consequence of the uncertainty associated with travelling under COVID-19 conditions, proximity tourism at a regional, interregional or national level has

become of particular relevance as it is considered safer and less complex to organise (Lebrun, Corbel & Brouchet 2021, Isaac & Keijzer 2021, FUR 2021). If the trend to proximity tourism persists in the long term, destinations that have been used to a highly international audience may experience a decrease in visitor arrivals. CSR-certified tour operators with a focus on long-haul travel such as those investigated in Chapter 5 may be affected by this, too. On the other hand, destinations that already welcomed a high proportion of domestic travellers might record more visitors.

Isaac & Keijzer (2021) see signs of an even intensified interest in travelling after longer periods characterized by travel bans, border closures and quarantine regulations, which is in line with earlier findings made by Wen, Huimin & Kavanaugh (2005). Some scholars are even concerned with the phenomenon of revenge tourism in the post-COVID-19 era, which refers to a desire of tourists to catch up on missed holidays and which could lead to extensive travelling (Wassler & Fan 2021).

If rural destinations seek to retain the concept of rural tourism as a small-scale alternative to mass tourism, a rightsizing of tourism arrivals will be inescapable for many regions by means of temporary degrowth (Andriotis 2018). With respect to degrowth, Jackson (2009) generally suggests unravelling the social logic of consumerism in order to be able to provide incentives for consumers to resist. Tourism as a service sector is characterized by its mainly non-materialistic nature. For many people, travelling is in fact a renunciation of materialistic consumption, which instead allows them to get to know new places, to see and do exciting things and to spend time with family and friends and thus gain extraordinary, authentic and memorable experiences that are strongly associated with positive emotions and fantasies. Hence, travelling needs to be considered from an experiential view of consumption (Batat & Frochot 2013, Le, Scott & Lohmann 2019). Numerous

scholars address the issue of experiential marketing in order to explain how tourism businesses and destinations can successfully sell their tourism services (Hultman, Kazeminia & Ghasemi 2015, Rather 2019, Le, Scott & Lohmann 2019). However, there is a lack of understanding of the role of tourists' materialistic values with respect to their perspective on degrowth, although the study undertaken in Chapter 2 provides an orientation by analysing tourists' sustainability orientations in relation to the form of holidays they prefer (Panzer-Krause 2020). From a tourism destination's point of view, Matteucci, Nawijn & von Zumbusch (2021) call for a new materialist governance paradigm in order to tackle sustainability problems. This may include elements of demarketing a destination and promoting tourism forms such as creative tourism, slow tourism and proximity tourism. Creative tourism focuses on tourists' active involvement in creative activities, stimulating learning processes and "emphasising the *doing* rather than the *being there*" (Matteucci, Nawijn & von Zumbusch 2021: 7). Similarly, slow tourism suggests undertaking activities at a slower pace to enable tourists to truly engage with a destination's natural and cultural heritage. Finally, proximity tourism with its emphasis on short distances and lower-carbon transport modes of travel can complement these forms of tourism (Matteucci, Nawijn & von Zumbusch 2021).

Second, sustainability networks of tourism businesses as investigated in Chapter 3 and Chapter 4 and like those that have sprung up in many rural tourism destinations in recent years, increasingly attract green growth-oriented businesses in more mature stages of the network evolution. These businesses then threaten to marginalize degrowth-oriented tourism business actors. Thus, rural tourism destinations are radically under pressure to continue to pursue growth-oriented rural tourism strategies (Panzer-Krause 2017, Panzer-Krause 2019). This development, too, contradicts with the concept of small-scale rural tourism and its related

activities. Chapter 5 diagnosed the same situation for sustainability-oriented tour operators who additionally often focus on long-haul travels (Panzer-Krause 2021). It is probable that in the post-COVID-19 era such businesses – if they are still on the market – will seek economic recovery and expansion instead of consolidating or downsizing their business activities.

