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Tourism Impacts and Sustainable Development

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Abstract

Following the emergence of sustainable development as a new development paradigm, the scope of tourism impacts has increased. There is a call for a more holistic approach, incorporating environmental, sociocultural, and economic impacts of tourism into impact evaluations.

The overall purpose of the thesis is to describe and analyze tourism impacts from a sustainable development perspective. Frameworks for reflecting multiple perspectives have been proposed and empirically tested, but predominantly economic arguments are still used to justify or condone investments in tourism. This makes objectives of sustainable development in tourism difficult to achieve. The first research question deals with this problem: *What are the advantages and challenges of measuring tourism impacts, from a sustainable development perspective, applying a cost-benefit perspective?* Local residents are primary stakeholders in tourism development, both as major recipients of benefits and costs linked to tourism development, but also as part of the tourist experience in their encounter with visitors. The second research question addresses the resident perspective: *How can resident attitudes toward tourism impacts be described and analyzed from a sustainable development perspective?*

Two case studies have resulted in the five articles included in the thesis. The first three articles focus on the first research question and are based on a case study of the music festival Way Out West. Over 2000 respondents, representing both festival goers and local residents, answered the questionnaires. In-depth interviews with festival management were conducted, and secondary data from the festival organization was also included. The second case study, discussed in the last two articles, was conducted at three coastal destinations in West Sweden and comprised questionnaires sent to local residents (528 respondents) and in-depth interviews with stakeholders.

Findings show that the concepts of Use and Non-use values shifts the focus from economic impacts to a discussion about value in the evaluation of tourism impacts. The attempt to achieve commensurability between different impact dimensions, in order to establish sociocultural and environmental impacts on an equal footing with economic impacts, is found to be promising. Findings from the second case study highlight the heterogeneity of local communities in terms of resident attitudes, through the application of a segmentation approach and a stakeholder perspective. Furthermore, the level of tourism development and the incorporation of an evaluative component are two factors that are found to facilitate the management of sustainable development at tourist destinations. The methods and tools applied and developed in this thesis emphasize the importance of including local residents in the tourism and event evaluation process, as well as a broader understanding of tourism impacts and the assessment of their value. The thesis findings contribute to the development of knowledge with regard to how the objectives of sustainable development in tourism can be met.

Key words: tourism impacts, sustainable development, local residents, cost-benefit analysis, commensurability

Sammanfattning

Turismens effekter i samhället är ämnet för den här avhandlingen. Inom akademi, industri och från offentliga verksamheter efterfrågas en mer holistisk ansats för utvärderingar av turismens effekter där man tar hänsyn till miljöeffekter såväl som sociokulturella och ekonomiska effekter. Den här bredare synen på effekter av turism har följt med framväxten av utvecklingsparadigmet hållbar utveckling.

Det övergripande syftet med avhandlingen är att beskriva och analysera effekter av turism från ett hållbarhetsperspektiv. Modeller, som inbegriper olika typer av effekter, har tidigare utvecklats och testats empiriskt i detta syfte, men investeringar i turism är alltjämt rättfärdigade eller avfärdade med ekonomiska argument. Detta innebär att mål med ett hållbarhetsperspektiv är svåra att uppfylla. Den första forskningsfrågan lyfter detta dilemma: *Vilka fördelar respektive utmaningar finns med att tillämpa ett cost-benefit perspektiv för att mäta effekter av turism från ett hållbarhetsperspektiv?* I samhällen där turismutveckling har, eller har haft, en stor roll är lokalinvånarna viktiga intressenter. De upplever både betydande positiva såväl som negativa värden kopplade till utvecklingen och är en del av turismupplevelsen i mötet med besökarna. Avhandlingens andra forskningsfråga anammar därför ett lokalinvånarperspektiv: *Hur kan lokalinvånarnas inställning mot turism beskrivas och analyseras från ett hållbarhetsperspektiv?*

Avhandlingen bygger på två fallstudier som resulterat i fem forskningsartiklar. Den första fallstudien, som diskuteras i de tre första artiklarna, är kopplad till den första forskningsfrågan och är en studie av musikfestivalen Way Out West. Över 2000 respondenter svarade på enkäter som inbegrep både festivalbesökare och lokalinvånare. Djupintervjuer med festivalledningen genomfördes också och sekundärdata från festivalorganisationen insamlades. Den andra fallstudien, som diskuteras i de två sista artiklarna, genomfördes på den svenska västkusten och innefattade enkäter till lokalinvånare i tre orter (528 respondenter) såväl som djupintervjuer med lokalinvånare.

Resultaten visar att begreppen *brukarvärde* och *icke-brukarvärde*, från cost-benefit analys, är användbara för att skifta fokus från ekonomiska effekter till en diskussion om värde när det gäller utvärderingar av turism. Ett försök att uppnå kommensurabilitet mellan olika typer av effekter visade sig också lovande i avhandlingskontexten. Detta ger möjlighet att diskutera sociokulturella effekter och miljöeffekter med samma förutsättningar som ekonomiska effekter. I den andra fallstudien visar resultaten vikten av att belysa lokalsamhällens olikheter gällande preferenser. Detta görs genom att tillämpa en *segmenteringsstrategi* och ett *stakeholder-perspektiv.* Dessutom identifieras två faktorer som kan hjälpa arbetet med hållbar utveckling på turistdestinationer. Dessa är *nivån på turismutveckling* och *inlemmandet av en värderande komponent för att mäta attityder*. Metoderna och verktygen som utvecklas och appliceras i avhandlingen understryker vikten av att inbegripa lokalinvånare i turism- och evenemangsutvärderingsprocessen samt en bredare förståelse för effekter av turism och värde. Avhandlingens slutsatser bidrar därmed till ny kunskap för att möta hållbarhetsmål inom turism och evenemang.

Nyckelord: effekter av turism, hållbar utveckling, lokalinvånare, cost-benefit analys, kommensurabilitet

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1 INTRODUCTION

Tourism used to be an activity for the privileged and wealthy, an activity in which to indulge for those who were well off. Today, vacationing has become commonplace in western societies. The question is not any longer if we travel, but where, when and how. In the span of only 50 years, this major behavioral change has connected places and people. It has created financial flows, flows of ideas and transfers of traditions. To understand how this development affects societies has been and still is a major area of interest in research, public institutions and for the tourism industry. It is also the focus of this thesis.

Since the dawn of mass tourism in the 1960s, consequences of tourism have been increasingly visible around the globe. This implies impacts other than the financial gains made by tour operators, national states, tourist entrepreneurs, and local residents. With an industry that is estimated to increase with 60% from 2013 (app. 1 billion) until 2020 to 1.6 billion tourists[1] (UNWTO, 2013, 2014), it is most likely that tourism will make even larger footprints on our societies. In 2012, tourism generated 9% of the world's GDP and almost 10% of all jobs, according to the World Tourism Organization (UNWTO, 2013). The fast expansion of tourism, and particularly the phenomenon of mass tourism, creates problems: pollution of oceans, deforestation and soil erosion, littering, prostitution, disturbance of wildlife, and air travel's contribution to climate change. Many of these problems are connected to tourism development in the Third World, but can also be observed in a Western context (Mowforth & Munt, 2008).

Thus, it becomes increasingly important to evaluate the consequences of tourism "if government agencies, planners, developers and businessmen are to appreciate the full implications of their actions" (Wall & Mathieson, 2006, p. 3). Local residents, employees in the tourism sector, community groups and tourists are also important actors in the tourism system, who could profit from such evaluations. Moreover, the importance of examining the consequences of tourism is highlighted when adding to the discussion the current discourse of sustainable development.

At the same time as mass tourism was making its mark upon destinations in the 1960s a new discourse on development started to emerge. A critical view on the state of development and environmental issues, and the link between the two, made way

[1] These numbers represent international arrivals, i.e. not domestic tourism. From 1995 to 2013 the number of international arrivals more than doubled (from 529 million in 1995 to 1,087 million in 2013)

for the concept of sustainable development (Pumar, 2005). Today, sustainable development is institutionalized as the prevailing development paradigm and it has become "hegemonic in policy discourse" (Pumar, 2005, p. 64). Seeing that the tourism industry has had continuous growth and become one of the world's leading industries in terms of economic turnover, the discourse of sustainable development is also present in this context. The World Tourism Organization (UNWTO) and the United Nations Environmental Program (UNEP), as well as national, regional and local governments, exercise institutional pressure on the tourism industry and on local and national policy makers to take social, cultural and environmental care as well as considering economic factors when addressing tourism (Dwyer, 2005; Hall, 2011). To achieve this, they are in need of measurement tools to meet the requirements of the sustainable development perspective (Tyrrell, Paris, & Biaett, 2013). Faulkner and Tideswell (1997) state three basic rationales for achieving the objectives of sustainable development in tourism: the establishment of planning and management systems that emphasize benefits and avoid costs of tourism development, the establishment of systems for monitoring tourism impacts, and finally that these monitoring systems should be comparable over time and across destinations.

The sustainable development discourse implies a holistic interpretation of which impacts to address when measuring and monitoring consequences of tourism. This thesis aims to contribute to the growing field of research focusing on holistic tourism impact evaluations, i.e. taking a larger spectrum of impacts into account. Previous research on tourism impacts has predominantly focused on the economic dimension (Getz, 2009; Wall & Mathieson, 2006), and several researchers have pointed out that it is important to look beyond economics and to include social, cultural, environmental and other impacts (Deery & Jago, 2010; Dogan, 1989; Gössling & Hall, 2008; Lankford & Howard, 1994; Pizam, 1978; Turner & Ash, 1975; Wall & Mathieson, 2006).

Frameworks have been proposed and tested in an effort to reflect multiple perspectives which could help facilitate planning, managing and understanding tourism impacts in a more holistic sense (see Ahn, Lee, & Shafer, 2002; Bennett, Lemelin, Koster, & Budke, 2012; Cernat & Gourdon, 2012; Mules & Dwyer, 2005). These frameworks, as well as previous efforts to address single impact dimensions (economic, social, cultural and environmental impacts) all contribute to an increased understanding of the consequences of tourist activities in our societies and the former also address the issue of sustainable development from different perspectives. Despite these efforts, investments in tourism and tourist activities (e.g.

festivals and events) are still justified or condoned with economic arguments, e.g. financial injection into the region by visitors (Getz, 2009; Tyrrell et al., 2013). The values of sustainability are certainly considered in the process, but money is habitually the language of decision making (Getz, 2009; Moons, 2003), and impacts are often viewed through an economic lens (Hall, 2012). Economic impacts are thus prioritized, whereas the objectives of sustainable development are difficult to achieve. The difficulty of comparing different types of impacts with one another due to different units of measurements can also be referred to as a problem of incommensurability, i.e. it is difficult or even impossible to know which dimension has the highest or lowest relative impact. This issue of incommensurability (literally and cognitively) and its consequences have been discussed in previous research (see Tyrrell et al., 2013), but needs to be addressed further.

1.1 PROBLEM DISCUSSION

1.1.1 SUSTAINABLE DEVELOPMENT OR SUSTAINABILITY?

It is not a straightforward task to define and ascertain the concept of sustainable development. First, it is a question of semantics. Are we talking about sustainable development or sustainability? These two labels are sometimes used interchangeably. Including tourism in the equation, we could also talk about, for example, *sustainable tourism, sustainable tourism development* or *sustainable development in tourism*. The two former labels suggest that tourism has (or can have) a sustainable feature while the latter refers to tourism as a field of application for the concept of sustainable development (see Butler, 1999).

There have been numerous theoretical debates about the concept of sustainable (tourism) development and its interpretation (see Gladwin, Kennelly, & Krause, 1995; Lélé, 1991; Robinson, 2004; Saarinen, 2006; Sharpley, 2000). Sustainable development consists of two different concepts put together (*sustainability* and *development*), which can be discussed separately in order to understand the whole (Lélé, 1991). The two concepts have developed both dependently and independently. In development theory the criteria have moved from being purely economic to having a more human focus encompassing cultural, social and environmental issues. Basically, the theory has gone from *modernization theory*, focusing on economic growth, to *alternative development*, which emphasizes a bottom-up perspective, including people and their basic needs in the equation (Redclift, 1992; Sharpley, 2000). The concept of sustainability has its history within the environmental movement, which had already started in the 19th century with the growth of

industrialization. Starting with a concern for environmental resource problems, this movement has during the last decades raised social, technological and other concerns, talking about the earth as a closed ecological system and about the need to maintain the reproduction of this system (Sharpley, 2000). Thus, sustainability has evolved as the watchword for the maintenance of this ecological system. Combining *alternative development* with *environmental sustainability* makes up the concept of sustainable development. The concept or process of development itself demands some attention. In this thesis, development is treated as both a change process and a goal. The process or goal is to achieve sustainable development, which in turn is a construction of sustainability and alternative development (cf. Sharpley, 2000).

The normative definition of impact dimensions included in sustainable development (economic, social, cultural, and environmental), and the reviews by Lélé (1991) and Sharpley (2000), have guided the way the concept is used in this thesis. The terms *sustainable development in tourism* or a *sustainable development perspective* (see Butler, 1999) will be used consistently. First, this is a demarcation vis-à-vis the use of sustainable tourism and sustainable tourism development. These labels suggest that tourism is inherently sustainable and are linked to a tourism-centric tradition (cf. Butler, 1999; Saarinen, 2006), while sustainable development in tourism implies the application of sustainability and alternative development to the analysis of the empirical field of tourism.

Second, on an operational level the sustainable development perspective includes the four impact dimensions of economic, social, cultural (hereafter referred to as sociocultural) and environmental impacts. From a historical perspective, the use of sustainability would underline the ecological system, while the inclusion of (alternative) development also stresses economic aspects and emphasizes a focus on human agency, with its bottom-up perspective[2]. This thesis deals with describing and analyzing tourism impacts in general, but also more specifically with how local residents of communities, as the primary group affected by the consequences of tourism, perceive and interpret local development. Thus, a local residents' perspective, emphasizing economic, sociocultural and environmental impacts, translates, in this thesis, into sustainable development in tourism.

[2] Robinson (2004) states that many academic environmentalists and NGOs tend to prefer the term *sustainability*, since development is seen as synonymous with economic growth. This might be the case in practice and is related to the modernization paradigm of development. However, this thesis refers to development in terms of *alternative development* as described above, and not development as equivalent to economic growth.

Different interpretations, traditions and applications of sustainable development, with links to theoretical frameworks in the context of tourism (Clarke, 1997; Hall, 2012; Hunter, 1997; Saarinen, 2006; Sharpley, 2000), are discussed further in section 2.4.

1.1.2 RESEARCH QUESTIONS AND PURPOSE

There is a call to produce frameworks, models and scales to measure impacts from a broader perspective, including the dimensions of sustainable development (Fredline, Raybould, Jago, & Deery, 2005; Getz, 2009; Tyrrell et al., 2013). However, as discussed in the introduction, the inclusion of multiple perspectives will not automatically widen considerations in line with the objectives of sustainable development. Thus, "it is important to situate social and environmental impacts on a common footing with economic impacts for decisions involving tourism industry development" (Tyrrell et al., 2013, p. 280). In economics, cost-benefit analysis (CBA) has been used as a means to discuss and incorporate externalities and their costs and benefits beyond the use of purely financial data. Methodologies used within CBA frameworks, such as contingent valuation methods (CVM), give the possibility of performing evaluations in monetary values (Mules & Dwyer, 2005), and deal with the problem of commensurability discussed above. CBA has been applied both in event contexts (Burgan & Mules, 2001; Mules & Dwyer, 2005) and more generally in a tourism context (Andersson, 2000; Reynisdottir, Song, & Agrusa, 2008). It has, however, been applied in only a few studies generally, and particularly with reference to sustainable development.

The focus of CBA is the contribution to welfare, i.e. economic efficiency and not only financial flows (Hicks, 1946). In this context, it is vital to include sociocultural and environmental impacts as possible externalities expressed as immaterial benefits and costs influencing the welfare contribution. These impacts are also equally important from a sustainable development perspective, thus creating a strong link between the framework of CBA and evaluations of impacts from a sustainable development perspective. Therefore, the first research question of the thesis is:

RQ1: What are the advantages and challenges of measuring tourism impacts from a sustainable development perspective, applying a cost-benefit perspective?

The scope of the first research question includes a discussion of practical and theoretical challenges in using methods and concepts from CBA in evaluating tourism impacts. It also leads to a discussion of what advantages, in the form of empirical results and the management of sustainable development, for instance, such evaluations could generate.

Furthermore, the results of such evaluations could generate follow-up questions, e.g. who benefits from and who bears the costs of tourism impacts? Local residents, in communities where tourism development has had or is becoming an important part in development strategies, have a central role in this discussion, both as major recipients of the benefits and costs linked to tourism development, but also as part of the tourist experience in the encounter with visitors (Sharpley, 2014). It is difficult to disregard the role of local residents as indirect or moral "owners" of the destination. They live their daily lives in a place where tourists only dip their toes in search of experiences. Wall and Mathieson (2006, p. 288) state that "tourism should be encouraged more for the fact that it may contribute to the well-being of local people in destination areas […] and less for the reason that it is good for the tourist industry […] per se".

To adopt a residents' perspective, when analyzing tourism impacts, is in line with a community-based approach to sustainable development in tourism (Saarinen, 2006). With this approach, the local community and its stakeholders negotiate the meaning of sustainable development and tourism at the destination. The involvement of local residents in the tourism planning process is also widely advocated in research (see Choi & Murray, 2010; Jamal & Getz, 1995; Nunkoo, Smith, & Ramkissoon, 2013). Thus it is important to understand how local residents perceive tourism development in general, and what they perceive to be important from a sustainable development perspective, i.e. their attitudes towards tourism development from a sustainable development perspective. However, local residents cannot be treated as one single group of people with one voice. The heterogeneity of beliefs and attitudes within a local community has been highlighted in previous research. Lankford and Howard (1994, p. 135) state, for instance, that "even in the lightly populated areas […] resident attitudes toward tourism are not homogenous".

Numerous different scales, with emphasis on social impacts, have been developed (see Ap & Crompton, 1998; Choi & Sirakaya, 2005; Lankford & Howard, 1994; Pizam, 1978). However, in Sharpley's (2014) review of research in the field of local resident perceptions, no study in the Nordic context was included and only a few studies focus particularly on measuring and analyzing impacts from a sustainable development perspective (Choi & Murray, 2010; Choi & Sirakaya, 2005; Sirakaya-Turk, Ekinci, & Kaya, 2008). Choi and Murray (2010, p. 590) conclude that "sustainability component factors and community participation provide a strong foundation to continue the investigations of resident attitudes". Thus, resident attitudes will be explored further:

RQ2: How can resident attitudes toward tourism impacts be described and analyzed from a sustainable development perspective?

Based on the introduction and the problem discussion, the overall **purpose** of this thesis is *to describe and analyze tourism impacts from a sustainable development perspective*. The aim is to advance research on tourism impacts in the context of sustainable development.

The two research questions are addressed in five separate studies in the form of research articles; these are presented in the next section.

1.2 DISPOSITION

The introductory discussion of the problem, the research questions and the purpose of the thesis has set the stage for this investigation into tourism impacts from a sustainable development perspective. Five articles (see Table 1 below for an overview) are included in the thesis and they are explicitly linked to the discussion of the problem and the overall purpose. These articles are summarized in chapter 4 and the full articles are found as appendices. The conceptual and theoretical frameworks and the methods used are reflected upon in chapters 2 and 3. This allows for the possibility of reflecting upon methodological choice and conceptual frameworks, which is not possible within the scope of each article. Shared methodological approaches such as the contingent valuation methodology (CVM) and the concepts of sustainable development and tourism impacts are reviewed and discussed. Lastly, a discussion of principal findings, limitations and possible future research is found in chapter 5. Parts of the text in chapters 1, 2, and 3 appear in the author's licentiate thesis (Lundberg, 2011).

	Title	**Authors**[3]	**Fulfilment of purpose**	**Published in**
1	Estimating Use and Non-Use Values of a Music Festival	Andersson, T. D., Armbrecht, J. & Lundberg, E.	Measurement model for economic evaluation, applying the concepts of Use and Non-use values	Scandinavian Journal of Hospitality and Tourism
2	Commensurability and Sustainability: Triple impact assessments of a tourism event	Andersson, T. D. & Lundberg, E.	Measurement model for tourism impacts to achieve commensurability, applying CBA-methodology.	Tourism Management
3	When a Music Festival Goes Veggie: Communication and environmental impacts of an innovative food strategy	Andersson, T. D., Jutbring, H. & Lundberg, E.	Examining the implications of impact evaluations and pursuing strategies.	International Journal of Event and Festival Management
4	The Level of Tourism Development and Resident Attitudes: A comparative case study of coastal destinations	Lundberg, E.	Application of cluster analysis to describe and analyze resident attitudes linked to the level of tourism development.	Submitted to Scandinavian Journal of Hospitality and Tourism
5	Sustainable Destination Management: Local Residents' Perceived Importance of Tourism Impacts	Lundberg, E.	Description and analysis of local residents' perceived importance, applying a stakeholder perspective.	Submitted to Journal of Cleaner Production

Table 1: The articles in the thesis

[3] The authors recognize their equal contributions (articles 1, 2, and 3)

1.3 ABBREVIATIONS AND ACRONYMS

The chapters on the theoretical and methodological frameworks contain numerous theories and concepts which are abbreviated throughout the thesis. To facilitate reading, the table below is included as an aid and overview. Acronyms for organizations are also included. The aim has been to consistently use the acronyms most frequently used in research publications.

