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Zheng Xiang   *Editors*

Design Science in Tourism

Foundations of Destination Management

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Foundations of Destination Management

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Printed on acid-free paper

Acknowledgements

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Part I
The Foundations of Tourism Design

Introduction to Tourism Design and Design Science in Tourism

Daniel R. Fesenmaier and Zheng Xiang

Abstract This chapter introduces design science in tourism (DST) as a framework which can guide both the theoretical foundations and applications in tourism design. It is argued that since 1972 when Clare Gunn first published *Vacationsape* huge progress has been made which now provides the theory and tools needed to support DST. This chapter discusses the concept of DST and the tools available to support tourism design. Finally, it introduces the chapters comprising this book which set the stage for the development of tourism design within today's cultural and technological contexts.

Keywords Tourism design • Experience design • Design science in tourism

1   Introduction

In 1972 Clare Gunn first wrote a book called *Vacationscape* where he first outlined a disciplined approach for designing landscapes ranging from small intimate places to cities. Over the past four decades many researchers have examined various components of the tourism system with the goal of improving on the basic ideas he proposed. This work along with other advances in science and technology delineates four essential advances which now enable tourism planners to realize Gunn's dream. First and foremost, the development of a considerable body of research in a variety of disciplines and areas of application ranging from psychology, social psychology, environmental psychology, geography, landscape architecture, urban and regional planning, economics, marketing, and communications provides a reasonably comprehensive understanding of the touristic experience and the factors influencing these experiences. Second, the development of the Internet and related technologies (i.e., storage, RFID, GIS, mobile, social media,

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wearables, etc.) now enables researchers to collect and analyze traveler-related data almost anywhere and in real time; this new capability affords new opportunities to understand how travelers respond to various stimuli while *in situ*, thereby over-coming a number of important limitations of previous methods. Third, the coales-cence of the basic theories and new technologies gives rise to a new understanding of design, which argues that it (i.e., design) is not simply a *property* of the artefact (i.e., event or place which supports the traveler experience), but rather it is a way of *thinking*. As such, scholars argue that *design thinking* is a basic process driving innovation and new ways for supporting the creation of customer value, i.e., the tourism experience. Finally, the development of new, highly sophisticated systems (including the Internet of Things (IoT) and the Quantified Traveler) for seamlessly tracking and communicating with visitors enables the tourism industry to manage the visitor experience in much more personal and innovative ways.

These developments in theory, methodology, and application provide the foun-dation for a new paradigm which can be characterized as *Design Science in Tourism* (DST) and supports a framework for designing systems and artefacts to improve people's daily lives as well as their travel experiences. Design Science in Tourism is not simply about developing an event or place to support the traveler experience, but rather it provides a basic logic for conducting research ***and*** designing tourism places. Further, Design Science in Tourism is explicitly focused on the develop-ment of new artifacts and, as such, it provides the foundation for enabling tourism managers to develop innovative processes, systems and places. Thus, it is reasoned that DST can be used to inform tourism research in such a way that it integrates design thinking and the science of design, the nature of the visitor experience, and the artefacts than can be developed to manage these experiences. With this brief introduction, this chapter first introduces design science in tourism (DST) as a framework which can guide both the theoretical and the applied work in tourism. It then elaborates on the conceptual and managerial tools available for design science practices in tourism. Finally, it introduces the chapters comprising this book which set the stage for tourism design within today's cultural and technological contexts.

2 Design Science in Tourism: An Emerging Research Framework

One of the most important advances supporting Design Science in Tourism (DST) is the extent to which science has contributed to our understanding of the tourism system, especially with respect to how travelers decide where and when to visit and the nature of the experiences during the trip. Since Gunn first published *Vacationscape* much progress has been realized through huge investments in research focusing on understanding the nature of decision making, the touristic experience, the role of emotions and the structure and framing of these decisions, and how experiences shape and derive meaning. In particular, recent articles by