6.2.2.2 Potential future pathways for rural tourism destinations

Hence, the concept of rural tourism as such is at stake in many destinations. Regarding rural sustainability transitions, tourists and tourism businesses in rural tourism destinations are not likely to be enough to initiate and realize a profound paradigm shift away from a growth-driven focus, particularly not within acceptable timeframes. This could be proved by means of the research outcomes in this habilitation thesis (Panzer-Krause 2017, Panzer-Krause 2019, Panzer-Krause 2020, Panzer-Krause 2021). Thus, there are various options for the future pathway development of rural tourism destinations; these are positioned within a wider spectrum confined by two extremes. First, in the post-COVID-19 era such destinations may give up on the concept of rural tourism and opt for mass tourism in the hope of being able to solve the increasing problems linked to trial by space along the lines of Weaver's (2012) suggested incremental path concept, where regulations such as visitor number restrictions or fees are implemented in order to diminish the most negative impacts of tourists on the destinations. Here, of course, discussions may arise about critical threshold levels, which might be increasingly adapted in a growth-oriented sense. Thus, using an evolutionary perspective, Weaver (2020) pleads for an eventual amalgamation of small-scale tourism and mass tourism, while bearing in mind aspects of sustainability. Yet, according to Gössling, Scott & Hall (2020) such an approach is regularly characterized by paying

lip service to sustainability targets rather than implementing an evidence-based strategy.

Second, forming the other extreme, in rural tourism destinations the boundaries between market and state may be redefined. Instead of sticking to a general growth ethos, regional state actors identify and support particularly degrowth-oriented local stakeholders and implement degrowth-oriented measures in order to rightsize tourism and eventually transition to a steady-state economy (Hall 2009). Thus, new partnerships between the state and other tourism stakeholders are essential in order to generate business-led grassroots innovations. Here, it is important that the focus is on elements of regional governance with cooperation between rural businesses, civil society movements at the grassroots and politics on an equal footing, since political sustainability regulations that are implemented in a one-sided fashion often lead to acceptance problems and conflicts within the tourism sector. Therefore, as shown in Chapter 3 and Chapter 4, incentives for voluntary compliance with sustainability criteria for tourism providers and a regular intensification of these can help to ease tensions and gradually convince more tourism businesses to join in. The studies illuminated member attributes and the dynamics of change within sustainability business networks. On the basis of this knowledge, strategies for degrowth practice in the tourism sector can be tested as proposed by the transition studies literature for technology-driven, green growth-oriented sectors as part of Strategic Niche Management (Kemp, Schot & Hoogma 1998). In this context, the approach combines ideas of transition studies and post-capitalist approaches.

Here, the COVID-19 pandemic can provide a window of opportunity to reset locked-in structures in the tourism sector in general (Higgins-Desbiolles 2020) and in rural tourism in particular, open up new and more sustainable pathways and thus strengthen rural tourism resilience with regard to sustainability in the sense of a

bounce-forward perspective (Scott 2013). Thus, tourism providers may “convert this crisis disruption into transformative innovation” (Sigala 2020: 313) and promote sustainable rural change in the longer term. However, this requires the establishment of new framing conditions that facilitate the generation of innovative business models and networking amongst tourism businesses, in which an ecologically sound and socio-economically constructive rural tourism can operate, and which also needs strict capacity limits. Travel restrictions put into place to prevent further spreading of the corona virus may be used as a measure for rightsizing tourism. In this way, rural tourism destinations that used to be under pressure prior COVID-19 could improve their sustainability resilience by applying a bounce-forward strategy instead of bouncing back to pre-crisis conditions. After the 2008 global financial crisis, Jackson (2009: 17) already emphasized that “[t]here is no better time to make progress towards a more sustainable society”. This applies even more to the aftermath of the much more severe COVID-19 crisis.

6.3 The role of rural regions in sustainability transition processes

6.3.1 Shared responsibilities between more or less rural and urban regions

The fact that many more or less rural regions are left behind economically gives them the image of problem regions (Maschke, Mießner & Naumann 2020). However, if they acknowledge their heterogeneity and recollect their specific ecological and socio-cultural strengths instead of one-sidedly emulating urban regions with their growth orientation, and if they are financially compensated for these efforts, they can be far more than problematic.