CBA	Cost-Benefit Analysis
CC	Carrying Capacity
CGE	Computable General Equilibrium
CVM	Contingent Valuation Methodology
CSR	Corporate Social Responsibility
EF	Ecological Footprint
EU-ETS	EU Emissions Trading System
GSTC	Global Sustainable Tourism Criteria
IOA	Input-Output Analysis
ITY	Integrated Tourism Yield
LCA	Life Cycle Assessment
SCC	Social Carrying Capacity
SET	Social Exchange Theory
SLA	Sustainable Livelihoods Approach
STBT	Sustainable Tourism Benchmarking Tool
TALC	Tourism Area Life Cycle
TBL	Triple Bottom Line approach
TCM	Travel Cost Method
TEF	Touristic Ecological Footprint
UNEP	United Nations Environmental Program
UNWTO	World Tourism Organization
WTA	Willingness-To-Accept
WTP	Willingness-To-Pay

Table 2: Abbreviations and acronyms

2 THEORETICAL FRAMEWORK

The origins of tourism research do not lie within one discipline. This will be evident in the following literature review, which incorporates theories and concepts from various disciplines. Researchers debate whether we can talk about a distinct discipline or whether tourism research should be viewed as an empirical field and studied within existing disciplines (Echtner & Jamal, 1997; Leiper, 2000). Geographers, marketers, sociologists, economists, business researchers and a multitude of others have contributed with theories and methodologies (Dann, Nash, & Pearce, 1988).

The purpose of this thesis is to describe and analyze tourism impacts from a sustainable development perspective, which entails two major concepts that will be reviewed below: tourism impacts and sustainable development. The art of analyzing tourism impacts is closely connected to quantitative methodologies and techniques, and the purpose of measuring is generally linked to an evaluation of some kind. Therefore, a review of *evaluation theory* and the *sociology of valuation and evaluation* follows, in order to understand the basics of why tourism impacts are examined, the societal consequences of measuring tourism impacts, and in particular the consequences of quantification and commensuration (cf. Lamont, 2012).

2.1 VALUATION AND EVALUATION

2.1.1 EVALUATION THEORY

> "Dictionary definitions refer to evaluation as assessing the value (or worth, or merit) of something. The 'something' focused on here is some kind of innovation, or intervention, or project, or service" (Robson, 2000, p. 8).

The "something" in this thesis is *tourism.* What the outcomes of evaluations tell us about the phenomenon is important to understand, both from a general point of view (evaluation theory) and on a detailed level (within the field of tourism research).

There are several reasons why an evaluation, of tourism, for example, is performed. Reporting and decision-making have been major reasons (Davidson, 2005), but also evaluation as a legitimization effort in order to maintain or increase investment levels (Robson, 2000). The latter, but also the former to some degree, can be understood within the present-day management discourse: "We live in an age of accountability; of concern for value for money" (Robson, 2000, p. 7). An increased demand for accountability, effectiveness and efficiency over the last two decades has led to what Love (2001, p. 437) refers to as a "measurement revolution in private, public, and nonprofit organizations". Measurable goals need to be defined and evaluated in

order to declare outcomes and legitimize strategies (Love, 2001). We might be experiencing a "measurement revolution", but measurement and quantification practices have, in a historical context, been growing constantly throughout the 20th century, in step with the rise of political institutions and the increased bureaucratization of western democracies (see Fourcade, 2011; Porter, 2003).

Evaluations are intimately linked to politics and ethics. The outcome of an evaluation is often used for policy-making, which is political by nature. Policies can affect citizens' daily lives to some degree, and thus "it is a minimum requirement that [evaluations] should be carried out to a high standard" (Robson, 2000, p. 29). This entails ethical considerations for the evaluator about the object of the evaluation, how data is treated, and for what purpose the outcomes will be used (Robson, 2000). Moreover, Guba and Lincoln (1989) express the importance of not dehumanizing the people who are part of an evaluation into objects, but of letting them participate in the evaluation process.

It is possible to see the history of evaluations as different phases. Guba and Lincoln (1989) suggest that evaluation is now in its fourth phase. The first phase is associated with *measurement*, e.g. in the context of schools and exams, to answer what is right or wrong. Evaluations were used as a decision-making tool, which implied a user-led approach (Guba & Lincoln, 1989; Robson, 2000). The second phase included *descriptions*, to analyze whether set objectives were met; i.e. to evaluate was to measure an outcome and to describe whether the outcome corresponded to set goals and objectives. In the third phase, *judgment* was added to measurement and description. The evaluator acquired the role of judging whether the right goals were fulfilled and of setting standards (Guba & Lincoln, 1989). Today, in the fourth phase, evaluations can be interpreted from a *responsive constructivist evaluation* approach. This approach implies that outcomes do not necessarily represent the way things are, but are the result of a negotiation process between stakeholders involved in the evaluation context. This negotiation is influenced by the physical, psychological, social and cultural contexts of the stakeholders (Guba & Lincoln, 1989). Fourcade (2011) discusses the influence of technologies, criteria, customary rules or conventions, and the role of nonhumans and instruments in the evaluation practice. Based on Guba and Lincoln (1989) and Fourcade (2011), the outcomes of evaluations should therefore be understood based on how they have been accomplished (by whom? for whom? under what circumstances? with what kind of instruments?), while the interpretation of the outcomes lies ultimately in the hands of the stakeholders.

2.1.2 THE SOCIOLOGY AND HISTORY OF COMMENSURATION AND QUANTIFICATION

The act of comparing different qualities within one metric is common-place in order to make sense of the world around us in our daily lives. It is also a common feature of evaluations and, as discussed in the introduction, a characteristic of cost-benefit analysis (CBA). This act, called commensuration, includes the creation of rankings and ratios (Espeland & Stevens, 1998) or, as in articles 1 and 2 of this thesis, the elicitation and estimation of hypothetical market prices. Commensuration efforts have a long history and are intertwined with the history of industrialization and of the bureaucratization of societies. Management accounting is an example of a practice where commensurability is taken to its extremes. All processes in an organization are transformed and reduced, via calculative processes, into one financial figure (Miller, 2004). In recent decades, sociologists have studied the processes of valuation and evaluation from different perspectives in a field referred to as "sociology of valuation and evaluation" (Lamont, 2012), and have included studies of commensuration, quantification, CBA and the influence of these processes on society.

Espeland and Stevens (1998, p. 315) argue that "commensuration is no mere technical process but a fundamental feature of social life". This means that, even if the evaluation and quantification of social phenomena, such as tourism, are regularly performed, widely accepted, and on the surface objective calculative processes, they are highly exposed to interpretation, political decisions and symbolic value (Espeland & Stevens, 1998; Miller, 2004). Objects with different qualities and information are reduced in order to be comparable. This reduction helps us with decision-making and political decisions, since uncertainty is reduced. However, it also weakens the link between the empirical world and what is represented in the quantification and commensuration (March & Simon, 1958). The risk is that commensuration hides important qualities of an object, particularly those that are not quantifiable, wanted or needed. Karpik (2010), in his theory of *economics of singularities*, states that there are certain goods that cannot be commodified, valued and commensurated within the realms of neoclassical economics, but work according to other laws. These singularities, e.g. fine wines, works of art, haute cuisine, literature and *tourism*, are multidimensional and structured (i.e. contain several dimensions which are indivisible), uncertain (i.e. knowledge of service delivery is imperfect), and incommensurable (see below). If we accept Karpik's definition of singularities and their deviance from other goods and services, their unique traits might be reduced or lost in a commensuration processes. Thus, it is vital to state and discuss what the commensuration leaves out and why, i.e. *w*hat are the implications of this reduction process?

Commensuration has, in accounting as well as in economics, and particularly within the framework of CBA, been employed to understand externalities and facilitate decision-making. Porter (2003) sketches the history and growing influence of CBA on both public and private life. The origins of what we think of today as a cost-benefit analysis can be found in 19th century France. It was developed in the public sector to motivate public investments such as railway and bridge construction, including intangibles as a means of balancing the large capital costs needed. The institutionalization of matching costs and benefits in the public domain was then furthered during the depression in the USA (1930s), while the 1950s saw the standardization and documentation of cost-benefit analysis and of techniques to quantify domains not traditionally quantified in economics and public decision-making (Porter, 2003). The ideal was objectivity through measurement and calculation, and a move away from political and expert judgment. Objectivity can be interpreted and used in different ways, and Porter (2003, p. 242) states that in connection to CBA and commensuration it was "not so much to refer to truth or what philosophers call *realism*, but with the effort to be impersonal, the negation of subjectivity". This is reinforced by Samiolo (2012), who states that numbers (and CBA) make decisions impersonal.

Money is the language of decision-making, according to Getz (2009) and Moons (2003), as discussed in the introduction. Money, CBA, and thus commensuration, symbolizes rationality in an historical context (Porter, 2003). What is not measured in monetary units could be seen as irrational, subjective, incomparable or *incommensurable*. There are domains that are ethically sensible, e.g. commensuration of friendship, children or a human life, but also domains that are defended as incommensurable for strategic reasons. Art experts could argue for the incommensurability of art objects and claim the impossibility of measuring unique esthetic, spiritual, symbolic and historical values. This, according to Espeland and Stevens (1998), is because their identity as experts is threatened by commensurability efforts, but also because, as stated by Throsby (2003), individuals' preferences cannot capture all possible cultural values. Commensuration, and quantification in general, have the ability to create such areas of conflict, often between institutions, where claims of commensurability and incommensurability clash (Espeland & Stevens, 1998). This may lead to political disputes and "epistemological wars" (Samiolo, 2012, p. 382). In her study of the giant flood protection program of Venice, Samiolo (2012) retells and analyzes the dispute over how to interpret a CBA conducted to evaluate the benefits of the protection program. In essence, it shows how a number of local and national institutions questioned the

correctness of calculations and aggregations in the CBA. It illustrates how commensuration is not static and "objective", but is influenced by "different modes of commensuration, and the different calculative tools" (Samiolo, 2012, p. 399) applied in the process. The uniqueness of the place, in this case Venice, was not fully integrated into the process, according to local institutions, which led to disparate views on the results. Another sociological and historical exploration of economic valuation and commensuration of nature is the study of three oil spills in two different contexts, the Exxon Valdez (in Alaska, 1989) and the Amoco Cadiz and the Erika (in Brittany, France, 1978 and 1999) (Fourcade, 2011). The settlements in court, based on economic valuations of nature and the loss thereof due to the oil spills, were greatly disparate in size. The Exxon Valdez settlement generated much higher claims than in the French cases, even though the French incidents were bigger in scale. Fourcade (2011) traces these disparities to cultural and social disparities between France and the USA in terms of relationships to money, nature and the legal system. This reinforces the difficulties of commensurating non-market goods, and highlights the importance of understanding the context of evaluation.

2.1.3 Reflection

Evaluation theory and the above discussion of commensurability, quantification and the origins of cost-benefit analyses (CBA) help to position this thesis in a social context and to enrich the findings in terms of another layer of analysis. It highlights advantages and disadvantages to consider when performing, analyzing and drawing conclusions from commensuration and quantification practices. In this thesis, an effort to commensurate impacts of tourism is undertaken with the help of CBA and ecological footprint calculations (articles 1, 2, and 3). Moreover, residents' perceptions of tourism impacts are measured and analyzed (articles 4 and 5). This is also an act of commensuration, in this case of different consequences of tourism that have an impact on peoples' life quality or community well-being.

An advantage of CBA and commensuration is the democratic empowerment, where political judgment is minimized and "objective" evaluations linked to welfare and economic efficiency are preferred (Espeland & Stevens, 1998), i.e. it is a tool of governance which creates political legitimacy (Sunstein, 2002). It also simplifies decision-making by reducing risk and choices for decision-makers (Espeland & Stevens, 1998). These advantages reinforce the notion that commensuration would benefit the analysis and description of tourism impacts as discussed in the introduction. It also increases the scope of impact dimensions, which have previously been preoccupied with economic impacts (Getz, 2009; Tyrrell et al., 2013).

However, it could also be seen as a reduction of qualities into a single number to hide behind and to use against weaker bodies involved in the decision-making process (Porter, 1995). Moreover, it creates a gap between the empirical world and the representation thereof (March & Simon, 1958), i.e. a loss of details and values that are not captured in the calculative processes of commensuration.

2.2 DIMENSIONS OF TOURISM IMPACTS

The introduction to this thesis points out the previous focus on economic impacts and a brief description of the historical context, which has also led to research on sociocultural impacts from the perspective of local residents, as well as investigations into environmental impacts. The syntheses of these efforts into frameworks with a sustainable development focus are of a later date and the main frameworks will be discussed briefly in this chapter. The separate articles (particularly 1, 2 and 5) include detailed reviews of different aspects of research into tourism impacts. Article 5 contains a summary of specific tourism impacts that have been explored in research since the 1970s.

The seminal works of Mathieson and Wall (1982; 2006) gather a large array of tourism impact research. They were pioneers, addressing economic, physical (i.e. environmental) and social impacts all together, contextualizing what is later discussed under the banner of sustainable development. In the first edition of their book they state: "Widely-accepted procedures for investigating the impacts of tourism have yet to be established and few studies attempt a comprehensive examination of a broad range of impacts" (Mathieson & Wall, 1982, p. 3). The exact same phrase is in the latest edition of the book (Wall & Mathieson, 2006, p. 3), hinting that not much has changed in almost 25 years. However, there is an aggrandizement in the latest version which states that there are now established frameworks for measuring economic impacts, but that there is still a lack of coherence regarding measuring social and environmental impacts and even more so for frameworks covering multiple dimensions of impacts (Wall & Mathieson, 2006).

2.2.1 ECONOMIC IMPACTS

Evaluations of economic impacts have been performed in many different kinds of tourist contexts: events and festivals (see Getz, 2008); country level (see Archer, 1989; Fletcher & Snee, 1989); sports tourism (see Lee & Taylor, 2005; Noll & Zimbalist, 1997); cultural tourism (see Bedate, Herrero, & Sanz, 2004); destinations (see Halpern, 2008; Wagner, 1997); the meetings industry (see Mistilis & Dwyer, 1999), and many more.

The challenge of measuring economic impacts is partly due to the fragmented nature of tourism – i.e. it covers a wide range of industries – and partly the absence of a clear output. This is particularly evident when governments examine their national economies and have problems identifying the benefits of tourism in their accounts, while the output of traditional industries is possible to identify and quantify more easily (Spurr, 2006)[4]. There has also been criticism of how economic impact studies have been achieved, with exaggerated positive economic impacts as a result (Baade, Baumann, & Matheson, 2008; Crompton & McKay, 1994; Jackson, Houghton, Russell, & Triandos, 2005; Nooij, Berg, & Koopmans, 2013)

Today, the most frequently applied models for calculations of economic impacts in tourism and event research are Input-Output analysis (IOA), Cost-Benefit analysis (CBA) and Computable General Equilibrium (CGE) (Andersson, Armbrecht, & Lundberg, 2008). The Input-Output model (IOA) measures the financial flows of tourism expenditure throughout the local, regional or national economy. It takes only the generated financial effects into account, and not values such as social costs and benefits or other immaterial values. The model is often based on data on visitor expenditure during a stay at a destination. The initial expenditure is also called direct impacts. An IOA also entails an analysis of indirect and induced impacts:

The *direct economic impacts* refer to the actual money spent by incoming tourists during their stay. The expenditure is distributed mainly to hotels or other places of accommodation, transport, restaurants and bars, local souvenir shops and other places where tourists are prone to spend their holiday money. It is also referred to as the initial injection of money (Crompton & McKay, 1994).

Apart from direct impacts, tourist expenditure also causes indirect and induced effects. *Indirect economic impacts* are for example expenditure that goes to payment of wages of local employees and to suppliers of goods and services in demand from beneficiaries of direct economic impacts. *Induced economic impacts* are tied to increase in spending among local employees due to higher wages caused by an influx of tourism expenditure (Archer, 1973; Mules & Dwyer, 2005; Wall & Mathieson, 2006).

Multipliers have frequently been used in tourism impact research, for example in IOA or CGE. These are ratios of total economic impacts compared to direct economic impacts (Archer, 1973). Multipliers calculated on employment, income, and value-added are frequently used (Archer, 1973, 1995; Mules & Dwyer, 2005). The factor

[4] "Tourism Satellite Accounts" (TSA), built on an Input-Output table, have been one solution for governments. See Spurr (2006) for more details on TSA.

determining the size of the multiplier is the amount of leakage out of the region, represented by imports and savings. If imports and savings are significant, less economic activity takes place in the economy and the multiplier is reduced (Archer & Fletcher, 1990).

Wanhill (1988) criticizes the use of average multipliers in all scenarios, as they do not take the capacity constraints of the economy and the amount of tourism expenditure into account. The argument is that if there is a large increase in tourism expenditure, an economy would increase its imports and the multiplier would be considerably lower than the average coefficient used initially. There has also been an introduction of misleading multipliers by consultancy firms, such as the ratio multiplier. Creating a ratio between the total income of all rounds of expenditure, in relationship to the initial direct impact, only gives a hint of the backwards and forwards linkage in the economy and should not be used to calculate for instance increase in employment (Archer & Fletcher, 1990). The use of sales multipliers has also been criticized (Crompton & McKay, 1994) since these only measure the business turnover that is created. This would only be of real interest to some businesses, but it is tempting to use this multiplier since it often gives large numbers to present to the public (Crompton & McKay, 1994).

The basis for *Computable General Equilibrium (CGE)* is an Input-Output model. However, where IOA often neglects capacity constraints and assumes that unlimited idle capacity (e.g. labor) is available in the economy to meet increased demand[5], CGE models the economy, looking at all different sectors of the economy and how they are influenced by a phenomenon or specific incident (e.g. increase in tourism caused by a music event). CGE takes the interrelations within and between economies into account, whether regional or national. This includes labor drawn from one sector to meet demand in the tourism sector (i.e. crowding-out effects), or inflation due to tourism that might harm export of products in other sectors (Dwyer, Forsyth, Madden, & Spurr, 2000).

The output of the model is the change in GDP or GRP,[6] including changes in employment, imports, and exports (Dwyer, Forsyth, & Spurr, 2004). According to Dwyer et al. (2004), CGE is a model that tries to use a more realistic view of the economy, accounting for capacity limitations at each step. A large amount of detailed empirical data is necessary, from several sectors and on different levels, in order to fulfil the criteria of CGE. This drives up the costs of building up a CGE model,

[5] See e.g. Wanhill (1988) for an exception.
[6] Gross Domestic Product (GDP) and Gross Regional Product (GRP).

and it has been criticized for being too costly, although Dwyer et al. (2004) claim it is not more costly than an IOA model, but probably more time consuming and not necessarily a good option when doing impact studies in small regional settings or on small events. Another criticism of CGE is that there are several underlying assumptions about the economy and the interrelations between sectors. If the analysis is not performed properly or based on sound empirical data, these assumptions could skew the results. This, however, is not only true for CGE. Both IOA and CBA rely heavily on assumptions (assumption of unlimited free capacity in the case of IOA; immaterial costs and benefits in the case of CBA). (Dwyer et al., 2004)

Besides IOA and CGE, cost-benefit analysis (CBA) is also used to conduct economic impact studies. It includes financial as well as social costs and benefits in order to generate a result where benefits and costs to the society as a whole are rendered (Mitchell & Carson, 1989). The interest is not primarily in the economic effects, but in the relationship between benefits and costs to society caused by the phenomenon under scrutiny, i.e. economic efficiency (Andersson et al., 2008). With this reasoning it is important to attach an opportunity cost evaluation, i.e. how resources could be used in the best alternative way and what the net effect would be. Using opportunity cost gives an estimate of the efficiency. The inclusion of benefits and costs and CBA's holistic characteristics make it a suitable framework to discuss for the purpose of describing and analyzing tourism impacts from a sustainable development perspective. It is therefore discussed, in this role, in section 2.3.

2.2.2 SOCIOCULTURAL IMPACTS

The perspective of local residents is often considered in relation to sociocultural impacts. Their views upon visitors' and tourist developers' (private or public) actions are under scrutiny. A distinction between social and cultural impacts is that the former are seen as changes affecting residents in the short run, and the latter are long term changes which affect locals' beliefs and cultural practices. Beliefs and cultural practices can change in the short term due to extreme events, but in order to reorient residents' beliefs permanently, a longer period of time, often several years of exposure, is necessary (Brunt & Courtney, 1999; Sharpley, 2003). The interaction between locals and visitors is a fundamental part of the tourist experience (Gursoy, Jurowski, & Uysal, 2002; Prentice, Witt, & Wydenbach, 1994; Sharpley, 2014). If locals experience negative social and cultural impacts of tourism, visitors might meet hostility instead of hospitality or indifference instead of enthusiasm when interacting with locals (Ap & Crompton, 1993).

Residents' views on tourism development and its effects on their quality of life or community well-being are subjective, comprising personal feelings and the perceptions of various community phenomena (Andereck & Jurowski, 2005). The subjective perceptions of locals are influenced by several *factors* (based on Lankford & Howard, 1994; Sharpley, 1994; Wall & Mathieson, 2006):

- Length of residence
- Economic dependency on tourism
- Distance to tourism center
- Involvement in tourism decision making
- Birthplace
- Knowledge
- Contact with tourists
- Demographics
- Perceived impacts on local outdoor recreational opportunities
- Rate of community growth
- Types/number of tourists
- Size and development of the tourism industry
- Cultural and economic distance between hosts
- Language and communication
- Capability to absorb tourist arrivals

Many researchers refer to *Social Exchange Theory* (SET) as a tool for explaining residents' reactions (see Ap, 1992; Chen, 2001; Hernandez, Cohen, & Garcia, 1996; Sharpley, 1994). The core of the theory, coming from the field of sociology, states that a person values the outcome of exchange in a social context by comparing their own benefits and costs linked to the exchange. Concerning the social and cultural impacts of tourism, this would imply that residents with a net benefit from the exchange will have a more positive attitude towards tourism development (Andereck & Jurowski, 2005; Cook & Emerson, 1987). Residents with little or no benefit will have an indifferent or negative attitude towards tourism development. The factors listed above have been found to influence the outcome of the social exchange (Lankford & Howard, 1994).

Another theory that could help explain why different groups within the local community have different views on tourism development is *social representation*, developed by the sociologist Moscovici. Social representations are vehicles for people to understand the world around them, consisting of images, values and meanings (Moscovici, 1988). People's perception of representations (e.g. tourism development)

can be formed by either direct experience, which gives first-hand information on which to base representations, through social interaction, where information about an event is transmitted through social networks such as friends and family, or through the media (Faulkner, Fredline, Jago, Cooper, & Cooper, 2003). Several tourism researchers have used this theory in order to segment different clusters of a population and define their perceptions of tourism development, i.e. the *segmentation approach* (Davis, Allen, & Cosenza, 1988; Faulkner et al., 2003).

Stakeholder theory has also been applied in the context of sociocultural impacts, and when addressing the issue of local residents in general (Easterling, 2005; Nunkoo et al., 2013). Rather than basing an analysis of attitudes on individual costs and benefits or on social representation, stakeholder theory focuses on stakes and claims of groups within society that are unique to a group of individuals. A comparison and more detailed descriptions of the stakeholder approach and the segmentation approach are found in chapter 3.

If local residents experience negative impacts they will cope with this up to a certain level. There is a threshold, however, where acceptance turns into protests and opposition towards tourism development. This threshold is known as the *Social Carrying Capacity* (SCC) (Yoel, 1992) and refers to the capacity of a community to cope with social change. Depending on locals' level of participation in tourism development, the rate of growth and other characteristics of the community, the level of SCC differs. Infringement of this threshold can result in openly displayed negative attitudes and actions against tourism (Gunn, 1988). The response from residents varies depending on the magnitude and importance of the perceived impacts. Dogan (1989) and Ap and Crompton (1993) examine different responses to tourism, but emphasize that different groups within society respond in different ways: *resistence, retreatism, withdrawal, boundary maintenance and embracement.*

2.2.3 ENVIRONMENTAL IMPACTS

Environmental impacts have been on the agenda for several decades, but research on the topic took off with the notion of the negative consequences of tourism in the 1970s (see Cooke, 1982; Kendall & Var, 1983; Liu, Sheldon, & Var, 1987; Plog, 1973; Turner & Ash, 1975). One problem with environmental impacts, according to Wall and Mathieson (2006), has been the difficulty of measuring them, due to the diversity of impacts, the lack of a baseline (i.e. when did the change start), the lack of knowledge of cause-effect relationships (whether a change is due to the tourists or to a "normal" process), and the diversity of different methods used in research. The

latter weakness leads to a problem of comparability across studies (Wall & Mathieson, 2006).

In tourism research, the main focus has been on quantifying environmental impacts, for instance by measuring emissions of greenhouse gas (CO_2 and similar gases) or energy and land use. The results have been compared with average emissions or use in everyday life, or acceptable levels of pollution using different methods, such as ecological footprint analysis (Becken, 2002; Gössling & Hall, 2008; Hunter, 2002). However, CO2 emissions are not the sole negative environment impact resulting from human activities. Other impacts include land use, water use, waste and toxics (WWF, 2008), and different methods can be used to approach the subject, depending on aim and perspective.

Ecological footprint analysis (EF), which is applied in this thesis, has been used by researchers in tourism mainly during the last decade (Gössling, Hansson, Hörstmeier, & Saggel, 2002; Gössling et al., 2005; Hunter, 2002; Hunter & Shaw, 2005; Patterson, Niccolucci, & Bastianoni, 2007). Wackernagel, Rees and their colleagues (Wackernagel et al., 2005; Wackernagel et al., 1999; Wackernagel & Rees, 1996; Wackernagel et al., 2002) have been progressing the EF methodology. They define the concept as:

> "…the area of biologically productive land and water required to produce the resources consumed and to assimilate the wastes generated by humanity, under the predominant management and production practices in any given year" (Wackernagel et al., 2002, p. 1).

The philosophy behind the concept of EF is that our planet has limited capacity to cater for a steady increase in the consumption of natural resources. The aim is to quantify resource use in an illustrative and educative fashion, i.e. the impact of the economy's demand on natural capital (Wackernagel et al., 2005). Therefore, it is a "metaphor for ecological impact, regardless of where the impact occurs" (McManus & Haughton, 2006, p. 115). In other words, it is an attempt to commensurate a range of different types of environmental impacts into one common measure.[7]

There are obvious links to research on carrying capacities, where the notion of limits to the ecological system is also highlighted. EF is also a continuation of prior methodologies which have had the aim of illustrating the impact of human consumption on available natural resources; "sustenance space of cities" (how cities depend on other parts of the world for imports, from the 1910s), "ghost acres" (land

[7] See discussion on commensuration in section 2.1.2. This creates a historical and sociological link between EF and CBA as part of the same social phenomenon.

equivalent in acres of how much food is needed to feed a nation, 1960s), "shadow ecologies" (extension of "ghost acres" to include other fields of consumption, 1990s), and "environmental space" (closely connected to carrying capacity and the notion of calculating limits of consumption, 1990s) are some of these methodologies that have been developed with similar goals to EF (McDonald & Patterson, 2004; McManus & Haughton, 2006). The illustrative side of EF is important, since indicators such as EF are meant not only for communicating with scientists and policy makers, but also with the community, where impacts take place without losing their link to theoretical concepts:

> "Few people get passionate about spreadsheets. For indicators to lead to change there needs to be emotional content: people need to care in their hearts as well as in their minds." (Lawrence, 1997, p. 183)

This methodology has been adapted to provide valid results when analyzing the impact of tourism. The *touristic ecological footprint* (TEF) is intended to measure possible scenarios of development within the tourism industry and across the sector as a whole, for example the construction of a new hotel, or increased tourism due to specific factors. The input is data from individual tourists' consumption, and/or secondary data from tourist suppliers and official statistics (Hunter, 2002). The approach has been widely used in tourism research, but it does have its critics. McManus and Haughton (2006) list several concerns with the methodology, including the underrepresentation of water usage in the calculations, the problem with comparing regions' or cities' footprints due to the areas and lands that are included in biocapacity (e.g. the city without agricultural lands versus the city including agricultural lands), and the exclusion of environmental benefits, for example technological advancement and communication. Moreover, there is no standard method for measuring EF. Instead, different researchers use the original methodology (Warnackel et al., 1996 and others) as a starting point and adjust key conditions to fit their particular case study. Another limitation to this method is the amount of data required to calculate the footprints (Wackernagel et al., 1999).

There are alternative methods available to measure environmental impacts, which could be appropriate in a tourism context. Life cycle assessment (LCA) has been used extensively to estimate the impacts of products and services, by researchers, governments, international institutions and corporations (Rebitzer et al., 2004). It has been applied in tourism contexts on some occasions and has been proposed as an alternative or complement to EF (Castellani & Sala, 2012). LCA aims to measure the environmental impacts of products and services with a "cradle-to-grave" approach

(Davis, Sonesson, Baumgartner, & Nemecek, 2010) and has been used since the late 1960s (Hunt & Franklin, 1996). It involves measures of emissions and resource usage which affect, for instance, climate change, ozone depletion, acidification, water use, land use and noise (Baumann & Tillman, 2002; Rebitzer et al., 2004). Both direct and indirect resources and energy use should be included in a LCA, where indirect energy is energy needed to produce, for instance, capital goods used in a product's life cycle, or the production of energy itself (Wallén, Brandt, & Wennersten, 2004). LCA has been applied in different contexts: e.g. food (see Davis et al., 2010; Wallén et al., 2004), packaging (see Hunt & Franklin, 1996), automotive, electronics and building products and other industrial production (see Rebitzer et al., 2004). The emphasis has been primarily on products and industrial processes and less on consumption life styles such as tourism.

2.3 Frameworks with multiple impact dimensions

Several frameworks have been explored in order to describe, measure, and understand tourism impacts from a sustainable development perspective: Carrying Capacity (Getz, 1983; McCool & Lime, 2001; O'Reilly, 1986; Yoel, 1992); the Limits of Acceptable Change framework, which builds on Carrying Capacity (Ahn et al., 2002; McCool & Lime, 2001); the Capital Assets or Sustainable Tourism Livelihood approach (Bennett et al., 2012; Shen, Hughey, & Simmons, 2008), the Triple Bottom Line approach (Hede, 2008; Sherwood, 2007; Tyrrell et al., 2013), the Sustainable Tourism Benchmarking Tool (Cernat & Gourdon, 2012), the Integrated Tourism Yield (Lundie, Dwyer, & Forsyth, 2007; Northcote & Macbeth, 2006), and Cost-Benefit Analysis (Burns, Hatch, & Mules, 1986; Mules & Dwyer, 2005) will all be discussed briefly in this chapter. They are summarized and characterized in table 3.

Framework	Characteristics	Impact dimensions
Carrying Capacity	Destinations have limits to growth, thresholds	Physical, perceptual, social or sociocultural, economic and political/administrative carrying capacity
Limits of Acceptable Change	Local residents' perceptions of desired conditions, regional tourism planning	Economic, social (cultural) and environmental indicators defined by local residents.
Sustainable Tourism Livelihood approach	Capital stocks increase or depreciate	Financial, physical, human, natural, social, cultural and administrative capital
Sustainable Tourism Benchmarking Tool	Benchmarking sustainability, country-level decision-making tool	Economic and socio-ecological impacts and infrastructure
Triple Bottom Line	Calculating the "bottom lines" in three dimensions	Economic, social (cultural) and environmental impacts
Integrated Tourism Yield	Monetary evaluation, assessment of yields, assessment and decision-making tool	Originally economic impacts, but recent incorporations of social, cultural and environmental impacts
Cost-Benefit Analysis	Includes all tangible and intangible costs and benefits, monetary evaluation	Tangible and intangible costs and benefits

Table 3: Frameworks with multiple impact dimensions and their characteristics

Carrying Capacity (CC) comes originally from the field of geography and has been a popular assessment tool (Saarinen, 2006). The basic idea is that each destination has its limits to how many visitors it can host before the environment or biodiversity is threatened. From a focus solely on environmental issues in the 1960s, the concept has grown to have a wider perspective, including social CC, economic CC and other dimensions (Coccossis & Mexa, 2004; Getz, 1983). The starting point is the resources of a place, either environmental or social. Therefore, CC has been seen as a version of sustainability in a resource-based tradition (Saarinen, 2006). In the early days of CC research, the aim was to limit growth by establishing a maximum number of visitors that a place could cope with without threatening biodiversity. However, this "magic number" has been criticized and today CC is more about subjective limits based on a perception of imaginary thresholds set by stakeholders (Coccossis & Mexa, 2004).

Limits of Acceptable Change (LAC) is a continuation of Carrying Capacity. This regional planning tool draws on local residents' perspectives in order to establish subjective limits to growth, i.e. how much change the locals can accept (Ahn et al., 2002). There are also other adaptations of CC, such as Visitor Impact Management systems (see Farrell & Marion, 2002), but these are often geared towards a specific type of tourist context and are not easily generalizable to other contexts.

The idea of capital(s) stems from economic literature and theories of *physical capital*, *human capital* and later also *natural capital*. A stock of capital (e.g. physical buildings, experience and skills, and natural resources) can be used to produce other goods. It can increase with investments but it also depreciates over time (Throsby, 1999). Impacts of tourism development can be said to influence the capital stocks of residents, the physical destination, developers and/or institutions. Physical capital is influenced in the form of newly built attractions or renovated airports, social capital can be linked to a feeling of togetherness that can increase with tourism development, and cultural capital can be reinforced, for instance, by an upswing of interest in local traditions and handicrafts (Macbeth, Carson, & Northcote, 2004). In tourism research, attempts have been made to use a number of different capital constructs as a starting point for evaluating and understanding tourist phenomena. The use of capital constructs in frameworks to evaluate tourism impacts, such as the **Sustainable Livelihoods Approach** (SLA), has been rather limited and is in need of more exploration. SLA has mainly been applied in developing countries as a tool for poverty reduction, and on a micro-level in small communities (Shen et al., 2008).

Sustainable Tourism Benchmarking Tool (STBT) is constructed as a policy and decision-making tool based on quantifiable indicators. The aim is to be able to compare, on a country-level, different destinations in terms of sustainability measures (Cernat & Gourdon, 2012). STBT is a new addition to the plethora of frameworks and has not yet been tested empirically to any great extent.

The **Triple Bottom Line approach** (TBL), encompassing economic, social and environmental impacts, has been highlighted as a suitable tool to cater for the demands of a broader, sustainable view on tourism impacts (Sherwood, 2007; Stoddard, Pollard, & Evans, 2012). This reporting tool has gradually gained proponents among tourism researchers for measuring impacts (Getz, 2009). TBL started out as a philosophy or guideline for how companies should think about sustainability and their footprint on the surrounding world, but has evolved into an accounting tool considering not just the financial bottom line (i.e. the financial result), but also the environmental and social impacts of the company (Vanclay, 2004). The aim of TBL reporting is to estimate the financial, social and environmental bottom lines. Practical examples and theoretical considerations of the applications, using TBL in tourism contexts, come primarily from research in Australia (Dwyer et al., 2007) and from the event and festival setting (Getz, 2009; Hede, 2008; Sherwood, 2007). Sherwood (2007) and Fredline et al. (2005) have made contributions to the TBL field by listing measurable indicators for each impact dimension that should be included when conducting a TBL assessment.

Tyrrell et al. (2013) address the problem of commensurability in a TBL model. They perform a discrete choice experiment with students and tourist industry professionals, which generates the relative weights of importance for 10 indicators representing the economic, social, and environmental dimensions. In a hypothetical scenario they apply these weights in order to calculate the tax-equivalent in dollars if a tourism business were to increase its performance on all indicators. The experimental design of the study raises concerns for its applicability outside of this particular setting, and the authors call for additional research (Tyrrell et al., 2013). The important contribution of this study is that it addresses the issue of commensurability, by incorporating different impact dimensions in a single measure (importance) and by exploring the possibility of putting a monetary value on these impacts.

Another approach, in which attempts are made to monetize impact dimensions, is **Integrated Tourism Yield** (ITY) or *Sustainable Yield* (Dwyer et al., 2007; Lundie et al., 2007; Northcote & Macbeth, 2006). This framework is proposed by Nothcote & Macbeth (2006) as a way of including costs and benefits across a number of different impact dimensions. Their paper does not contain any specific empirical techniques, but is, rather, a conceptual development of the use of yield outside of its classic territory, i.e. financial gains for businesses. ITY emphasizes both limitations and growth (as opposed to the LAC approach, for instance, which focuses on limits) by modelling a required yield and a potential yield for destinations. Lundie et al. (2007) applies ITY in order to calculate economic and environmental yields. Leaving aside social and cultural impacts, they operationalize environmental impacts by calculating energy and water use, greenhouse gas emissions and ecological footprints per dollar spent, number of trips and visitor nights. This was done for several tourist segments (backpackers, Japanese honeymooners etc.) in order to understand their yield levels both in terms of economic and environmental impacts. Dwyer et al. (2007) have proposed the measurement of social yield, in this context, by looking at the profile of the destinations, the key market segments visiting the destination, types of activities, impacts associated with certain behaviors and activities, and management practices. But they conclude that extensive development is needed, including empirical testing, and development of methods to reflect social impacts in yield measures (Dwyer et al., 2007).

Cost-Benefit Analysis (CBA), as discussed in section 1.1.2, shows the potential to incorporate externalities and to apply methodologies that can help measure a wider range of impacts in monetary units. Methodologies within the CBA framework have a

track record of previous research within adjacent research fields such as cultural economics (Noonan, 2003).

In CBA, the aim is to include all costs and benefits to society, both tangible and intangible, i.e. to internalize the externalities. One challenge is to isolate intangibles and to measure them. In addition to this, it can be challenging to include all intangibles over time, i.e. values accrued historically, at the time of the event or in the future (Getz, 2005). The interesting part of the CBA framework, for the purpose of this thesis, is the ambition of commensuration and the methodologies that have been developed to elicit costs and benefits. Two families of techniques are available in order to estimate demand for private and public goods, primarily without a market price: stated and revealed preference methods. Most techniques have been developed within environmental economics, with the intention of giving a value to public goods such as nature reserves or water assets (Garrod & Willis, 2001; Mitchell & Carson, 1989), but have recently also been adopted, for instance, in cultural contexts (Armbrecht, 2012; Frey, 2003; Noonan, 2003; Throsby, 2003).

The *contingent valuation method* (CVM), based on stated preferences to estimate people's perception of economic values (Mitchell & Carson, 1989), has been the method most often applied outside of the context of environmental economics. When using CVM, respondents are often explicitly asked for their maximum *willingness-to-pay* (WTP) for a public good, a service or an event, i.e. the economic value that people assign to a good. This is not what they have paid, but an estimate of the maximum amount people are willing to pay. The advantage of this method is that all economic values are theoretically included based on individuals' preferences, i.e. a holistic appraisal of economic value, while one disadvantage is that respondents do not have to realize their estimation, i.e. to actually pay the stated amount. Respondents can also be asked for their *willingness-to-accept* (WTA), which asks them how much they are willing to accept as a minimum, being compensated for a hypothetical scenario (e.g. deterioration of a public good, injury etc.) (Garrod & Willis, 2001).

There is also the possibility of using individuals' revealed preferences. While a public good might not be traded on a market it is possible to see what people spend on other market goods in order to consume a non-market good. In this way a value can be attributed by the estimation of the indirect costs. An example of this is the *travel cost method* (TCM), which has been used in tourism research (see Armbrecht, 2014; Czajkowski, Giergiczny, Kronenberg, & Tryjanowski, 2014; Fleming & Cook, 2008) .

This method uses visitors' cost to travel, for instance to an attraction, in order to estimate the indirect value that visitors attribute to a specific attraction (Bateman, 2002; Liston-Heyes, 1999). According to Armbrecht (2014), in a study comparing TCM and CVM, TCM consistently yields higher elicitations of value. Thus, CVM can be seen as a more conservative measurement of value in tourism settings.

In this thesis, open-ended willingness-to-pay (WTP) and willingness-to-accept (WTA) techniques have been used to understand the economic value of the intangibles. The methodological approach of using stated preference techniques (WTP and WTA) has also been applied previously in tourism contexts (Armbrecht & Lundberg, 2006; Atkinson, Mourato, Szymanski, & Ozdemiroglu, 2008; Barget & Gouguet, 2007; Lindberg, Andersson, & Dellaert, 2001), although not to a large extent. Noonan's (2003) review of studies using CVM in the cultural context illustrates the increased interest in and development of CVM in that field and, as a result, "policymakers can see the benefits of undertaking certain projects, cultural institution managers can weigh different alternatives, and analysts can undertake more complete cost-benefit analyses" (Noonan, 2003, p. 172).