With a particular view to peripheral rural regions, Steinführer et al. (2016) highlight that such regions are normally financially and thus also politically dependent on urban centres of power. However, they also identify examples of economic renaissance amongst rural regions. Nevertheless, when considering processes of sustainability transitions, it becomes evident that it is not only economic aspects that are of relevance, but also ecological and socio-cultural factors. While many regions with differing degrees of rurality remain economically disadvantaged, they can often provide ecological intactness and social-cultural heritage and coherence as well as regional networks of related knowledge. In processes of sustainability transitions, this becomes valuable and can be a striking characteristic of these regions. Hence, with a view to shared responsibilities, structures of power are able to change for the benefit of regions that are rural to varying degrees, if societies are willing to give more weight to sustainability transitions and if such regions do not fail to take the right measures for sustainable rural change. For rural tourism, this means avoiding overtourism and further growth-oriented development and following a bounce-forward strategy with regard to tourism resilience instead. Here, tourism actors such as the tourism providers of a rural destination, but also a region's political and civil society actors as well as external actors like tour operators and tourists, have an influence on the production of space, and together they should aim to resolve potential trial by space. This will help to provide an authentic experience to visitors with regard to sustainability, whilst tourists should be integrated in a rural region's sustainability concept according to their sustainability orientations (Panzer-Krause 2017, Panzer-Krause 2019, Panzer-Krause 2020, Panzer-Krause 2021). Additionally, establishing and fostering rural-urban partnerships, exercised as 'rurban' sustainability networks that are

characterized by mutual learning will create the foundation for yielding, generating and exchanging sustainability-related knowledge, innovations and experiences.

This habilitation thesis proposes that tourism destinations that can be characterized as rural to varying degrees dynamically adjust their position within the spectrum marked by the two extremes of mass tourism on the one hand and small-scale tourism on the other hand. They adapt coherent sustainability strategies that, with regard to the specific targets, integrate tourism actors along the spectrum between green growth and degrowth-oriented strategists. They can thus take responsibility to varying economic, ecological and socio-cultural extents in sustainability transition processes.

6.3.2 Learning from financial compensation approaches: Yasuní-ITT initiative and HNV farming

Against the backdrop of shared responsibilities, this habilitation thesis pleads for financial compensation for those rural tourism regions that are willing to follow a concept of reduced use of economic resources for the sake of greater ecological and socio-cultural goals that are of value for our societies on different geographical scales. This idea picks up Meadows et al.'s (1972) argumentation with regard to the limits of growth in that it urges for degrowth-focused strategies of rural change.

Financial compensation for the conservation of natural and socio-cultural resources is not a new idea in the context of the sustainability debate. A prominent example was the 2007 Yasuní Ishpingo Tambococha Tiputini (Yasuní-ITT) initiative, a proposal by the Ecuadorian government to the international community to dispense with the exploitation of oil in the Yasuní National Park, which is one of the most biodiverse hotspots in the world and home to indigenous groups that choose to live in isolation. In exchange for partial financial compensation covering at least

half of the expected revenue of commercial exploitation of the ITT oil, the idea was to leave the oil underground indefinitely in order to avoid the emission of vast amounts of CO_2 into the atmosphere, conserve biodiversity and preserve the living environment of indigenous cultures. An international trust fund was set up, and donations to the fund from all kinds of actors from around the world could be made and were to be invested in sustainable development projects in Ecuador. The proposal was interpreted as an innovative attempt to address climate change and promote environmental justice by involving economically disadvantaged countries of the Global South (Larrea & Warnas 2009, Finer, Moncel & Jenkins 2009, Kingbury, Kramarz & Jaques 2018).

The initiative received great international attention, both from supporters and sceptics. It ultimately failed when in 2013 only 13 million USD of the expected 3.6 billion USD had been deposited. Ecuador's President Correa declared its termination and the Ecuadorian government's will to move forward to exploit the ITT oil (Sovacool & Scarpaci 2016, Kingsbury, Kramarz & Jaques 2018). Amidst a number of tensions that led to the initiative's demise was the lack of trust between the Ecuadorian government and the international community as contractual partners. Political instability throughout Ecuador's past and a lack of instruments to handle the potential for opportunistic behaviour by the Ecuadorian state raised significant concerns amongst international actors regarding the Ecuadorian state's future compliance with the agreement not to exploit the Yasuní-ITT oil indefinitely once the large amount of financial compensation was raised (Pellegrini et al. 2014).

Nevertheless, the proposal, which was developed in the context of the 2008 new Ecuadorian constitution that guarantees rights to nature incorporating the concept of 'buen vivir' as a vision of humans' "harmonious co-existence with nature" (Kingsbury, Kramarz & Jaques 2018: 7), offered a new model of sharing costs and

benefits for conserving the world's natural and cultural heritage between the actors of the international community "under the principle of common but differentiated responsibilities" (Rival 2010: 362). Meanwhile, the discourse about 'yasunizing' other regions with extractable resources has not completely vanished (Vallejo et al. 2015, Kingsbury, Kramarz & Jaques 2018).