2.3.1 Reflection

The review above describes frameworks with different scopes. All are labeled as frameworks, but their characteristics, robustness, and area of application varies greatly. Some, like Triple Bottom Line (TBL) and Carrying Capacity (CC), are conceptual or theoretical ideas about how impacts can be understood or reported. TBL has been critiqued for its vagueness, much like sustainable development, and for having differing definitions of what it contains and how it can be applied (Stoddard et al., 2012). This fuzziness has paved the way for the application of different methodologies to calculate or discuss the "bottom lines". Examples are Tyrrell et al. (2013), who uses choice experiments in a technique developed within cost-benefit analysis (CBA), and Hede (2008), who applies stakeholder theory in an event context. Other frameworks, such as Limits of Acceptable Change (LAC) and the Sustainable Tourism Benchmarking Tool (STBT), are methods or tools for planning or reporting. The latter are explicitly developed in a tourism context, while CBA, on the other hand, has a long history in economics and as a policy tool, with well-developed measurement techniques.

TBL, Integrated Tourism Yield (ITY), and CBA are more geared towards reporting, accounting and monetizing tourism impacts. They have previously been used in efforts to commensurate multiple impact dimensions. So far, ways of measuring

social yield within ITY have not developed to any great extent (Dwyer et al., 2007; Lundie et al., 2007). TBL studies have included examples of commensuration using CBA methodologies. CBA, and methods within CBA, such as stated and revealed preference models (e.g. CVM, TCM, and choice experiments), have been used in tourism contexts on a few occasions. These methods correspond to the challenge of increasing comparability between impact dimensions, and to including a broader scope of values. The specific choice of technique and approach has proven to influence the end result, as was discussed in the introduction to this chapter (cf. Fourcade, 2011), and will be discussed further, in the context of this thesis, in section 3.2.1.

The frameworks described above all have at least one thing in common. They are constructed explicitly or implicitly with the notion that it is not enough to measure financial gains from activities that have wider societal impacts. Sustainable development has emerged as a paradigm through which to address development issues as well as these wider societal impacts.

2.4 Sustainable Development

This chapter continues the discussion of the concept of sustainable development that was introduced in the discussion of the problem (section 1.1.1). First, the aim is to present a brief background of its popularization from an institutional perspective, and secondly to how it has been interpreted from a management perspective. With these insights, section 2.4.2 shifts the focus to sustainable development research within the empirical field of tourism, and looks at how the concept has been interpreted and applied in this context.

2.4.1 A brief background to sustainable development

More than 25 years after the popularization of sustainable development by the Bruntland Commission in 1987 (Brundtland, 1987), and 20 years after the Agenda 21 conference in Rio de Janeiro in 1992, the debates about how to understand and interpret sustainable development in tourism are still lively (Butler, 1999; Hall, 2012; Saarinen, 2006; Sharpley, 2000). The disparate interpretations have made it a complex task for tourism planners, tourism entrepreneurs, local residents, NGOs, government agencies and tourism researchers to implement and operationalize sustainable development. This is also the case in a wider context, i.e. for businesses, governments, and academics in general (Robinson, 2004). The UN-led commission headed by Brundtland published the report *Our common future* (Brundtland, 1987), with the following definition of sustainable development:

> "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987).

This definition, and the report itself, helped to popularize sustainable development and has guided the understanding of the concept, but it has also caused numerous debates and has been criticized for being an ethical paradox, advocating both the indefinite sustainment of ecosystems and development in terms of economic growth, the latter threatening to damage those same ecosystems (Jabareen, 2008; Schaad, 2012). Despite this, it has become an important definition and has been adopted by most institutions and organizations dealing with sustainable development. At the same time that the definition above, and sustainable development in general, has been criticized for its paradoxical qualities and openness to interpretations, it has also been commended for being inclusive. Robinson (2004) suggests that the concept is constructively ambiguous. The ambiguity allows for the inclusion of many stakeholders who can relate to sustainable development from different perspectives, and thus for opportunities, in a political and policy context, to find constructive ways of implementation. This ambiguity has also created a shift in the sense-making of sustainable development. In a recent review of institutional documents from the OECD and the UN, concerning the role of businesses in sustainable development, Barkemeyer et al. (2014) find that the discourse of sustainable development is now focused on environmental sustainability. Social equity, such as fair wages, poverty alleviation and workers' rights, is less present. Thus, there has been a deviation, over the last 25 years, from the discourse of the Brundtland report, which included economic and environmental as well as social concerns.

There is pressure on businesses to contribute to sustainable development. Moon (2007) lists four major drivers behind this pressure: markets (consumers, suppliers and employees), social pressure, governments and globalization. From a managerial perspective, the response has often been manifested in the implementation of *corporate social responsibility* (CSR)[8] programs. CSR can be defined as a self-regulatory management practice that contributes to social welfare and environmental conservation. But what this practice constitutes varies depending on the purposes of CSR set out by the corporation, their perceptions of CSR and sustainable development, and which stakeholders they wish to address (Moon,

[8] Concepts with similar definitions are also used in previous literature: e.g. corporate citizenship, corporate societal accountability and corporate sustainability (Dahlsrud, 2008). The Triple Bottom Line (see section 2.3) has become a reporting and accounting tool for businesses that apply CSR programs, to calculate the bottom lines of corporations' economic, social and environmental impacts.

2007). Dahlsrud (2008) finds five dimensions that are present among the multitude of existing definitions of CSR: environmental, social, economic and stakeholder dimensions, and voluntariness.[9] These dimensions mark a strong link between CSR and the content of sustainable development, although Moon (2007) points out that the responsibility of businesses for sustainable development has limits, and that the ultimate responsibility is on regulation by governments. To interact with stakeholders and to define goals of CSR based on stakeholder interests is also closely connected to the field of *business ethics*, i.e. how is it possible to make businesses take responsibility for their actions that affect the surrounding society in which they operate, and to improve "the moral conduct of business" (Kaler, 2002, p. 93)? Both sustainable development and CSR could be called value-based concepts, and could be approached using theories of ethics, i.e. "they are based on principles that express the right thing to do or the necessity to achieve a good society" (Garriga & Melé, 2004, p. 60). A difference is that CSR has been developed on the corporate level, while sustainable development has been developed on a macro-level (i.e. by institutions and governments) (Garriga & Melé, 2004).

The call for more responsible tourism operations and tourism consumption has led to discussions of management practices and the broader application of CSR in tourism, for instance by leading global tour operators (see Coles, Fenclova, & Dinan, 2013). Despite this, there have been concerns within the tourism industry about how sustainable development should be defined in tourism, and how companies can be certified and marketed to the consumer as sustainable. This issue has been addressed on an institutional level. A number of UN-led organizations started a partnership in 2008 called "the Partnership for Global Sustainable Tourism Criteria" (GSTC), between the Rainforest Alliance, the United Nations Environment Programme (UNEP), the United Nations Foundation, and the United Nations World Tourism Organisation (UNWTO). The goal of the partnership is to increase understanding of sustainable development in tourism and to set minimum universal criteria for being a "sustainable tourism provider". The main pillars of the criteria are:

- To demonstrate effective sustainable management
- To maximize social and economic benefits to the local community and to minimize negative impacts
- To maximize the benefits to cultural heritage and to minimize negative impacts
- To maximize benefits to the environment and to minimize negative impacts

(GSTC, 2014)

[9] Voluntariness implies the voluntary efforts of corporations to apply regulations beyond the scope of the law (Dahlsrud, 2008).

As in tourism research literature, the main themes are economic, social, cultural and economic impacts. GSTC has also highlighted the management aspect, where planning and long-term sustainability are put at the forefront.

2.4.2 SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF TOURISM

"If there is a single factor that has the potential to change the nature of tourism more than any other, it is the introduction of the concept of 'sustainable development'" (Butler, 1999, p.8).

Tourism research can be said to have lived through three "paradigms". In the beginning, research was based on economics and tourism as a commodity. The focus then shifted to a more sociological stance, with sociocultural aspects of tourism as a starting point, eventually arriving at the sustainability issue as the third and present "paradigm" (Tribe, 2006). There is no clean break between these "paradigms". A more appropriate term would perhaps be trends or traditions, which still co-exist, although the focus has shifted to sustainable development.

The first wave of sustainable tourism was seen as a counterweight to large-scale mass tourism, and Clarke (1997) categorizes the first wave of sustainable tourism research, or *positions of understanding*, as she calls them, as *polar opposites*. The opposites refer to mass tourism vs. small-scale tourism. They are opposites and it is therefore not possible to combine them. Small-scale tourism was popularly called alternative tourism (in parallel with alternative development). As the name articulates, it was an alternative way of travelling, emphasizing interaction with hosts at destinations without disturbing or impacting on the local community. The critiques against this proposition and way of polarizing small vs. large-scale tourism are manifold, and Clarke (1997) mentions the triviality of the idea of small-scale tourism as "good", versus large-scale, mass tourism as "bad". This is, according to Butler (1999), a naïve viewpoint, since small-scale tourism might well be as "unsustainable" as mass tourism if, for instance, located in a fragile natural environment. Secondly, it did not address the problem of masses of tourists flooding into overcrowded destinations (Butler, 1999; Clarke, 1997). It did, however, get the dilemmas of tourism on the table and presented an alternative to the norm. Clarke (1997) distinguishes three further positions in addition to *polar opposites*. Since all types of tourism use the same basic tourism infrastructure, it is straightforward to think of development as a *continuum*, where small-scale, alternative tourism could develop into a mass tourism phenomenon. The second position can be seen as a position of *movement*, where the goal is to move large-scale tourism into being more sustainable, and the third position is a position of *convergence*, where sustainable development is seen as the ultimate goal, not only for large-scale tourism but for all types and shapes of tourism. These last two positions differ from the initial ones, since they do not consider

sustainable tourism as a feature inherent in certain types of tourism, but as a direction to follow (Lu & Nepal, 2009). Lee (2001) also sees sustainable development in tourism as a concept with *moving* goals, arguing that these goals constantly change over the long term. To attain these *moving* goals is something to constantly strive for, in order for a destination to call itself sustainable.

Sharpley (2000) discusses the three fundamental principles of sustainable development in a conceptual model based on previous research and institutional documents. The three principles are the *holistic approach,* i.e. challenges on a global scale*, futurity,* i.e. a focus on the long term, and *equity,* i.e. fair development accessible to everyone. Sharpley (2000) argues that if the tourism context is applied to this model, disparities are evident. Tourism is, even from a sustainable development perspective, predominantly product-centered and activity-based (Hunter, 1997; Saarinen, 2006; Sharpley, 2000). The holistic approach is thus lost, and it is more a question of sustaining the level of the tourism industry. There are also other issues connected to global and local perspectives. Traditionally, the focus has been on local implications in the tourism context, in which the global or holistic feature of sustainable development is missing. In this sense, the practice of sustainable development in tourism resembles the practice of how the concept of carrying capacity has been applied historically (Saarinen, 2006). Moreover, tourism may "reinforce rather than diminish global socioeconomic injustices" (Sharpley, 2000, p.11) with structures that are tightly connected to a few countries in the western world, and vertically integrated global networks operating in the same western context. This is contradictory to the principle of equity.

Hall (2011, 2012) points to similar problems with the interpretation of sustainable development in tourism policy contexts applied to mega-events. He lists three approaches to sustainability, and considers their policy implications: economic sustainability, balanced sustainability and steady-state sustainability. From a somewhat different perspective, Saarinen (2006) discusses three traditions of sustainable development in tourism and how they are interconnected with the concept of carrying capacity: resource-based, activity-based and community-based approaches. Table 4 summarizes the approaches/traditions proposed by Hall (2011, 2012) and Saarinen (2006). The economic sustainability and activity-based approaches both highlight tourism-centricity. The implementation and view of sustainable development in the tourism industry has had a tendency to be "focusing more on the needs of tourism as an economic activity" than the needs of the wider community (Saarinen, 2006, p. 1128).

Approaches (Hall, 2011; 2012)	**Characteristics**	***Traditions (Saarinen, 2006)***	**Characteristics**
Economic Sustainability	✓ "Sustainability" is interpreted as environment-related and "development" as economic ✓ Mitigation between the two	***Resource-based***	✓ Focus on limits to growth in relation to existing resources ✓ Primarily ecological but also social and cultural resources
Balanced Sustainability	✓ Focus on sustainable (economic) growth. ✓ Seeking balance between economic, sociocultural and environmental considerations	***Activity-based***	✓ Tourism-centric ✓ Tourism in isolation ✓ The needs of tourism ✓ Tourism as a tool for development ✓ Existence of tourism is not questioned
Steady-State Sustainability	✓ Policy paradigm shift ✓ Founded on constraints of natural capital ✓ Environmental conservation and degrowth	***Community-based***	✓ The needs of locals ✓ Negotiation, social construction of sustainable development ✓ Tourism in a wider community perspective ✓ Bottom-up perspective

Table 4: Traditions and approaches to sustainable development in tourism (Hall, 2011; Hall, 2012; Saarinen, 2006)

Saarinen (2006) focuses on which actors affect the limits of growth in each tradition. The resource-based tradition is situated close to the view of environmental sustainability, with natural resources as the subject of evaluation. While an activity-based tradition focuses on the tourism industry itself as the main actor, a community-based approach considers local community actors and human agency, similar to the notions of alternative development and the bottom-up approach (Saarinen, 2006; Sharpley, 2000). The process of the community-based approach can be seen as a negotiation between the activity (the tourism industry) and the resources (e.g. natural or social capital), where the local community is included in participatory efforts to negotiate the level of limits to growth, and ultimately the meaning of sustainable development from their perspective, i.e. a constructive approach (Redclift & Woodgate, 2010; Saarinen, 2006). This effort raises the question of local residents' quality of life and possibly the empowerment of local residents (Scheyvens, 1999).

Tourism development is also placed in a wider community development context, avoiding a tourism-centric view. The answers to how sustainable development is defined locally "are not derived directly from the impacts themselves but from the social, economic, and political practices and discourses of the power relations defining them" (Saarinen, 2006, p. 1131). Thus, the topic of power relations and empowerment is essential in this community process, and influences the outcome of the negotiations.

The *balanced approach* to sustainability is, according to Hall (2012), the dominant view among researchers. All impact dimensions are given equal importance in this approach. The emphasis is on "balance" and the promotion of a "triple bottom line", including economic, social and environmental considerations. Different indicators, systems and objectives are set in place to measure the impacts, but Hall criticizes this view:

> "Such approaches are symptomatic of second-order change that is change characterized by the selection of new policy instruments, techniques, and policy settings due to previous policy experience but the overarching policy goals remain the same" (Hall, 2012, p. 126).

Hall (2012) argues that this is not the paradigmatic change in policy setting that is needed to meet the challenges of sustainable development. It is merely an accommodation to institutional pressures, while the goal of economic growth is still the constant in terms of policy and development.

Third-order change is only achieved, according to Hall (2012), in the *steady-state approach*, which implies a paradigm shift in tourism policy setting. This means that a new hierarchy of goals is adopted by policy makers in response to previous policy failures (Greener, 2001), for instance if the ideas that shaped earlier policy are out of date and do not match "reality". A new set of ideas is then internalized, and in this case might be, for instance, ideas about sustainability and alternative development. The steady-state approach described by Hall (2012) has points in common with the resource-based approach (Saarinen, 2006). It stipulates the relationship between tourism development and natural capital and consumption that does not deplete the stock of natural capital. But it does also imply considerations of opportunity costs, costs and benefits, and an inclusion of the local community in order to increase social equity. Thus, it includes aspects of CBA and a community-based approach, "grounded in ecological economics rather than neoclassical economics" (Hall, 2012, p. 127).

2.4.3 Reflections on sustainable development in tourism

It is possible to state, with support from development theory, that sustainable development is simply the next in line of (political and institutional) development

theories that have been institutionalized into our society step by step since the late 1980s. A good example of its institutionalization is the incorporation of sustainable development goals in constitutions:

> "The public institutions shall promote sustainable development leading to a good environment for present and future generations" (The Instrument of Government, Sweden, chap. 1: Art. 2).

With externalities of development or "modernization", such as negative social, cultural and environmental impacts, the need for a new paradigm has grown. Although the paradigm of sustainable development (in tourism) has its flaws due to inconsistent definitions causing problems of validity (see Sharpley, 2000), it has changed (or has the potential to change) the discourse for policy makers and (tourism) entrepreneurs.

Sustainable development can be derived from limits to growth, according to Saarinen (2006). The realization of a limit to growth is something that has increased over time, but there is still a discussion on how these limits can be set. Should they be based on available resources, the activities themselves (i.e. tourism) or on the perceptions of a community (see Saarinen, 2006)? The most commonly discussed approach today is the community-based approach (Okazaki, 2008), but the problematic issue with this approach is its reliance on the equal representation of stakeholders within a community, and how the approach can be implemented on a global level, in a discussion of global issues of sustainable development. The power relations that govern a local community and hence the community's perception of limits of growth (Saarinen, 2006) are even more problematic on a global level. In contrast, the activity-based discourse on sustainable tourism development is tourism-centered and is led by the industry and its own aim of sustaining itself. With such an approach, locals have few chances to influence the agenda of (sustainable) development and the limits to growth. In the end, as Wall and Mathieson (2006) point out, tourism should be developed in order to benefit locals and their communities, not for the benefit of tourists or tourism entrepreneurs.

3 METHODOLOGICAL FRAMEWORK

Tourism research in general, and, more specifically, tourism impact research, has previously been dominated by a positivistic world view and a quantitative approach (Dann et al., 1988; Deery, Jago, & Fredline, 2012; Veal, 2006), but the interpretive world view and the qualitative approach have gained more and more influence since the 1990s (Veal, 2006). There have also, as of late, been calls for a mixed methods approach (see Nunkoo et al., 2013; Pansiri, 2006). This makes it important to address questions of research philosophies in a tourism research context (Pansiri, 2009).

This thesis follows in the quantitative research tradition, with the aim of expanding current knowledge on how to analyze and describe tourism impacts through the lens of sustainable development. As argued in the introduction, there is still a need to look further into these questions, particularly from a sustainable development perspective (Choi & Sirakaya, 2005; Getz, 2009). By doing so, the thesis builds on a substantial body of research that has been extensively tested empirically. It also incorporates the positivistic view "regarding the existence of an external world independent of people's minds" (Pansiri, 2006, p. 225). This could be "the world of tourism impacts" which I intend to capture by measurement models and scales (e.g. measuring economic and environmental impacts). But it also corresponds to a pragmatic world view, in the sense that an independent external world does exist. The emphasis of pragmatism is, however, on using theory to solve human problems and not on exposing truth or reality, thus promoting an openness to theory and methodology application (Pansiri, 2006). This openness also includes an acceptance of subjectivity (e.g. analyzing perceptions of sociocultural impacts) and the use of qualitative research methods as a strategy for solving research problems (Creswell, 2014). The research problem is at the center, rather than the particular type of methodology.

Pragmatism has been closely connected with the use of mixed methods (Creswell, 2014). Although the collection of articles in this thesis is dominated by a quantitative approach, there are some exceptions, and some tentative uses of mixed methods. One such example is article 3, where the objective was twofold: *to measure the environmental impact of the vegetarian strategy and to describe and discuss how festival managers handled communication of core values and brand identity*. The description necessitated a qualitative approach, in this case in-depth interviews with managers of the music festival. It provided, combined with the quantitative measurement model, a deeper understanding of the effects of the vegetarian strategy. It was not a case of triangulation, as discussed by Yin (2003), in terms of validating facts with multiple sources of evidence. It was rather a use of mixed

methods to highlight different aspects of the same phenomenon[10] that are related and, as stated by Mason (1994, p. 104), "enhance the validity of the overall analysis" and "build up a rounded and credible overall picture".[11]

The essence of pragmatism is, according to one of its founders (J. Dewey), to see "knowledge and truth as the outcome of processes that successfully resolved problematic situations" (in Mingers, 2004, p. 90). Adopting the pragmatic world view helps us to situate the results and contribution of this thesis, i.e. as suggestions of tools to help solve a societal problem, in this case how to describe and analyze tourism impacts from a sustainable development perspective. But before the outcome of these processes can be discussed, the processes (methodologies) themselves need to be further scrutinized, both in terms of the choice of study objects and the data collection (section 3.1), and in terms of the specific methodological considerations made throughout the articles (section 3.2).

3.1 RESEARCH DESIGN

Empirical studies are, to a large extent, used to explain the (touristic) world. The field of tourism research has been criticized for the overrepresentation of empirical case studies (regardless of methodological choice) with weak links to theory, much like other applied research fields (e.g. in logistics research (Croom, Romano, & Giannakis, 2000)). An example, in the field of tourism, is Nunkoo et al. (2013) with a review of articles dealing with residents' attitudes towards tourism. In their review, over half of the 140 articles are considered to be atheoretical, i.e. having no direct link to existing theory. This lack of theoretical connection is also illustrated by Gursoy and Rutherford (2004) in their study on host communities. This thesis has a strong methodological focus, developing and testing frameworks and measurement models. But the aim has also been to create and highlight theoretical and conceptual connections throughout the articles by applying, for instance, stakeholder theory (article 5) and social exchange theory (article 4) to connect the frameworks to an empirical world. To understand the overall results of implementing measurement models in a tourism context, more abstract or formal theories (Corbin & Strauss, 2008) such as evaluation theory and sociology of economics have also been incorporated.