Another, though differently shaped form of financial compensation for landscape conservation is the concept of high nature value (HNV) farming. HNV farming, which was introduced in the early 1990s in Europe, is based on the ecosystem services approach (Plieninger et al. 2019, Sauerwein, Dieck & Stadtmann 2015)[23]. It is guided by the "idea that nature values" (Andersen et al. 2004: 3) and by the concept of multifunctional farming systems "in which human action and natural processes interact to jointly provide environmental and social services […] that would otherwise not exist" (Rac, Juvančič & Erjavec 2020: 89). Here, farmers receive funding from the European Union for preserving farmland, which is in many cases located in agriculturally rather disadvantaged, marginalized areas characterized, for example, by poor soils or steep slopes and thus is less suitable for intensified, market-oriented farming. Hence, HNV farming is realized by means of predominantly extensive and oftentimes traditional farming systems (O'Rourke & Kramm 2012). Approximately, 30% of the European agricultural land is classified as HNV farmland (Plieninger et al. 2019).

HNV farming systems as socio-ecological systems help to facilitate farmland biodiversity and preserve valuable cultural heritage such as specific farming practices and, therefore, justify maintaining agricultural landscapes in their present

[23] In a BA thesis supervised by the author of this habilitation thesis, Reckemeyer (2019) evaluates the cultural ecosystem services of hospital greenery of two hospitals in Hildesheim, Germany, from the perspective of users: Reckemeyer, V. (2019). Grünanlagen an Krankenhäusern: Cultural Ecosystem Services aus Nutzersicht. BA thesis. Hildesheim.

state (Strohbach et al. 2015). Examples for HNV farming areas are the Kerry Uplands, Ireland, and the Atlantic Pyrenees, France (O'Rourke, Charbonneau & Poinsot 2016).

HNV farmland is vulnerable to abandonment, and in areas where it is economically profitable, also to intensification. Hence, in recent years, many approaches have been developed to identify and monitor relevant farmland throughout Europe (Andersen et al. 2004, Bartel, Süßenbacher & Sedy 2011). According to Strohbach et al. (2015), most of them refer to classifications of farm systems, land cover/land use, and indicator species. However, mainly due to the problem of limited data availability, their spatial resolution has proved insufficient on an international level, while the different indicator systems developed are incompatible on a national or regional level (Lomba et al. 2014, Strohbach et al. 2015, Ribeiro et al. 2018). Hence, Lomba et al. (2014) propose a hierarchical, bottom-up approach in order to identify target areas beginning from the lowest administrative level and then further aggregating the information on higher administrative levels.

The indicator systems are the basis for the funding of HNV farming by the European Union, which is predominantly realized under the Common Agricultural Policy. Farmers are funded on a continuous basis if they comply with certain criteria associated with HNV. Nevertheless, in many cases HNV farming is not viable (Keenleyside et al. 2014, Ribeiro et al. 2018, Rac, Juvančič & Erjavec 2020).

In sum, it can be stated that the concept of HNV farming is well-established within Europe, though declining in practice (Ribeiro et al. 2018, Rac, Juvančič & Erjavec 2020). Therefore, indicator systems that clearly identify relevant territories and farming systems, as well as funding schemes, which are in line with the economics of HNV farming, need to be further improved.

6.3.3 Financial compensation for degrowth in rural tourism

This habilitation thesis argues that it is necessary to instigate cross-financing between economically advantaged, oftentimes urban regions and regions characterized by different shades of rurality that offer valuable ecological and socio-cultural heritage for tourism activities and are under pressure to develop these in a growth-oriented fashion. Only so will it be possible to meet shared responsibilities with regard to sustainability transitions on all geographical scales against the background of differentiated economic, socio-cultural and ecological configurations. Therefore, this habilitation thesis proposes combining and further developing the two financial compensation approaches discussed above for the conservation of natural and socio-cultural heritage and thus to support sustainability targets in rural tourism destinations that are valuable for societies not only within those regions, but also beyond.

Here, it is proposed that financial compensation should be made to rural actors for a reduced use of tourism resources in rural regions that would otherwise be commercialised more intensely and thus exceedingly stressed. However, contrary to the idea of the Yasuní-ITT initiative, which suffered from significant trust issues between the contractual partners, the funding should be disbursed on a low but continuous level that enables viability, and in exchange for regional actors' engagement with enhancements to degrowth-oriented strategies in practice. This component is comparable to the HNV farming approach. Here, farmers are encouraged to revitalize traditional farming practices or innovatively adapt them if they are not suitable anymore. However, for many HNV farming areas the aim is to continue farming at a moderate level and to avoid land abandonment in order to safeguard biodiversity, while for many rural tourism destinations financial

compensation would mean a significant reduction of tourism activities in order to rightsize the tourism sector.