Two case studies have been carried out in order to test the conceptualized frameworks and measurement models and address the research questions of the thesis. The first has a single-case design examining a Swedish music festival, while the

[10] The environmental and communicational impacts of the vegetarian strategy
[11] Mason (1994) refers to this process as the *integration or linking of data.*

second has a multiple-case design containing three case destinations located in the same context. A case study approach, using multiple data sources, gives, according to Yin (2003), a rich data material to understand a complex social phenomenon. However, a case study approach, particularly the single-case design, has been criticized for not being an appropriate research design for generalizations and theory development (George & Bennett, 2005) . Generalizability is discussed further in sections 3.3 and 5.4. The cases are described below (sections 3.1.1 and 3.1.2), followed by a description of the data collection (3.1.3).

3.1.1 WAY OUT WEST MUSIC FESTIVAL

The object of research in the three first articles is the festival phenomenon. The Way Out West music festival (www.wayoutwest.se) is studied in order to describe and analyze the impacts of this festival on the local community. By definition, festivals are planned or unplanned social phenomena which are temporary in time (Falassi, 1987; Getz, 2005). The choice of a festival as a study object allowed survey respondents to focus on a limited period of time and space, and thus provided an ideal setting for developing and testing a framework to analyze and describe tourism impacts from a sustainable development perspective. In essence, this helped to minimize a potential part-whole bias (further discussed in section 3.2), i.e. the risk of mixing the part (the experiences of the specific festival) with the whole (events or tourism in general), and avoided difficulties relating to an experience that stretches out in space and time.

Way Out West is a three-day festival targeted at a young audience (average age of 26 in 2010), featuring rock, pop, hip-hop and electronic acts. It has been organized in a large city park in Gothenburg, Sweden, since 2007, and has an attendance of about 30,000 people. The festival is organized by a private promoter who has a vision of an environmentally friendly event, and the promoter's efforts have been rewarded by prizes such as the "Most Innovative Festival" by MTV in 2011, and the "Green Operations Award" at the 5th European Festival Awards in 2013.

This specific festival was chosen because the organizer of the festival: a) had, together with the destination management organization of the city (Goteborg & co), identified a problem of how to measure and follow up on their efforts to work on sustainability issues, which fits with the objective of this thesis; b) was interested in working with and implementing changes based on the results of an impact evaluation with multiple impact dimensions, and c) was willing to assist in terms of data delivery, as interviewees, and with provision of volunteers to help with data collection, i.e. "sufficient access to the potential data" (Yin, 2003, p. 26). This could be characterized as a pragmatic choice of case study because of easy access, but also as

a good illustrative case (Veal, 2006), since Way Out West has a high environmental profile and takes place over a limited time period (see above). Awareness of potential risks with a close cooperation is important. Representatives of Way Out West could, for instance, exercise control over data in terms of what can or cannot be published, or could attempt to dictate the aims or purposes of the research. This has not, to the author's perception, been the case in this study. The profile of Gothenburg as an "event city" in the local discourse, together with the environmental profile of Way Out West, would also imply a probable emphasis on perceived positive values by local residents. The choice of a more contested event or tourist attraction would have emphasized other more negative values and possibly influenced the direction of the study.

3.1.2 Coastal communities of West Sweden

For articles 4 and 5, the research contexts are three peripheral communities on islands off the Swedish west coast. The focus is on analyzing and describing tourism development over time, i.e. an evaluation by local residents of how they perceive the "entire" tourism phenomenon where they live and/or operate.

Thus, the chosen objects of research in this thesis differ both in time and space, i.e. the analyses of experiences with a short time span in a confined space (a festival) versus the measurement of, in some cases, lifelong experiences of tourism within entire destinations (albeit geographically small destinations). The difference in time-span gives us the opportunity to examine how perceptions of tourism development change,[12] depending on the level of tourism development (article 4). The destinations are small, socially tight-knit communities in the periphery, where tourism development has become (or is becoming) a dominant presence in the daily lives of local residents, particularly during the summer months. This facilitates the connection, for local residents, between tourism development and the development of the wider community, and thus increased the quality of the data from the surveys and interviews.

Marstrand, Käringön and Björholmen were chosen as case destinations. They are situated along the coastline of Western Sweden and are all old fishing communities that have, to a greater or lesser extent, experienced a transition towards tourism and other livelihoods. It is boat tourists, above all, that arrive in the guest marinas during the summer months, but also day trippers and weekenders from Western Sweden,

[12] The change is analyzed through the comparison of local resident perceptions in the three destinations, which are presumed to be at different levels of tourism development. Longitudinal studies for each destination have not been carried out.

Norway and other parts of Scandinavia. The three destinations are described in more detail in article 4 (Marstrand, Käringön and Björholmen) and to some extent in article 5 (Marstrand).

The destinations were chosen in a process involving researchers, representatives from three local governments (where the destinations are situated), representatives from regional destination management organizations, and an industry representative. This took place in the context of a research project, called Future Coasts, funded by the European Union Regional Fund. The advantages of this arrangement were, as in the case of Way Out West: a common interest, access, site-specific knowledge, contacts and help with administration. The possible disadvantages also mirror the potential risks described for Way Out West. In this case, an even higher number of actors were involved throughout the process, but control over the project was maintained partly because it was managed by the academic representatives. The process of picking suitable case destinations had the aim of finding places with different levels of tourism development, different historical backgrounds linked to tourism development, and with diverse challenges.[13] In this way, they represent coastal and island destinations across a wider context, and facilitate generalizations. Limitations associated with funding, time constraints and the participating actors did influence the number of case destinations and their geographical setting. These limitations need to be accounted for in efforts to generalize the results.

3.1.3 DATA COLLECTION

Multiple sources of evidence were used in both case studies (in form of surveys, interviews and documents). As discussed in the introduction to this chapter, the emphasis is on surveys.

Table 5 gives an overview of the data in the thesis and also, for the quantitative samples, the response rates for each sample. For samples 1 and 2, short face-to-face interviews at the gates of the festival (1) and at designated spots around town (2) were undertaken in order to recruit respondents. The purpose was to perform a systematic sampling of the population, to inform respondents about the study, and to legitimize the study, in order, for instance, to trigger the perceived benefits and minimize the perceived costs involved in participating in the study (Helgeson, Voss, & Terpening, 2002). Increased response rates, improved data quality and the possibility

[13] Marstrand was perceived as a destination with many conflicts between local and regional actors, whereas Käringön was perceived as a "good example" of local tourism development and collaboration. Finally, Björholmen was perceived as having challenges associated with their recent experiences of tourism.

of offering multiple survey modes are some of the benefits of this data collection procedure. A comparison can be made between samples 1 and 6. These are identical surveys with the difference that sample 6 is based on lists of e-mails from ticket sales, rather than on a respondent recruitment process as for sample 1. The response rate is significantly higher in sample 1 (49% vs. 34.6%). Different procedures were used due to cost and time restraints.

Samples 7, 8, and 9 are all mail surveys (with the option of filling in a web version) aimed at local residents. In contrast with sample 2, which was also aimed at local residents, this sample is a census, i.e. it was sent out to all households in these destinations. Addresses for all property and business owners were obtained from the respective local municipalities, which also helped with administration of the surveys. Only one reminder was sent out for these samples, compared with two for samples 1, 2 and 6. This was due to the time-consuming and costly procedure of sending out mail surveys.

Samples 5 and 10 consisted of in-depth interviews. The two interviews with Way Out West management (sample 5) lasted approximately one hour, and the questions asked during the interview are found as an appendix to article 3. In the case of sample 10, the length of interviews varied from approximately 30 to 90 minutes. These interviews are part of a larger research project and the data used for this thesis (concerning how people perceive that tourism affects their communities) is only a fraction of the whole data material. They were used to generate items for the surveys. The data material was coded to reflect different impact categories. A list of perceived impacts were compiled and compared to impact items in previous measurement scales in the literature. In a discussion with participants in the research project (see section 3.1.2) a number of items were added. [14] The added items and the applied measurement scale are listed and discussed in article 5. Undergraduate students completed some of the interviews with local residents as part of their course work. [15] They were formally trained by project participants and their course teacher and delivered detailed transcriptions[16] of their interviews to the research project group.

[14] This process can be seen as a form of triangulation. The interviewees discussed a number of tourism impacts that they perceived, which was later validated by respondents in the surveys (see Yin, 2003)

[15] This was students from the undergraduate course in ethnology at the department of arts and cultural sciences, Lund University. They did interviews with local residents in Marstrand and Käringön.

[16] Full transcriptions were also produced for those interviews that were not performed by the undergraduate students.

Data points 3 and 4 consist of secondary data from the organizers of Way Out West for the environmental impact analyses. More detailed descriptions of each sample and of the secondary data are found in the articles.

Sample/Data	Article(s)	Population/data source (year)	Type of data collection	Sample size	Response rate
1	1, 2, 3	Festival visitors, Way Out West (2010)	Web survey	719	49%
2	1, 2	Local residents of Gothenburg (2010)	Web survey	648	30.8%
3	2, 3	Luger AB, organizers of Way Out West (2010)	Secondary data	--	--
4	3	Luger AB, organizers of Way Out West (2012)	Secondary data	--	--
5	3	Festival management, Way Out West (2012)	In-depth interviews	2	--
6	3	Festival visitors, Way Out West (2012)	Web survey	663	34.6%
7	4	Local residents of Björholmen (2012)	Mail survey	127	41.6%
8	4	Local residents of Käringön (2012)	Mail survey	108	43.2%
9	4, 5	Local residents of Marstrand (2011)	Mail survey	293	24.3%
10	4, 5	Local residents in Björholmen, Käringön and Marstrand (2011-12)	In-depth interviews	42	--

Table 5: Description of samples and secondary data

3.2 METHODOLOGICAL CONSIDERATIONS

3.2.1 CONTINGENT VALUATION METHODS

The objective of the first article is to assess the total value of a music festival from a cost-benefit perspective and to introduce Use and Non-use values to the festival context.[17] This is done using *contingent valuation methods* (CVM). Article 2, measuring sociocultural and environmental as well as economic impacts in a uniform monetary unit, also relies on CVM to understand sociocultural impacts, thus connecting CVM to the evaluation of tourism impacts from a sustainable development perspective. A music festival (privately or publically organized), as in

[17] Use value is defined as the value accrued for festival visitors and is divided into Direct Use values (experiences at the festival premises) and Indirect Use values (experiences outside of the festival premises). Non-use value is defined as the externalities influencing the value accrued for non-visitors, i.e. local residents not visiting the festival (Andersson, Armbrecht, & Lundberg, 2012, p. 220)

articles 1, 2, and 3, has characteristics of both private and public goods and could therefore be labeled as a mixed good with positive (and negative) externalities (cf. Throsby, 1984), which can be evaluated using CVM.

3.2.1.1 Validity and Reliability of CVM

The rationale behind CVM is to put an economic value on a non-market good or service by creating hypothetical market scenarios (Mitchell & Carson, 1989), for instance the parts of a tourist experience which are not measurable by the price of the ticket (article 1), and the total experience of externalities experienced by non-users (article 1 and 2). Since the popularization of CVM in research and public policy in the 1980s and 1990s (see Fourcade, 2011), the debates about its validity ("accuracy") and reliability ("consistency") have been lively (Venkatachalam, 2004). Extensive empirical testing in different contexts, and with different survey designs, has refined the techniques and has highlighted several biases that are vital to control for.

Content validity asks whether CVM covers the domain of the object, i.e. whether the right questions are asked in relation to the public good that is investigated (Mitchell & Carson, 1989). *Criterion validity* deals with the comparison between the CVM measurement and the "true value" of the public good. This is difficult to achieve, since the goal of CVM is to understand the value of a public good with no market prices; for quasi-private or mixed goods, however, it might be possible to make comparisons (Bateman & Turner, 1993; Heberlein & Bishop, 1986; Mitchell & Carson, 1989). Heberlein and Bishop (1986) concluded in their experiments that willingness-to-pay (WTP), contrary to willingness-to-accept (WTA), did fulfil criterion validity, i.e. the behavioral intention of WTP matched the behavior on the market. Seeing as the object of study in articles 1 and 2 is a paying festival, it is possible to test criterion validity by comparing the elicited use value (WTP) of festival goers (i.e. hypothetical market) with actual spending (i.e. the market price). A t-test shows a statistically significant difference between use value (M=2739) and spending (M=2279) ($t(676) = -7.13$, $p < .0005$), which means that criterion validity is not met in this case. However, it is also possible to check for *convergent validity*. This implies that a construct (e.g. use-value) is related to a theoretically similar construct. Looking at how WTP and actual spending are related, a Pearson correlation shows that there is a strong positive correlation ($r = .55$, $n = 677$, $p < .0005$), which indicates a close relationship between the hypothetical and the real market, which is thus a sign of convergent

validity (Bateman & Turner, 1993). The market price for the entrance fee and the costs attached to the festival experience can explain this correlation.

Overall validity and reliability can be affected by threats, also known as *biases* (Mitchell & Carson, 1989). These biases are summarized in Table 6 and are based on CVM literature in the fields of environmental economics (Alberini & Kahn, 2009; Bateman & Turner, 1993; Mitchell & Carson, 1989) and cultural economics (Snowball, 2008).

Type		**Description**
General Bias	*Strategic bias*	Individuals count on others to pay for public goods, underestimating the value, i.e. *free-riding*, or use *strategic over-bidding* if they particularly like a good.
	Information bias	Level of information about the good (in the scenario) influences responses.
	Hypothetical bias	Hypothetical markets are created in the absence of real markets and transactions. Risk of gap between hypothetical responses and real WTP/WTA.
	Part-whole bias (*a.k.a. embedding or scope effect, mental account bias, warm glow)*	If only the current good is valued out of a larger package of goods.
Procedural Bias	*Sampling bias (a.k.a. aggregation bias)*	Sampling procedure important, to avoid creating a biased aggregation of total economic value
	Interviewer bias	Interview or interviewer influences respondents
Instrument Bias	*Payment vehicle bias*	The choice of payment vehicle influences responses (e.g. taxes, entrance fee, higher prices). It should be connected to the good it is used to value.
	Starting point bias (anchoring, discrete bid levels)	Initial starting points in bidding games or dichotomous choice influence end bid. Can lead to cognitive short-cuts.

Table 6: Reliability and Validity biases in CVM-research. Adapted from Bateman & Turner (1993)

A possible *strategic bias,* affecting the Direct Use value in article 1, would be the notion among respondents that their responses might influence future pricing of the festival, i.e. if respondents report a very high mean WTP, the festival might increase the ticket price to maximize profits. The notion of how survey results could affect policy or pricing is discussed by Schulze, d'Arge and Brookshire (1981) as a possible

strategic bias. It is possible to avoid or at least minimize this bias by emphasizing the large number of respondents (minimizing one individual's influence on mean WTP) and the purpose of the survey, i.e. for research and not as a pricing model for the organizers (Venkatachalam, 2004). The latter was stressed in the studies in this thesis.

The estimation of Non-use values (WTP) of the festival contains a large amount of zero bids (27.5%), which can indicate a free-rider bias. This has previously been a problem with open-ended WTP studies (Bateman & Turner, 1993; Throsby, 1984), but could also be open to a number of other interpretations. The phrasing of the WTP scenario in articles 1 and 2 is divided into two parts.[18] First, respondents are asked if public funding should be granted if the festival was in need, i.e. a scenario where respondents would not be liable to pay any extra tax but believe resources should be allocated to the festival, presumably being reallocated from other public funding. Second, they were asked how much they would accept in increased taxes to support the festival if it was in need, i.e. a scenario where respondents were liable to pay extra taxes. This design has similarities to the liable/non-liable scenario of Throsby (1984, p. 284). One interpretation is that the zero bids are protest bids, either against the payment vehicle (tax) that is introduced in the second question or against the method as such. Another interpretation is that respondents are prone to seeing a reallocation of public funds to this festival as being at the expense of other public or mixed goods, but not that they are prone to pay more taxes, i.e. a true WTP of 0 (Hansen, 1997). Lastly, it could also be as discussed above, i.e. a free-rider bias. A limitation of these studies is that it is not possible to isolate these possible interpretations, but the result could, however, be seen as a conservative estimation of the economic value, due to the large amount of zero bids.

The open-ended elicitation method used here has also been criticized for its hypothetical nature, meaning that the valuation of a hypothetical scenario does not reflect actual consumer behavior, i.e. it has poor predictive validity (Whitehead, 2006). There are discussions (see Walker & Mondello, 2007) over which type of elicitation method should be used in order to avoid the *hypothetical bias*. In previous research, for public goods, dichotomous choice is recommended as the most appropriate format through which to elicit WTP (preferably in combination with open-ended elicitation) (Bateman & Turner, 1993; Venkatachalam, 2004). Dichotomous choice questions allow respondents to consider a random monetary amount (answering yes or no) rather than being confronted with open-ended

[18] Full questions in articles.

questions. This question format has not, however, removed the hypothetical bias, according to Johannesson, Liljas and Johansson (1998) since people tend to answer yes not only when it matches their preferences, but also to please the interviewer or when they do not know. This is because the norm in occidental culture is that it is better to accept than to decline. Moreover, Mitchell and Carson (1989) suggest that the monetary amount given (the starting bid) can cause starting point biases. To combine open-ended elicitation with dichotomous choice could help to reduce starting-point bias, since open-ended elicitation can provide a range of WTP responses that could subsequently be applied in a dichotomous choice survey format (Bateman & Turner, 1993). Thus, the WTP results of these tentative studies, in the festival context, could be used in future studies using dichotomous choice in order to validate the research method and the results.

The *part-whole bias* complexity is present in the elicitation of both Use and Non-use values in this study. First, it is a question of differentiating between direct and indirect Use value (inside the premises vs. total experience). Is it possible for the festival visitor to distinguish between their accrued value inside the gates of the festival and over their whole stay at the festival destination? By correlating WTP for the festival experience with ticket price ($r = .29$, $n = 670$, $p < .0005$) and WTP for the total experience with total expenditure ($r = .55$, $n = 677$, $p < .0005$), it is possible to see that respondents do distinguish between the "part" (festival premises) and the "whole" (total experience). This is facilitated by the link to a "real" market value represented by their expenditure over the festival weekend. It is more complex for the Non-use value, since these respondents have not been at the festival and may not be very familiar with its characteristics. The risk is that they fail to put a value on the specific festival, but include festivals and events in general, e.g. embedded in the destination's event communication discourse or lumping different events together, i.e. they "fail to distinguish between the specific good which is under analysis (the 'part') and the wider group of goods (the 'whole') into which that specific good falls" (Bateman & Turner, 1993, p. 155). There are no specific checks or tests to minimize a possible part-whole bias (see Willis & Garrod, 1993) in this study, which is a limitation, but the festival under study is nationally renowned and reported on in local and national press, which would speak for a high level of familiarity among respondents. The survey also included a control question on familiarity, and a scenario, which is clearly focused on the value of this specific festival.

An *interviewer effect* is avoided by using a web-survey interface. This also facilitates the sampling procedure of respondents (festival visitors and local residents) in order

to avoid a *sampling bias*. The representativeness of the sample for local residents (non-users) is discussed in the articles, which conclude that the sample consists of younger and better educated respondents than average; this is a result of the web-based data collection method.

The open-ended scenario format is applied in this thesis in order to avoid a *starting point bias* as described by Mitchell and Carson (1989), although evaluation of a private cultural good (i.e. the music festival) in an open-ended format does not evade instrument bias completely. For the elicitation of use values by festival goers, the ticket price (for direct Use value) and total expenditures (for total Use value) work as payment vehicles and consequently anchor respondents' bids around these market transactions. The ordering of questions in the visitor surveys, with questions on visitor expenditure before questions on WTP, makes this anchoring effect possible. Anchoring or starting points are problematic when dealing with public goods and the dichotomous choice format, since the respondents tend to anchor around the starting bid, often selected as a technicality, rather than giving information about the value of the good (Snowball, 2008). In the case of the economic valuation of a music festival, the anchoring point (e.g. ticket price) does give information about the good, since it is traded in a market place. The anchoring bias, as described by Snowball (2008), for instance, can thus be disregarded. It can even be seen as an asset in terms of validity, since the Use value, or the hypothetical market value, correlates with (and is close to) expenditures .

3.2.1.2 WTP AND WTA DISPARITY

Empirical testing and comparisons between WTP and WTA have suggested that they differ substantially. WTA gives higher values than WTP (Mitchell & Carson, 1989; Venkatachalam, 2004). The theoretical explanations behind this disparity are manifold: the *income effect* suggests that WTP is limited by individuals' income, while WTA is not; the *substitution effect,* i.e. whether a good has many close substitutes, would minimize disparity between WTP and WTA; and the *prospect theory* states that a loss in income (WTA) is considered bigger in terms of utility than a gain in income (WTP) (Coursey, Hovis, & Schulze, 1987; Venkatachalam, 2004). The experimental setting of CVM has also caused WTP and WTA disparities, since respondents may be unfamiliar with the format, and with placing values on hypothetical goods (see also *hypothetical bias* above).

Both articles 1 and 2 have applied WTP and WTA measures in order to understand local residents' positive and negative economic values attributed to the music festival (Non-use values). Despite the validity issues of WTA and its disparity with WTP, the substitution effect is arguably relevant in this context, since a music festival would have many close substitutes compared, for instance, to a public good with no real market. This closes the gap, according to Mitchell and Carson (1989), and would support the use of WTA. The unfamiliarity of the experimental setting (see above) has not been addressed in these studies, although the argument for the substitute effect would stress that respondents have some level of familiarity with the good, since several music festivals (or other substitutes) are present in the study context, particularly for users and the elicitation of the Use value.

3.2.1.3 CVM IN THE TOURISM AND FESTIVAL CONTEXT

As a final remark to the methodological challenges of CVM, it is important to point out that the use of CVM techniques to estimate the economic value of festivals and other tourism phenomena, as well as of private cultural goods, is relatively novel and should undergo further testing and refinement in order to improve validity and reliability (see Andersson et al., 2012; Barget & Gouguet, 2007). In line with recommendations by the NOAA panel (Arrow et al., 1993),[19] the dichotomous choice format should be tested in order to minimize hypothetical bias, increase familiarity, and to decrease the uncertainty which has been attributed to the open-ended format (Snowball, 2008); or a combination of open-ended and dichotomous formats might be used, as described by Bateman and Turner (1993), and discussed above. The part-whole bias could also be controlled for, either by employing budgetary constraints or by a more detailed description of the scenario (Willis & Garrod, 1993).

Data collection has not been performed in a laboratory setting and it is difficult to control for all biases. Instead, testing of the WTP and WTA questions for the surveys have been done with experienced researchers in the field in order to produce "realistic, plausible, clearly understood" scenarios (Bateman & Turner, 1993, p. 170).

It can be disputed whether all value accrued from a cultural good such as a music festival is included using CVM (Throsby, 2003). Cultural value, such as the future musical legacy, might not be fully understood in a valuation based on individuals'

[19] The National Oceanic and Atmospheric Administration panel (NOAA), chaired by Nobel laureates Kenneth Arrow and Robert Solow, scrutinized the CVM and presented guidelines for the use of the method in response to concerns relating to the Exxon Valdez case and future liability claims (Alberini & Kahn, 2009, p. 20)

preferences, but CVM can give a snapshot of *value* based on festival visitors' and local residents' preferences and their knowledge and experience of this particular phenomenon.

3.2.2 THE APPLICATION OF ECOLOGICAL FOOTPRINT ANALYSIS

In article 2 and, even more so, in article 3, the (tourism) ecological footprint analysis ((T)EF) is used to analyze and describe the environmental impacts of a music festival. EF and Life Cycle Assessment (LCA) are discussed as two possible measurement models in section 2.2.3. Below is a comparison between the two, explaining the motivation for the use of EF in this thesis, and the implications of this choice.

Castellani and Sala (2012) compare strengths and weaknesses between LCA and EF, both in general and from a tourism perspective. Firstly, EF is not as comprehensive as LCA since it does not include impacts causing, for instance, acidification, eutrophication and toxicity. Secondly, only the absolute quantity of land use is measured in EF, and not whether land is renewable or has multiple functions. In LCA, this is accounted for in "end-of-life" scenarios. But LCA does not take into account the limited amount of resources, i.e. the biocapacity, as in EF. The biocapacity is a measure of carrying capacity which helps to illustrate the ratio between resources used and the availability of resources (Castellani & Sala, 2012). Thus, EF has a pedagogical advantage that is useful when illustrating limits to consumption, and in particular tourist consumption. LCA, on the other hand is not as useful in this perspective and therefore lacks this applicability in policy contexts. With LCA, it is possible to compare different goods or services, such as the environmental impacts of different types of trips to different destinations, but not in terms of the limits to the ecosystem or carrying capacity, which is a fundamental element of sustainable development in the tourism context. It is this weakness of LCA, in line with the frequent use of EF in tourism contexts, its indirect links to sustainable development, and the availability of specific "event footprint calculators" online (see articles 2 and 3 for more details) that motivate the choice of EF in this thesis.

An issue of construct validity linked to the use of online footprint calculators is the input data upon which they are based. The calculator used in this thesis was developed for the Australian context and more specifically for the state of Victoria.[20] This means that the input-output data used in the calculator is taken from Australian national and regional statistics. Thus, we are measuring the environmental impacts of the Way Out West festival (articles 2 and 3) as if it was situated in an urban area of

[20] The technical background paper to the event footprint calculator is found online: http://www.epa.vic.gov.au/~/media/Publications/972.pdf

Victoria, Australia (e.g. Melbourne). It is possible to argue that life styles and infrastructures in Sweden are similar to those in Australia and that this would justify this choice, but it is a limitation of the thesis discussing environmental impacts. Comparing the national footprint accounts for Australia and Sweden it is possible to find similarities concerning cropland footprint (Australia 21.6% vs. Sweden 18%.) and energy, which stands for approximately half the footprint in both countries (57.4% vs. 47.7%). For grazing, forest, and built-up land there are larger disparities (WWF, 2008). Due to the limited amount of resources available to obtain national or local input data in order to build a local event footprint calculator, the Australian calculator is used in the project despite its limitations.

The proposition by Castellani and Sala (2012) is to combine EF with LCA to achieve a more comprehensive environmental impact evaluation. The areas not covered by EF , such as chemicals, could be investigated using an LCA approach. Different policy objectives are also reasons for choosing a specific methodology, such as EF for an overview of tourism impacts, in order to identify the most important ones, and LCA to understand specific tourist activities in more detail (Castellani & Sala, 2012).

3.2.3 Segmentation approach and Stakeholder perspective

Articles 4 and 5 apply two different approaches to describing and analyzing local residents' perceptions of tourism impacts. The former is a multi-case study examining the relationship between the level of tourism development and perceptions of tourism impacts by different resident groups. The latter is a single case study with the aim of exploring the possibility of applying an importance measure in research into residents' attitudes, and of analyzing and describing the results among different resident stakeholder groups.

Both the segmentation approach (article 4) and the stakeholder perspective (article 5) address the heterogeneity of a local community, but with different starting points and techniques. While the segmentation approach, through the application of cluster analysis, uses "the classification of data as suggested by natural groupings of the data themselves" (Hair, Black, Babin, & Anderson, 2010, p. 508), the stakeholder approach considers individuals or groupings who "may be affected by the actions, decisions, policies, or practices of the business firm" but also those who "may affect the organization's actions, decisions, policies, or practices" (Carroll & Buchholtz, 2006, p. 67). Thus, the heterogeneity of local residents is represented based on different rationales: for stakeholders it is the claim, stake or interest that defines delimited groups of people (e.g. local entrepreneurs, locals involved in politics etc.), whereas with the segmentation approach it is locals' perceptions that define delimited groups

(e.g. lovers, cynics, haters etc.). The characteristics of each approach are contrasted in Table 7 and are discussed in more detail in the articles.

	Segmentation approach[21]	**Stakeholder approach**
Statistically significant different perceptions between groups	Yes	Depends on the context and how stakeholder groups are formed
Theoretical explanation to distinguish between groups	Social representation theory, atheoretical	Stakeholder theory
Variables used to distinguish between groups	Perceived attitudes, sociodemographic variables and/or community values	Stakes, claims, interests linked to tourism development

Table 7: Comparison of characteristics between cluster analysis and stakeholder theory

The purposes of articles 4 and 5 differ and it would be difficult to use these approaches interchangeably. A stakeholder approach creates the possibility of distinguishing between groups in a local community (e.g. local entrepreneurs or second home owners) who might also be part of existing associations or community groups (e.g. local interest groups). From a bottom-up perspective it would, thus, facilitate both knowledge about specific groups' perceptions, and facilitate the effort to include them in policy-making and tourism planning, as proposed, for instance, by Jamal and Getz (1995). A segmentation approach, however, visualizes "opinion groups" in the community centered on perceptions about the tourism phenomenon (Madrigal, 1995). It creates a community overview of different currents, groups' sizes, possible values based on social representation theory, and whether the groups have any specific characteristics. An important difference is that the segmentation approach will always find differences in the data and will extract separate opinion groups, while a stakeholder approach is not dependent on perceptions and might show that stakeholders agree on many issues (as in article 5). Both approaches serve a purpose. The stakeholder approach, as discussed above, is in line with a community-based approach (cf. Saarinen, 2006) and the segmentation approach is a means to understand the opinion groups, how they change, and possibly what they are based upon in terms of values, images, meaning, and knowledge about the community (Andriotis & Vaughan, 2003; Williams & Lawson, 2001).

[21] By the application of cluster analysis.

3.3 REFLECTIONS ON RESEARCH DESIGN AND METHODOLOGICAL CONSIDERATIONS

The quality of the empirical findings (and the ensuing conclusions of the thesis) can be discussed in terms of the different parts of the whole, i.e. the choice of case study objects, the different sources of evidence used and the methodological techniques used. The parts are discussed above in sections 3.1 and 3.2, with focus on validity and reliability issues and how they are dealt with in the individual articles. The whole concerns the overall quality, which is a result of all choices, and how the case studies were carried out. It is also the overall quality that influences the author's level of authority and credibility to address the research questions and the objective of the thesis. This can also be discussed in terms of *construct validity*, *internal validity*, *external validity* and *reliability* (Kidder, Judd, & Smith, 1986; Yin, 2003).

The choice of illustrative cases (see Veal, 2006) facilitated the approach to the research questions. It is helpful in order to "illustrate a proposition" as stated by Veal (2006, p. 112). In this thesis, it is the propositions of incorporating a cost-benefit perspective to tourism impact evaluation, incorporating an importance measure to resident attitude research and highlighting the heterogeneity of local communities in terms of perceptions. The latter proposition is linked to the case study of three coastal destinations in West Sweden. This case-selection was also purposive (Veal, 2006), i.e. three destinations with different challenges were chosen in order to identify the heterogeneity of resident attitudes (see section 3.1.2).

As discussed, it is likely that a festival with high ambitions regarding environmental issues highlights other values than economic and could provide data for a thorough analysis of sociocultural and environmental impacts. It is also a nationally renowned festival which facilitates the application of CVM-scenarios as discussed in section 3.2.1. The purpose of the case study, however, is not to generalize the specific empirical results (e.g. the monetary value of the sociocultural impacts), i.e. to seek external validity, but to develop, explore and apply methods and concepts that could facilitate impact evaluation from a sustainable development perspective, i.e. it is foremost concerns about construct validity and reliability. How this has been fulfilled is both discussed in 3.2 linked to CVM and EF applications and as concluding discussions (see chapter 5). The application of, for example, CVM is relatively novel within tourism research and the overall reliability can therefore be questioned. Two studies were performed at the Way Out West festival (2010 and 2012), which indicated high reliability, but further studies are needed to establish the methodology in this context.

The second research question, concerning resident attitudes and the case of coastal communities in West Sweden, has a similar purpose and the same concerns about construct validity and reliability. External validity, however, could be claimed in similar contexts (see section 5.4). But it is important to note that the context surrounding the tourism development phenomenon is not comprehensively explored in this thesis. Yin (2003) states that a phenomenon, such as tourism development, is often inseparable from the context. It can therefore be difficult to determine, with exactness, which contexts this would be if the context itself is not explored more thoroughly. To adopt a more developed mixed-methods approach would be one way forward (Pansiri, 2006).

4 FINDINGS

In this chapter follows a summary of each article in the thesis, with a focus on the principal findings and how they contribute both academically and managerially. The full articles are included as appendices.

4.1 ARTICLE 1: ESTIMATING USE AND NON-USE VALUES OF A MUSIC FESTIVAL

The first study had the aim *of measuring the total value of a music festival from a cost-benefit perspective, introducing Use and Non-use values in the festival context.* The contingent valuation method (CVM) was applied in order to measure the total economic value. This study is, to our knowledge, the first application of the methodology in a festival context.

A research model is proposed and tested at the music festival Way Out West held in Gothenburg, Sweden. The model divides Use value into Direct and Indirect Use value, where the former reflects experiences at the festival premises and the latter estimates the value of activities outside of the festival premises. Externalities of the festival, as perceived by local residents, are reflected in the Non-use value and elicited using willingness-to-pay (WTP) and willingness-to-accept (WTA). To better understand the elements of the Non-Use value, it is divided into subcategories based on previous research in cultural (Frey, 2003) and environmental economics (Garrod & Willis, 2001). *Option value* represents the value attached to the opportunity they have to attend the festival themselves. *Bequest value* represents the value attached to the festival as a provider of culture and entertainment to future generations (i.e. younger generations). Finally, *existence value* is related to the value created by the festival in terms of the image and development of the local community (figure 1).

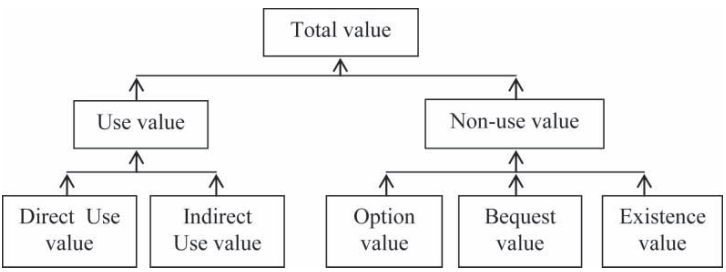

Figure 1: A model describing the components of Use and Non-use values (Andersson et al., 2012)

Way Out West is a three-day music festival in Slottsskogen, Gothenburg's central park. It was founded in 2007 and has an attendance of about 30,000 each year. It is privately organized in cooperation with the City of Gothenburg and has gained a reputation as a festival with high environmental and sustainability credentials. It was

the first Swedish festival to be environmentally certified and also the first to have an ISO certification. 719 festival visitors completed the first survey, which explored Direct and Indirect Use values, and 648 local residents completed the second survey, investigating Non-use values.

The results, illustrated in figure 2, show that externalities in terms of Non-use value make a considerable contribution to the total value of the festival (€3 million or 29%). In terms of individuals' estimations of value, mean Use value is considerably higher (€282) than mean Non-use value (€6) but the latter concerns a much larger population (the city of Gothenburg), hence the large contribution to total value. The use of a cost-benefit perspective illustrates that the value of a music festival is far greater than just the value created by activities within the festival premises.

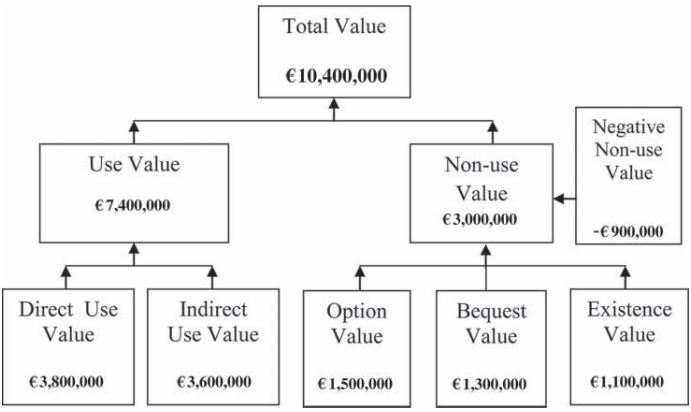

Figure 2: An approximate assessment of the total value created by a music festival (Andersson et al., 2012)

To apply Use and Non-use values in the festival context contributes to an understanding of the total economic value from a cost-benefit perspective, including both material and immaterial costs and benefits. In this specific case study, *total value* exceeds the gross total expenditure (€6.5 million) which indicates both a consumer surplus (use value of €7.4 million) for festival visitors and a positive perception of value for the local community (€3 million), which would not have been taken into account in traditional impact studies. The latter could, from a sustainability perspective, be interpreted as the value of sociocultural and/or environmental impacts (see more in article 2). The positive economic value can also be linked to the managerial and communicative efforts of the festival, such as their pursuit of a "green" image (see more in article 3), which is received positively by both festival visitors and local residents. Since the estimation of Non-use values depends on

information and knowledge, it is possible to conclude that a successful communication strategy would increase the elicited Non-use value.

4.2 Article 2: Commensurability and Sustainability: Triple impact assessments of a tourism event

The purpose of this article was to develop, test and discuss a measurement model based on a sustainability approach which included economic, sociocultural and environmental impacts. *The main objective was to achieve commensurability across impact categories, i.e. to test ways of quantifying sociocultural and environmental impacts in monetary units.* A review of the literature on tourism impacts and on methodologies for measuring is the basis for a measurement model that was empirically tested at the music festival Way Out West (see article 1 above).

Economic impacts are measured based on festival goers' *direct expenditure* as well as the *opportunity cost*; sociocultural impacts are measured using CVM to estimate the Non-use value in monetary terms; and environmental impacts are measured both in terms of CO2 equivalents, which are traded on the market using "carbon credits", and ecological footprint, which is converted by estimating the land lease cost per hectare as an approximation of its shadow cost. Figure 3 below is a summary of the proposed research model:

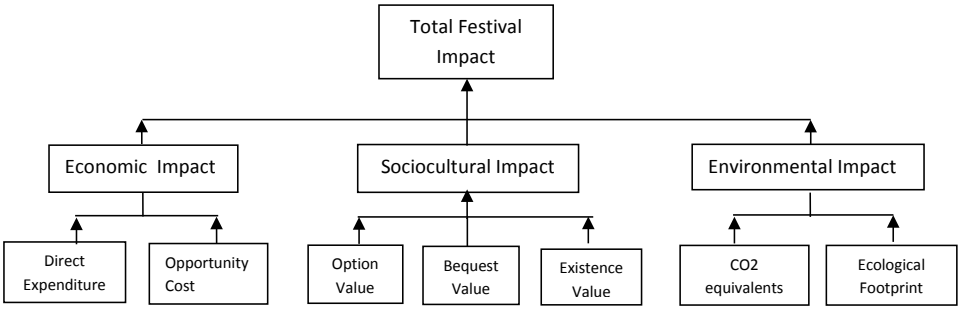

Figure 3: A measurement model describing the total impact from a sustainability perspective

In order to estimate economic impacts, the survey of festival visitors (see article 1), which had 719 respondents, was used. The monetary value of sociocultural impacts was elicited from local residents' perceptions in a survey with 648 respondents. The environmental data was retrieved from both the festival visitor survey and from compilations of data from the festival organizers. Figure 4 below is an overview of the results:

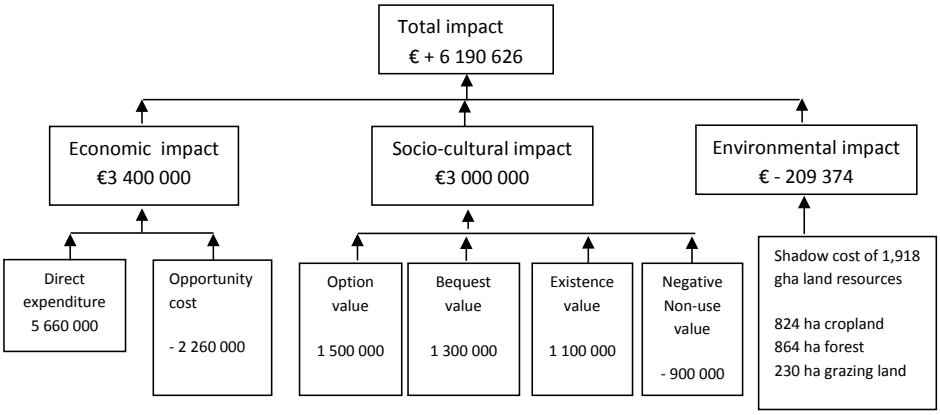

Figure 4: A total estimation in monetary terms of the sustainability of a music festival

Three principal findings are discussed in detail: the results of the measurement model and its implications, the scope of the assessment, and commensurability. The total impact of the festival was estimated to be €6.2 million, with economic and sociocultural impacts contributing almost equal amounts of value. Seeing as environmental impacts only account for approximately 4% of total impacts, despite massive media and political attention given to environmental issues, it is appropriate to discuss the validity of the environmental assessment. The conclusion is that these impacts are underestimated and need further investigation and development. The results show that the market for "carbon credits" (EU-ETS) does not function well, as the cost of the festival's emissions is estimated as being a mere 5% (€9,276) of the shadow cost of land applied in the final model.