Hence, on the one hand, financial compensation should be realized for rural tourism actors that voluntarily abstain from using economic resources for growth-oriented tourism development in order to conserve the natural and socio-cultural heritage on a continuous basis. On the other hand, these regions are supposed to function as experimenting fields to develop and test degrowth-oriented approaches in practice. Here, regional as well as 'rurban' networks involving economic, civil-society and state actors along the whole spectrum of sustainability orientations have a vital role to play in generating innovations in the tourism sector.

The concept of financial compensation for degrowth in rural tourism involves evaluating the natural and socio-cultural tourism value of destinations with different degrees of rurality. Such valuations can benefit from studies that estimate recreational ecosystem services (Ward & Beal 2000, Neher, Duffield & Patterson 2013, Paracchini et al. 2014). In this context, Mayer & Woltering (2018) assess the nature-based recreational value of 15 National Parks in Germany using zonal travel cost models that draw on data collected in nearly 21,000 on-site interviews with National Park visitors and include travel distances, means of transportation used, trip length, visitor characteristics and socio-demographic variables. They conclude that the consumer surplus in the National Parks under investigation is equal to between 385.3 and 621.8 million euros and that these parks thus generate immense value for society. The travel cost method valuation technique is refined by Sinclair et al. (2020) who use crowdsourced geotagged photographs from social media for the evaluation of recreational ecosystem services of German National Parks in order to significantly reduce the costs for on-site surveys and compare their outcomes to Mayer & Woltering's (2018) results. Despite some limitations of the quality of

crowdsourced data, the findings show that this type of data has “the potential to become a game changer for the valuation of recreational benefits” (Sinclair et al. 2020).

While travel cost models employed for the calculation of recreational ecosystem services are visitor focused and utilized to argue in favour of a touristic valorisation of recreational areas in order to facilitate economic development in rural regions and finance conservation in protected areas, the proposed concept of financial compensation for degrowth in rural tourism needs to turn these models on their heads. Against the backdrop of degrowth due to overtourism in rural tourism destinations, compensation approaches can benefit from experiences with financial compensation for HNV farming under the European Union’s Common Agricultural Policy (Plieninger et al. 2019). Hence, the aim is to strengthen rural tourism resilience, which is not necessarily realized through economic development but rather by financially compensating ecological and socio-cultural efforts, and in doing so to promote sustainability transition processes.

6.4 Outlook

This habilitation thesis has made theoretical contributions to various fields of research including rural studies, evolutionary geography, network theory, sustainability studies and tourism geographies. Nevertheless, further research is required. Besides the research agendas already outlined in Chapter 2, Chapter 3, Chapter 4 and Chapter 5, the overall findings and the conclusion of this habilitation thesis reveal that more knowledge is needed with respect to methods for evaluating regions’ different shades of rurality and their economic, ecological and socio-cultural capacities. This involves better understanding of the detailed functioning of rurban networks under the influence of actors’ differing sustainability orientations and the

division of competencies and responsibilities in processes of sustainability transitions within them. This will help to strategically support the generation of business-led grassroots innovations for degrowth in rural tourism. Here, insights into the development of tourism in the post-COVID-19 era will be essential, too.

Further research is also needed with respect to rural regions' tourism value and its change dynamic. While models for assessing recreational ecosystem services and indicators for HNV farming can be seen as a starting point for the development of tools to evaluate natural and socio-cultural heritage for degrowth and financial compensation in rural tourism, Rival's (2010) and other scholars' calls for a more profound discourse on different forms of values should not be ignored. Hence, a vulnerable rural tourism destination can be valorised from the visitors' perspective and their willingness to pay. However, the price for the destruction caused by its intense commercialization can also be evaluated. Finally, ecological and socio-cultural worth can be monetarized, which, however, is in fact incommensurable. By carefully considering these ethical aspects, detailed concepts for financial compensation mechanisms should be worked out.

Hence, this habilitation thesis ultimately votes for a reconceptualization of urban and rural studies towards a joint field of research with regard to responsibilities in processes of sustainable change, one that acknowledges different shades of rurbanization where academics and practitioners of urban and rural studies join on an equal footing.

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