Concerning the scope of the assessment, it is possible to see some limitations. The estimation of Non-use value to account for sociocultural impacts should entail all externalities of the festival, but it is questionable whether local residents are capable of perceiving the full scope of benefits and costs. Moreover, the estimation can be considered rather crude as it does not include any detailed description of what is included. Economic impacts are only measured in terms of direct expenditure, and no indirect or induced impacts are included. This is mainly a precautionary step in order not to inflate impacts using arbitrary multipliers, but also to enhance the possibility of commensurability, since sociocultural impacts are also only measured in terms of "direct" impacts. Furthermore, the application of opportunity cost is vital for the economic impact analysis, but should also be applied for sociocultural and environmental impacts in future studies, in order to widen the scope and to describe the net impacts in all dimensions.

Finally, the attempt to achieve some degree of commensurability is a step away from subjective interpretation and political judgment when assessing the relative importance of the various dimensions of sustainability. Using monetary units is facilitated by the fact that economic impacts are already expressed in this fashion and that this approach is universally understood and accepted. However, it is also important to highlight the fact that three different types of monetary measures are applied: real market transactions for economic impacts, hypothetical market transactions in the form of hypothetical tax payments for sociocultural impacts, and previous market transactions in the form of the shadow cost of land, representing the value foregone by using resources for the festival instead of the best alternative activity for environmental impacts.

4.3 Article 3: When a Music Festival Goes Veggie: Communication and environmental impacts of an innovative food strategy

This article had the *objectives of measuring the environmental impact of a festival's vegetarian strategy and of describing and discussing how festival managers handled communication of core values and brand identity in relation to the decision to implement the strategy.*

The background to article 3 is the music festival Way Out West's (WOW) decision to sell only vegetarian food on the festival premises. This decision was taken both due to the conviction of festival management and as a result of the high impact of food and catering (attributed to meat consumption) in a previous evaluation of the festival's ecological footprint (article 2). Festival management were interviewed in order to understand how they handled communication, the background and the setup of the vegetarian strategy. The ecological footprint was measured in 2010 and in 2012 after the strategy was rolled out, in order to compare the environmental impacts and the possible effect that could be attributed to the vegetarian strategy.

The findings indicate that the communication of the vegetarian strategy was successful in terms of adding value to the festival brand and embedding the "vegetarian message" to their target groups. The process was partly controlled (encoding, choice of media and message). By using their own social media channels, the initial message could be controlled and then picked up by traditional media, who created "loops" without the sender (WOW) being involved. Festival management were also given the opportunity to speak out about their ethical and environmental concerns regarding meat consumption, incorporating it into the brand value of the festival. The environmental impact was reduced between 2010 and 2012, mostly thanks to the veggie strategy, by 24%, even though the 2012 edition of WOW had

more visitors. The impact of catering and food decreased from 62% to 37% of the total ecological footprint. Findings show that timing, previous impact evaluation and research, and a well-controlled communication strategy based on the festival's core values, together formed a successful innovative strategy both in terms of enhancing brand value and of reducing environmental impacts.

4.4 Article 4: The Level of Tourism Development and Resident Attitudes: A comparative case study of coastal destinations

The fourth article *aimed at examining the relationship between the level of tourism development and perceptions of tourism impacts for different resident groups*. In line with arguments that local communities are diverse and heterogeneous and that destinations are heterogeneous, depending on their level of tourism development, three destinations were included in this empirical study in order to analyze and compare residents' perceptions of tourism development. The *tourism area life cycle* (TALC) was utilized in order to understand the differences between destinations, and cluster analysis was applied so as to identify heterogeneous groups of local residents in terms of perceptions. A total of 528 respondents from three coastal destinations (Björholmen, Käringön and Marstrand) in the same geographical region but with different levels of tourism development were included in the empirical study.

The application of cluster analysis indicated that a four-cluster solution was the most appropriate, dividing the sample into *development supporters, prudent developers, ambivalent/cautious* and *skeptics*. Comparison shows that the clusters at the three different destinations are distinctly different in size, and their attitudes towards future development also differ significantly.

The general understanding in previous research is that higher levels of tourism development generate more perceived negative impacts of tourism. Destinations at an earlier stage of tourism development have more positive attitudes (Coccossis & Mexa, 2004; Diedrich & García-Buades, 2009). However, findings from the context of this study suggest otherwise. Marstrand (C3 in the study), with the highest level of tourism development, had the lowest number of *skeptics* and the highest positive attitudes towards future tourism development. Even the *skeptics* were more positive than negative towards increased future tourism. Björholmen (C1), with the lowest level of tourism development, had the smallest number of *development supporters* and *prudent developers*. A majority of locals at this destination are *skeptics* (26.8%) or *ambivalent/cautious* (37.8%). Thus, the findings suggest that "negative impacts of tourism development are perceived by a larger share of the population in destinations with a lower level of tourism development".

These findings could partly be explained from the social exchange theory perspective. Costs linked to tourism development are accepted to a higher degree in destinations with higher levels of tourism development, due to the altruistic surplus phenomenon, i.e. it is for the greater good of the community (cf. Faulkner & Tideswell, 1997). Seeing as the destinations in this study are peripheral communities with tight social bonds, the altruistic surplus phenomenon is a plausible explanatory factor. Dependency theory is also useful in order to understand the results (cf. Gill & Williams, 2011). Käringön (C2) and Marstrand (C3), with higher levels of tourism development, may experience so-called *lock-ins*, i.e. historical decisions about tourism development which lead residents to believe that tourism is the only possible generator of future development (a *cognitive lock-in*). This may seem irrational or counterproductive when a large proportion of the population are skeptics or ambivalent/cautious about tourism development. Therefore, it is of interest for future research to look more deeply into the influence of dependency theory in this context. Another suggestion would be to better try to understand mechanisms creating possible lock-ins. Moreover, the linear progression of the TALC, which has previously been contested, is also contested in this context. Elements of chaos and complexity could be incorporated in the TALC to better understand the life cycle of a destination (see Hovinen, 2006; Russell & Faulkner, 1999, 2004).

4.5 Article 5: Sustainable Destination Management: Local residents' perceived importance of tourism impacts

The purpose of the fifth article was *to explore how an importance measure can contribute to resident attitude research, and to analyze and describe the results among different resident stakeholder groups.* A measurement model with impact items representing economic, sociocultural and environmental impacts, to cover the main dimensions of sustainable development, was empirically tested. The study applied a stakeholder perspective in order to analyze perceptions of importance among different local residents' groups.

A Swedish coastal destination (Marstrand) was used for the empirical testing, and a sample of 294 local residents responded to the survey. Findings show that the importance measure complements previous resident attitude scales. By combining the perceptions of to what degree an impact has occurred, i.e. what is traditionally measured in resident attitude scales, with the evaluative component of importance, it is possible to understand resident attitudes towards tourism development in more detail. A discriminant validity test shows that the importance measure seems to be a valid instrument in order to understand local residents' evaluation of tourism

impacts, since perceptions of importance differ, to a large extent, from perceptions using the traditional resident attitude scale. From a managerial perspective, such results could be the foundation for a more legitimate planning process for sustainable development in tourism, since such a process would create an understanding of both the current state of tourism impacts, i.e. how locals perceive that tourism has affected their community, and the importance of these specific tourism impacts for the future tourism development. Moreover, the use of a stakeholder approach facilitates the identification of clearly demarcated resident groups who could be included in a planning process.

Examining the results of the empirical study, it is possible to conclude that permanent residents and second home owners have similar perceptions of importance. The only exception is for second home owners who are not involved in local associations, local businesses or local politics. They attach less importance to economic impacts than permanent residents do. However, the variable *local involvement* has a moderating effect on the relationship between residence type (permanent residents or second home owners) and perceived importance of economic impacts, i.e. there are no differences in perceptions between second home owners who are locally involved, and permanent residents. The conclusion is that local involvement can enhance social integration and foster a greater understanding among resident groups at the destination.

5 CONCLUDING DISCUSSION

The overall purpose of this thesis was to describe and analyze tourism impacts from a sustainable development perspective with the aim of advancing research on tourism impacts in the context of sustainable development. As discussed in the introduction to this thesis, the number of tourists worldwide has increased exponentially over the last decades and this growth is projected to continue. This has had, and will have, both positive and negative economic, sociocultural and environmental consequences for tourist destinations and their residents. Thus, researchers and practitioners are in need of methods to analyze and describe the consequences of tourist activities from a broader sustainable development perspective.

The overall contribution of the thesis is *the development of knowledge to meet the objective of sustainable development in tourism.* This knowledge consists of theory, concepts, methodological tools and measurement models, as discussed in this thesis, and supported by the findings in the five articles discussed below in sections 5.1 to 5.3. These correspond to the two research questions that were formulated initially (see table 8 for a summary).

This is followed by a discussion of the academic and managerial contributions of the thesis (5.4), a discussion of limitations connected to the research methodology and theoretical framework, and the future research needed to take the next step (5.5).

Research questions		Article 1	Article 2	Article 3	Article 4	Article 5
RQ 1	What are the advantages and challenges of measuring tourism impacts, from a sustainable development perspective, applying a cost-benefit perspective?	**Focus shifts economic impacts to value (5.1.1)** **Integration of Use and Non-use values (5.1.1)**	**Commen-surability (5.1.2)** **Scope of the assessment (5.1.2)**	**Evalua-tions as a tool for innovative strategies (5.3)**		
RQ 2	How can resident attitudes toward tourism impacts be described and analyzed from a sustainable development perspective?	**Integration of Non-use values based on local resident valuations (5.1.1 and 5.2)**			**Level of tourism development (TALC) and its influence on resident attitudes (5.2.1)** **Heterogeneity of local residents with a segmentation approach (5.2.2)**	**Importance measure to manage and plan tourism development (5.2.2)** **Heterogeneity of local residents with a stakeholder perspective (5.2.2)**

Table 8: Summary of research questions, thesis' articles and principal findings

5.1 THE INTEGRATION OF A COST-BENEFIT PERSPECTIVE

The findings from the first research question concern primarily the integration of a cost-benefit perspective in tourism impact evaluations. The application of contingent valuation methods is discussed in the first section (5.1.1) and the attempt of commensurating multiple impact dimension in the second section (5.1.2). The advantages and challenges of this approach are discussed in relation to previous research, concepts and theory. The findings from article 3, related to the use of evaluations as a strategic tool, are discussed in section 5.3 since they concern not only the first research question, but also the findings related to the second research question.

5.1.1 CONTINGENT VALUATION METHODS

Findings show that contingent valuation methods (*willingness-to-pay* and *willingness-to-accept*), commonly used in *cost-benefit analysis* (CBA), can be applied in order to elicit monetary values of tangible and intangible impacts in a festival context.

Applying the notion of *Use and Non-use values* helps us to analyze the values created by a touristic activity, including externalities, both for users (e.g. festival visitors) and for non-users (local residents). In the first step (article 1), the results show that the Non-use value and Use value exceed the direct economic impact, i.e. total visitor expenditure (€ 10.4 million vs. € 6.5 million[22]); thus, economic impacts are only one part of the societal impact, and are not the full picture.

Moving the focus from economic impact to value (Use and Non-use values) increases the scope of the evaluation and integrates perceptions of local residents into the evaluation process. Private and public festivals, and other touristic activities that are not necessarily financially profitable, could use such a tool in order to demonstrate their potential value contribution. For public bodies such as policy makers and funders, this tool would also give the possibility of understanding how investments in festivals, events, and other tourist activities contribute to value creation, as well as the possibility of comparing different activities, for policy decisions and public funding.

The discourse in the media and the tourism industry is dominated by tales about how much tourists are contributing to local economies, but less is said about local residents' perceptions or the value created from a broader perspective. This is linked to conventions and criteria of the evaluation practice (in the tourism context) as discussed by Fourcade (2011). To elicit a value of immaterial benefits and costs for non-users makes local residents' perceptions visible and able to be discussed in the same context as the contribution of visitors to the local economy. This, in turn, is a step towards an inclusion of sustainable development objectives in the public tourism discourse, since it leads to "a broader understanding of costs and benefits" (Hall, 2012, p. 127) for various stakeholders, not just primary economic beneficiaries (such as restaurants, hotels, etc.). Hall (2012) states that the inclusion of costs and benefits, from a residents' perspective, is crucial if a paradigmatic change in policy setting, to meet the challenges of sustainable development, is the aim. [23] If the hegemonic ideology in institutions and industry believes that tourism is "only" a business than it will be treated as such in policy formation, i.e. with focus on economic impacts. If it is treated as a phenomenon with societal and welfare impacts then it can be treated and judged differently. Getz (2009) discusses this from an event perspective, but the arguments are equally relevant for the tourism sector as a whole. The incorporation

[22] €6.5 million includes travel costs to and from the festival. Total visitor expenditure excluding travel cost, which is used in order to calculate direct economic net impacts, amounts to €5.66 million

[23] Hall (2012) refers to this as a third-order change possible in the *steady-state approach* in an event context.

of *Use and Non-use value* and *commensurability* of impacts dimensions (see section 5.2) in tourism impact evaluation could demonstrate the wider effects for society and thus influence a change in policy setting.

Among the empirical examples in this thesis, the results for Way Out West (WOW) show that local residents experience positive values (€3 million[24]) and that festival visitors spent approximately €3.9 million in the City of Gothenburg, which benefits businesses as well as the city itself in terms of taxes. Thus, WOW can be considered a win-win situation for these stakeholders. If this approach could be applied to a more controversial activity (from a local resident perspective), such as an Olympic bid, the results would help public bodies understand whether the activity should be pursued or not, on the basis of the potential net benefits. An evaluation could be performed both *ex post* (as in this thesis) or *ex ante*, as exemplified by Atkinson et al. (2008) for the 2012 Olympic Games in London. They illustrate, using WTP, a Non-use value for the Games over a period of 10 years that would amount to £2 billion nationally. This study, as well as the findings in this thesis on *Use and Non-use values*, facilitates a more complete cost-benefit analysis where the elicited value is compared, for instance, to public funding. The applied methodology also corresponds to the arguments of Hall (2012) and Getz (2009) in order to meet sustainable development objectives, as discussed above. The advantages and disadvantages of using monetary evaluations, i.e. commensuration, are discussed further in the next section and in section 5.5.

5.1.2 COMMENSURABILITY

The findings show that the perceived externalities by local non-users can tentatively be linked to sociocultural impacts and can thus be incorporated in an evaluation of festival impacts from a sustainable development perspective (article 2). The suggestion is that this approach could also be applied in a more general tourism context in order to evaluate tourist attractions, destinations, regions and even nations.

Economic impacts are measured based on visitor expenditure (cf. Frechtling, 2006), with the opportunity cost included, as in a CBA, while the costs of environmental impacts are calculated in an estimation of the shadow cost of the global hectares needed for the production of the event. In a measurement model of economic, sociocultural and environmental impacts, these techniques are combined to "situate social and environmental impacts on a common footing with economic impacts"

[24] This is the aggregated sum. There is a minority experiencing negative Non-use values (€0.9 million), which should also be considered by the organizers and other stakeholders.

(Tyrrell et al., 2013, p. 280). This is a step away from subjective interpretation and political judgments regarding the relative importance of different impact dimensions (cf. Espeland & Stevens, 1998), i.e. a more pragmatic approach to analyzing and describing the outcomes of tourism impact evaluations. It could also be said to promote a more balanced approach (cf. Hall, 2012) to understanding tourism impacts from a sustainable development perspective, i.e. *highlighting the relative values of a broader range of impacts*.

The attempt to achieve *commensurability* shows that the monetary values are considerably larger for economic and sociocultural impacts, while environmental impacts make a very small mark (4% of total impact in the WOW case). The findings indicate that the costs of environmental impacts might be underestimated when using monetary evaluation, which has also been the case with the trading of CO2 equivalents and the European emission rights market (Grubb & Neuhoff, 2006; Okereke & McDaniels, 2012). As noted in section 4.2, it is important to emphasize that three different monetary units are used in the model and that the methodological choices made are reflected in this result (e.g. choice of ecological footprint over LCA).

The result or outcome of the evaluation is in turn interpreted and negotiated by stakeholders (Guba & Lincoln, 1989) and used in their interests, as exemplified in article 3, discussing the innovative strategies of the festival organizers of WOW. This is discussed further in section 5.3. Other stakeholders, only indirectly part of the evaluation process, can also take the opportunity to interpret the evaluation and use it for their own purposes. A consequence of the evaluation of WOW in 2010 was a letter to the editor in the local newspaper by the political leadership of Gothenburg and the county board (Hultén & Andersson, 2012). They did not focus on the negative environmental impacts like the organizer, but on visitor expenditure and the positive Use- and Non-use values of the festival, as a means to legitimize the region's past and future investments in events and tourism as a regional development strategy, and to demonstrate that they emphasize a sustainable development:

> "[…] we could, with [this measurement model] argue more explicitly for a continuous expansion of tourism in Western Sweden. A sustainable society must consist of a plurality on labor and production markets. With a strong industry, an extended knowledge society, and as an attractive tourist destination, we want to further strengthen the whole region." (Hultén & Andersson, 2012)

This interpretation is, supposedly, the result of a negotiation process including the political stakeholders and influenced by their social and cultural contexts as described by Guba and Lincoln (1989). The organizers of WOW, on the other hand, operate in a

slightly different social and cultural context where the negative environmental impacts need to be addressed (see further in section 5.3). One reason may be the close relationship between environmental values and the brand of Way Out West. The interpretation of the political stakeholders also indicates a less tourism-centric view, as described by Saarinen (2006) in reference to the activity-based tradition. Tourism is, in the quote, described as a tool for development (see table 4, section 2.4.2). Not, however, as the sole tool but rather as part of a greater whole, together with investments in the knowledge society and other industry sectors.

There are advantages of monetizing sociocultural and environmental impacts, as discussed above, but there might also be possible disadvantages. Apart from possible methodological biases, a potential risk is that details of what the estimated values consist of may be lost. An in-depth understanding of processes leading to certain impacts, or of how certain impacts can be promoted, runs the risk of being overshadowed by the monetary value (Porter, 1995). This is further discussed as a limitation in section 5.5. The comparison between impact dimensions (economic vs. social vs. environmental) and their generated monetary value might still generate conflicts and be subject to political judgments (cf. Samiolo, 2012), particularly concerning environmental impacts that are suspected of being underestimated, as described above.

5.2 The integration of a local residents' perspective

The integration of Non-use values and its link to sociocultural impacts, discussed above, is one step towards an integration of a local residents' perspective in tourism impact evaluations. The second research question dealt exclusively with this issue. The next two sections (5.2.1 and 5.2.2) discuss the findings from articles 4 and 5, which take further steps towards this integration from a sustainable development perspective. The notions of heterogenic communities, factors that influence resident attitudes, as well as the management of sustainable development informed by local resident attitudes are discussed in this context.

5.2.1 Using the tourism area life cycle to understand resident attitudes

Resident attitude research has generated a long list of independent variables that influence how residents perceive tourism impacts and how their attitudes towards tourism development are formed (see p. 27). Several theoretical constructs (see Nunkoo et al., 2013; Sharpley, 2014) and different ways of constructing scales to measure resident attitudes (see Andereck & Nyaupane, 2011; Ap & Crompton, 1998; Choi & Sirakaya, 2005; Lankford & Howard, 1994) have also been extensively discussed in previous research.

Findings from articles 4 and 5 in this thesis discuss two approaches from a sustainable development perspective. First, from a regional (or national) perspective, it is important to understand how different destinations within the region differ in terms of local resident attitudes, due to the destinations' level of tourism development (cf. Diedrich & García-Buades, 2009). The application of the *tourism area life cycle* (TALC), comparing three destinations, shows that independent variables (such as sociodemographics, length of residence, and dependence on the tourism industry) play a minor role. Differences in attitudes can instead be linked to destinations' different levels of tourism development, assuming that the type of tourism and type of tourists are similar between destinations. The second approach, the application of an importance measure in resident attitude research, is discussed in the next section (5.2.2).

The application of TALC, in article 4, shows that negative impacts of tourism development are perceived by a larger share of the population in destinations with a lower level of tourism development. This contradicts previous findings, which show a linear increase in both perceived positive and negative impacts, where negative impacts are dominant in later stages of development and positive impacts are dominant in earlier stages (Allen, Long, Perdue, & Kieselbach, 1988; Ap & Crompton, 1993; Butler, 1980; Diedrich & García-Buades, 2009). An explanation for this contradiction might be the presumed linearity of TALC. Hovinen (2006) and Russell and Faulkner (2004) introduce *chaos and complexity theory* to TALC in order to understand the complexities of destination development. They state that the beginning and end of each stage of development in TALC introduce chaotic elements that can be expressed as negative perceptions of tourism development. In article 4, Björholmen, with the lowest level of tourism development, is assumedly in such a chaotic phase. The marina with the adjacent hotel, a restaurant and a spa increased the size of tourism operations significantly when everything was finished in 2008. The local residents in this small community (37 permanent residents in 2012) are relatively new to tourism development and its impacts, whereas the other two destinations in the study have been well-acquainted with the costs and benefits of tourism for over a century.

Another theoretical explanation, which supports the findings of this study regarding the perceptions at the more "experienced" destinations (Käringön and Marstrand), is *dependency theory* and the concept of *lock-ins* (Gill & Williams, 2011; Grabher, 1993). Cognitive lock-ins influence local residents to ignore negative impacts, as the level of tourism development increases, and to overestimate positive impacts. A long history of tourism development, coupled with a perception that tourism is the only available

generator of growth and positive development, could create this lock-in effect. A third theoretical explanation is the act of *altruistic behavior*, discussed within social exchange theory (Faulkner & Tideswell, 1997). The findings suggest, with reference to Faulkner and Tideswell (1997), that negative impacts are ignored in places with higher levels of tourism development, because tourism is perceived as working for the greater good of the local community.

With this knowledge, from the specific context of the article, it is possible to plan strategically for long-term tourism development and to cater for local residents' perceptions of this process. In early stages of tourism development, or when big changes are imminent at a destination, residents' perceptions should be analyzed and considered in detail in order to avoid or deal with negative impacts that could affect local residents' response to tourism, tourists' experiences, and ultimately the operations of the tourism industry. In places with higher levels of tourism development, and where tourism has a dominant role at a destination, alternative development paths should also be considered, in order to break the possible cognitive lock-in and to break out of the activity-based tradition of sustainable development (cf. Saarinen, 2006).

5.2.2 The importance of an evaluative component

Findings from article 5 suggest the application of an *importance measure* (cf. Martilla & James, 1977) to analyze and describe local residents' attitudes towards tourism development from a sustainable development perspective. This is also supported directly or indirectly in previous research (Andereck & Nyaupane, 2011; Ap & Crompton, 1998; Wall & Mathieson, 2006). Wall and Mathieson (2006) criticize the lack of an evaluative component of resident attitude research, and Ap and Crompton (1998) construct an index where an evaluative component is included. The importance measure proves to be, to a large extent, independent of traditional measurement of attitudes, which focuses on the degree to which an impact has occurred or not. An evaluative component, in terms of importance, would both nuance past tourism development and expose local residents' attitudes about what is important for future development at this stage. Thus, it could increase the weight of local residents' attitudes in the planning process and thus improve legitimacy for a sustainable development process in tourism.

The application of the importance measurement, analyzed from a stakeholder perspective, also shows that perceptions are not, to a large extent, dependent on residence type (permanent residents or second home owners), but are more closely linked to whether local residents are *locally involved* in associations and/or engaged

in entrepreneurial activities in the local community. Previous research has pointed at a possible divide in perceptions of tourism and living strategies between second home owners and permanent residents (Müller, 2002), but this is not fully supported in this empirical context. Thus, in order to create mutual understanding and integration in small communities concerning (tourism) development, it is recommended that local community involvement of different sorts should be promoted. This could involve inviting new residents to local associations or facilitating for entrepreneurs to establish operations.

Articles 4 and 5 suggest two different ways of approaching the assumed heterogeneity of local resident attitudes: the *segmentation approach* and the *stakeholder perspective* (introduced in section 3.2.3). The findings show that the former identifies groups (or clusters) that have significantly different perceptions of tourism impacts and tourism development. This is the nature of cluster analysis, which was used to segment local residents (see section 3.4 and article 4). The stakeholder groups identified, on the other hand, differ significantly, in terms of resident perceptions, on only a few points. This has also been the case in earlier studies where the stakeholder perspective has been applied (cf. Easterling, 2005).

Since few characteristics, apart from perceptions of tourism impacts, can be used to differentiate the groups identified with the segmentation approach, a *stakeholder perspective* is preferable if sustainable management of destinations is the objective. Stakeholder groups such as second home owners, locally involved residents or local business owners are easier to physically involve in planning processes concerning tourism development. Their opinions can be voiced and included in the development planning process.

But the *segmentation approach* has other virtues: understanding the size of the resident groups that are pro-tourism (i.e. development supporters) and anti-tourism (i.e. skeptics), as well as those in between, would illustrate the state of general opinions about tourism development. If local residents are treated as one group (or one stakeholder), the notion could be that “all is good”, illustrated by one single mean value for all residents. A more “fair” or “just” picture is achieved in a breakdown through segmentation. This also illustrates which factors (e.g. environmental issues or negative social aspects) need to be addressed in a development planning process, according to those who perceive predominantly negative impacts of tourism.

5.3 EVALUATION AS A PLANNING AND STRATEGY TOOL

This section is primarily based on the findings from article 3, but does also include findings from the other articles in order to analyze the consequences of tourism impact evaluations from a broader perspective.

Findings from this thesis point to the *direct applicability of knowledge* from a tourism impact evaluation with a sustainable development perspective (article 3). The outcome of the WOW evaluation (article 2) was interpreted by researchers (authors of the article), by the political leadership of the region (see section 5.1.2) and by the receiver/evaluated subject (in this case festival management). Various conclusions were constructed depending on the different contexts of the stakeholders and the transmission and discussion of the outcomes. This is what Guba and Lincoln (1989) refer to as a responsive constructivist approach. Various actions were taken based on this process, which are described here below for WOW.

The researchers wrote articles for academic audiences, while planning and strategy decisions were taken by festival management. As shown in article 3, the vegetarian strategy pursued at WOW was partly an effect of this interpretation. Knowledge of environmental impacts was transformed into a strategy that stimulated the brand value of the festival, reduced environmental impacts and launched a national debate on vegetarianism. These findings can be seen as an example of managing and promoting sustainable development in tourism and events in line with previous definitions of sustainable development (GSTC, 2014), as well as the use of *impact evaluations as a planning tool* (cf. Lundberg, 2011) or a *CSR initiative* driven by the market and social pressure[25] as described by Moon (2007). Figure 5 illustrates the process of using impact evaluations as a strategic planning tool. An initial impact evaluation is performed (1) and the outcome is interpreted and negotiated by one or several stakeholders (2), e.g. festival management, or by politicians as exemplified in section 5.1.2. The resulting knowledge is then integrated in the planning process (3) of the festival in order to implement strategy. The dotted line illustrates the strategy implementation process (4), which leads back to the first box (1), and to a new evaluation in order to understand the impacts of the new strategy initiatives. This process is ongoing and the model illustrates this continuous process.

[25] A main driver for Way Out West management (except for the interpretation of the impact evaluation) can be related to what Moon (2007, p. 300) refers to as "employees […] as a driver for CSR" (as one of the market drivers). This can be attributed to management's "concerns regarding animal rights, health considerations and, not least, to challenge and debate what the manager coined "normativity" in society" (Andersson, Jutbring, & Lundberg, 2013, p. 228). While Moon (2007) implicitly refers to employees at lower levels of the organization, the case of Way Out West displays how employees in managerial positions are driving CSR initiatives.

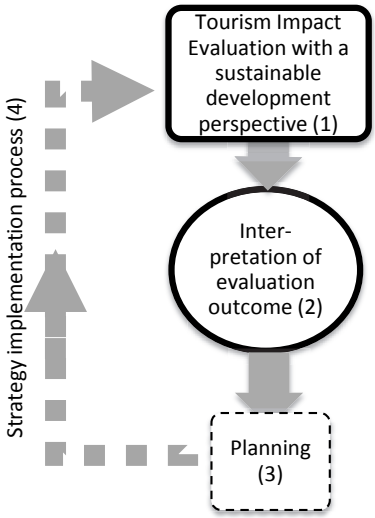

Figure 5: Process of determining degree of sustainability (adapted from Lundberg, 2011, p. 112)

Evaluation as a planning and strategy tool can thus be used to manage sustainable development of event and tourism operations. Continuous evaluation to follow up on planning and strategy initiatives will affirm whether goals are met or not. It also identifies positive and negative impacts, which in turn may create new goals to fulfil in order to strengthen positive impacts and minimize negative impacts (cf. GSTC). This process confirms the notion that tourism of any kind does not have an inherited status as sustainable, nor is it a possession to acquire (Clarke, 1997). Sustainable development in tourism, and in general, is rather a target with constantly moving goals (Lee, 2001).

Another example of evaluation as a planning and strategy tool can be taken from the context of articles 4 and 5. Although this example concerns findings that are not explicit in the articles, but rather are a consequence of the research setting and overall agenda of the research program, it illustrates the overall contribution that the knowledge developed in this thesis has. These studies, as described in section 3.1.2, were part of the research project Future Coasts, funded by the European Union Regional Fund. The specific research project was part of a process to elaborate new local tourism strategy plans. The inclusion of local residents was emphasized in this process,[26] in a similar way to the notions of the community-based approach

[26]This process is described in detail in the book chapter *Strategier för lokal förankring i kustnära turismutveckling* (Lindström & Larson, 2013).

(Saarinen, 2006). The surveys discussed in article 4 and 5, together with 105 in-depth interviews (with local residents, entrepreneurs, tourists and civil servants), were analyzed and described in three separate reports, one for each case destination (Larson, Lindström, & Lundberg, 2011, 2012a, 2012b). Three seminars, one in each destination, were organized in order to present the reports and to discuss the state of current tourism development, the link between tourism and other industries, and future tourism development. Local residents, entrepreneurs, politicians and civil servants were invited to the seminars. The seminars differed slightly, but the main program consisted of a presentation of the report by the researchers and short presentations by other stakeholders at the destination, followed by a Q&A session. If possible, the participants were divided into groups, where they discussed possible strategies and goals linked to the main findings of the reports. For Marstrand, these group discussions were recorded and used as input to a seminar report (Larson, Lindström, & Lundberg, 2012c) handed over to the local municipality to aid their strategy development process. This serves as another example of how knowledge from evaluations of tourism impacts (local resident attitudes and perceived importance) can be used in policy and planning processes.[27] It also involves several stakeholders in the tourism development process, directly and indirectly, as suggested in previous research (see Choi & Murray, 2010; Jamal & Getz, 1995; Nunkoo et al., 2013). The local residents that were surveyed in the evaluation process did also have a possibility to influence the interpretation of the outcome together with other stakeholders and the evaluators (i.e. the researchers) (cf. Guba & Lincoln, 1989).

While the findings of article 3 are an example of self-regulatory management practices, or corporate social responsibility (CSR) (Moon, 2007), the latter example above is on a political and policy level. Both examples serve as illustrations of possible ways of working with evaluations as strategy tools for sustainable development in the context of tourism. All tourism providers are not prone to implement CSR programs with strategies that change their impacts and it might not even be their responsibility to do so as pointed out by Moon (2007). Thus, to improve "the moral conduct of businesses" (Kaler, 2002, p. 93) regulations on evaluations with a sustainable development perspective and the inclusion of a local residents' perspective, as discussed in this thesis, might be necessary.

[27] There is no new strategy plan in place for Marstrand yet, but it is a work in progress and several activities with direct or indirect links to the reports are underway, headed by the municipality: e.g. a ten-point program for destination development concerning tourism infrastructure, intensified cooperation with local, regional and national stakeholders, construction of a nature trail, and strengthening of dialogue with residents (L. Andersson, personal communication, March 17, 2014).

5.4 CONTRIBUTIONS

Knowledge about tourism impacts from a broader perspective facilitates a sustainable development approach in tourism. This thesis has, with the findings discussed above (5.1-5.5), developed knowledge and contributed to several domains of tourism and event research; the *integration of Use- and Non-use values*, *commensurability of tourism impacts*, *local resident attitudes towards tourism impacts* (incorporation of an importance measure, application and reassessment of TALC, and the heterogeneity of local communities), *and examples of how impact evaluations can be interpreted, from the perspective of evaluation theory, and used as strategy tools*. These advances, together, constitute the overall contribution, i.e. *the development of knowledge to meet the objectives of sustainable development in tourism.*

Faulkner and Tideswell's (1997) rationales for achieving the objectives of sustainable development in tourism, mentioned in the introduction, were to (1) establish planning and management systems that emphasize benefits and avoid costs of tourism development, (2) establish systems for monitoring tourism impacts, and finally that (3) the monitoring systems should be comparable over time and across destinations. The contributions of this thesis are very much in line with these rationales, i.e. the findings described above all contribute to one or several of these rationales, directly or indirectly. Above all, the thesis contributes to step 2, in terms of the integration of a cost-benefit perspective and local resident attitudes, and to step 1, as discussed in section 5.3. Step 3 is implicit in the findings above, but is discussed in 5.5 as a suggestion for future research.

What about the actual objectives of sustainable development? These are context-based, since, as discussed in chapter 2.4, sustainable development is a value-based (Garriga & Melé, 2004) and socially constructed concept (Saarinen, 2006). The knowledge of different traditions and approaches in tourism and event research[28] aids in the understanding of different interpretations of sustainable development in different tourism contexts.

However, the academic contributions of this thesis (methodological, empirical, conceptual and theoretical), which emphasize the inclusion of local resident attitudes, local resident valuations (e.g. their Non-use value) and commensuration as the basis for impact evaluations, push the process of tourism development away from a tourism-centric or economic sustainability approach to a *community-based*

[28] activity-based, resource-based, and community-based traditions (Saarinen, 2006), economic sustainability, balanced approach, steady-state approach (Hall, 2012)

approach (see Hall, 2012; Saarinen, 2006). With this approach, the local community influences the objectives of sustainable development on the basis of their perceptions of value and limits to growth with regard to tourism. It is also an *empirical contribution to evaluation theory* from the field of tourism and event research showing how different interpretations by stakeholders make way for different strategies, i.e. examples of the *responsive constructivism* described by Guba and Lincoln (1989).

The managerial contribution of the thesis is to facilitate the implementation of sustainable development policy and strategies (exemplified in section 5.3), i.e. managerial practices in line with the use of CSR programs. The methods used to analyze and describe impacts of tourism development facilitate the introduction of a planning and management system that emphasizes benefits and minimizes costs of tourism (cf. Faulkner & Tideswell, 1997). This approach is particularly useful for politicians, institutions and businesses in order to efficiently manage tourism development with the help of measurable indicators (see McManus & Haughton, 2006) and goals of sustainable development.

The knowledge developed in the thesis could be applicable beyond the contexts studied herein, in other tourism and event contexts, in order to meet objectives of sustainable development. This is in line with the aspirations of the pragmatic approach, i.e. to find suitable tools to solve societal problems (Pansiri, 2006) and establish construct validity and reliability (see section 3.3). The model in article 2, including three impact dimensions in monetary units, could, for instance, be applied to whole destinations, regions or even nations without too many modifications. This would also apply to Use and Non-use values (article 1), the segmentation approach (article 4), and the importance measure (article 5). The results of the applications are mostly context-specific, with a few exceptions. In articles 4 and 5, the empirical results could be generalizable to similar contexts, i.e. at small, socially tight-knit destinations with a tourism industry that has a dominating position and a high degree of seasonality. The findings are valuable input for managerial efforts to address sustainable development in tourism at similar destinations, but are also generalizable in terms of the conceptual contribution to the TALC and research on resident attitudes.

5.5 LIMITATIONS AND FURTHER RESEARCH

The possible limitations of this thesis due to methodological and theoretical choices, i.e. the scope of the findings, are discussed in this section, as well as recommendations for future research.

Not all sociocultural impacts can be said to be included when using WTP to understand non-use values. Respondents might have difficulties evaluating impacts that will make their mark in the future, i.e. legacy impacts. Such impacts might be musical legacy from a festival or the value of ancient local traditions that are replaced by new ones. Throsby (2003) illustrates this point and suggests that cultural goods, e.g. a festival or tourist attraction, are consistently undervalued due to this. Their unique traits are reduced or lost, according to Karpik (2010), since these goods ("singularities") are fundamentally different and do not fit in to the classic view of markets. Karpik (2010) argues for the replacement of measurement instruments by judgment (expert opinions, rankings, quality labels, etc.). It may be an enormous task to ask local residents to evaluate (either in monetary terms or in Likert scales) all possible positive and negative externalities, but it would be possible to design future studies that are more explicit about *what* respondents are including in their evaluations and *how* these are related to value creation. The quantification and commensuration of tourism impacts can lead, with reference to economic sociologists (cf. Espeland & Stevens, 1998), to the championing of transparency, legitimization and democratization, moving away from "expert" judgment (championed by Karpik, 2010). But it is also reductionist, hiding the qualities of tourism behind numbers, and lumping different impacts together, as discussed above. Thus, the application of these methodologies is useful as long as these limitations are respected and their virtues are exploited. The combination of a measurement model for commensuration, as in article 2, and resident attitude perceptions, as in articles 4 and 5, may be a way forward in analyzing the qualities of tourism behind the numbers. The perceptions of residents, measured on Likert scales, may be related to the elicited Non-use value and may give information on which impact items are perceived as important and which are perceived to have taken place. Future research should investigate this relationship between impact items (or impact dimensions) and Non-use values, in order to better understand the process of value creation.

A mixed-methods approach to tourism impacts would nuance the understanding even further and avoid the risk of simplification. According to Deery et al. (2012), (social) impact research has dealt primarily with definitions, the development of conceptual frameworks, scale development and scale testing, and less with in-depth understanding and explanations of the origins of these impacts (applying an interpretative approach). This thesis mainly deals with the former, traditional, areas of impact research and cannot expand on the underpinnings of specific impacts and their links to tourism development (cf. Deery et al., 2012), nor, for instance, the

interpretation and social construction of sustainable tourism development (cf. Saarinen, 2006). In order to solve the full problem at hand (from a pragmatic viewpoint), i.e. understanding the processes of tourism impacts, a more extensive use of mixed-methods is necessary. Future research should aim at combining the development of frameworks to measure tourism impacts with other methodological techniques such as participant observation, interviews, diaries and photo elicitation. A mixed-methods approach could create a better understanding of Use and Non-use values, the process or underpinning of residents' perceptions of tourism impacts, and the distributional effects of tourism impacts, both in time and space.

Trade-offs between the various dimensions of sustainable development are often necessary and are part of the difficulty of managing sustainable development (Tyrrell et al., 2013). The limited resources of policy makers and others only complicate the matter. In this thesis, the monetization of impact dimensions is an effort to facilitate decisions of this kind, but no active decisions about trade-offs were made by respondents in their estimations of, for instance, sociocultural impacts, where tax payments acted as the payment vehicle. Neither did local residents consider trade-offs when they stated their perceived importance of tourism impacts. This should be considered in further development of tourism impact attitude scales and tourism impact evaluations. One possibility is to use choice experiments in order to understand the relative importance of individual impact items versus whole impact dimensions (cf. Tyrrell et al., 2013).

Finally, there are some aspects of the community-based approach, as discussed by Saarinen (2006), that are problematic. The local-global paradox of sustainable development in tourism still resembles the approach of carrying capacity issues, i.e. a focus on the local destination in isolation. If evaluations are performed on single destinations, regions or even nations, the global structure of tourism is not addressed and the holistic and equity features of sustainable development (see Sharpley, 2000) are not fully included. From an impact evaluation perspective, there are several possible ways to deal with this issue.

First, evaluations based on single destinations (or events/attractions) need to include a description of the type of tourism (structure, ownership, scale, scope) at the destination, and how this influences direct, indirect and induced impacts (e.g. leakage and equity issues such as distribution). This would help us to understand the connections between the local destination and its surroundings (at the regional, national and/or international level).

Second, more evaluations with a multiple perspective approach including local residents', should be carried out on a higher macro-level, i.e. nationally or globally, in order to understand the global dimension of tourism impacts and achieve a better understanding of tourism's role in sustainable development. This would create stronger links between the local and the global and would help to close the theoretical and practical gap between sustainable development and sustainable development in tourism (cf. Butler, 1999).

Third, the issues of power relations and legitimacy are vital to understand in this context. The implementation of evaluations with a sustainable development perspective could promote transparency (Kidd & Fischer, 2007) and a "real" paradigm shift in tourism policy, as proposed by Hall (2012), in the steady-state approach, or by Getz (2009). The results could help to empower local residents and promote a community-based approach to sustainable development in tourism. The wealth of information, both concerning the value creation associated with touristic activities and residents' attitudes towards individual impact items, is an asset that may guide a planning process which includes the interests of local community stakeholders (cf. Jamal & Getz, 1995). But local residents' level of (social, cultural, political) resources or legitimacy in the negotiation process might not be enough to push the agenda their way (cf. Hall, 1999). The economic resources in tourism are often in the hands of external actors pushing an agenda that is more activity-based. Destinations in developing countries may be more exposed in this sense, in comparison with the destinations that are studied in this thesis.

If some of the issues in this section are addressed in future research, the application of tourism impact evaluations and frameworks with a sustainable development perspective could acquire a more prominent place in academia as well as in a managerial and wider society context. This is also in line with what current tourism researchers, institutions and businesses aim at.

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