McCabe et al. (2015), Dellaert et al. (2013) and Lamsfus et al. (2015) provide excellent reviews of several general models on tourist information search and decision making, which contend that, while the research conducted over the past 40 years has provided essential insight into consumer decision processes, these models are overly simplistic. For example, McCabe et al. (2015) show how the 'old' models really do not describe adequately the processes determining how travelers simplify or organize decisions because of the complexity of their information environment. Lamsfus et al. (2015) argue that context is an important driver of travel decisions, and because of recent advances in mobile technology, travel decisions have become much more spontaneous. Indeed, building upon this work, Dellaert and his colleagues (2013) offer a dynamic model which considers uncertainty and risk as an inherent component of travel decision making. Further, McCabe et al. (2015) proposes to interpret Dual Processing Theory (Pacini and Epstein 1999) within the context of travel decision making wherein they argue that it is important to recognize the two different systems (System 1 and System 2) which guide cognitive processing. The important aspects of the two systems is that one system (System 1) is largely intuitive, rapid, and emotional while the other (System 2) emphasizes deliberate, rational and effortful evaluation.

These advances in our understanding of the factors affecting basic cognitive processing of travel evaluations have led to further insights into the nature of tourism experiences and role of emotions. Indeed, while most travel decision models are based upon assumptions that travel decisions (and their evaluations of places, etc.) are high risk and therefore require active and deliberate (read as optimized) decision making (i.e., evaluation). However, recent research suggests that most decisions use System 1; that is, travelers often use very simple decision rules which are intuitive and emotional. Tussyadiah (2014) and others (Kim and Fesenmaier 2015) conclude that experiences are first created through sensations obtained from our senses and then organized or interpreted through a number filters (defined by the situation, our goals, etc.) to form emotions. This work is consistent with other research in services whereby services are seen as 'intangible' and therefore can be evaluated only *during or after* actual consumption. As such, it is now widely accepted that travel decision making and evaluation is largely experiential and, therefore, based upon the emotions aroused during the trip.

Recent research also indicates that while sensations are instantaneous, they are 'organized' so as to derive meaning. Studies by Volo (2009), Schmitt (1999) and Tussyadiah and Zach (2012), among others, show that the entire tourist experience (and the emotions raised) can be distinguished as a series of 'micro' experiences, and as such, can be represented as a series of 'events' within a travel journey (Stienmetz and Fesenmaier 2013; Kim and Fesenmaier 2015). Indeed, Pine and Gilmore (1999) and others (Sundbo and Hagedorn-Rasmussen 2008; Tussyadiah 2014) characterize this as an 'experience production system' which is comprised of six key components: (1) Themes, (2) Stories, (3) Atmospherics; (4) Affordances; (5) Co-creation; and, (6) Technology. As illustrated in Fig. 1, each of these components represent a specific aspect of the system which determines which sensations are received and how they are interpreted and communicated so as to

Fig. 1 The tourism design
system

create memorable visitor experiences. Thus, one of the most important findings of
this research over the past forty years is the clear linkage between environmental
stimuli, sensation, emotions and decision making and the nature of tourism
experiences.

It is argued that this new knowledge provides the essential foundation for
guiding the design and management of tourism places. Wendel (2014) builds
upon this literature to propose what he called the CREATE action funnel to guide
product design where C stands for cue, R stands for reaction, E stands for Evalu-
ation, A stands for ability while T represents timing, and finally E is execution.
Further, he proposes a four stage design model: (1) understand how we make
decisions; (2) discover how action can be supported through various cues; (3) design
artefacts which build repetition and desirability; and, (4) Refine, which emphasizes
evaluation, learning and change. This line of research and design delineates a clear
roadmap from understanding basic behavior in travel to the creation of artefacts to
support and enhance the experience as well as to the subsequent evaluation of the
outcomes. Different from conventional methods for tourism product development,
design science in tourism is underpinned by a strong theoretical, scientific basis that
supports the integration of a variety of tools.

3 The Toolbox: Design Science in Tourism

Building upon the emerging theoretical framework, it is argued that design science in tourism is unique in that it entails a set of conceptual and managerial tools to support and guide both research and application. The following provides a brief introduction to each of the six central elements of design science in tourism.

3.1 *Systems Orientation as Design Philosophy*

One of the key features of tourism is that it is a system which in its most basic form is comprised of travelers, the attraction (or place including the host community) and the mechanisms which support travelers moving from the home location and back (see Fig. 2). Over the past 40 years, research has enhanced this conceptualization such that the tourism system is now recognized as an organism which functions fully within a series of ecosystems or sub-ecosystems that range in scale from a room or building to much larger places such as a park, a community, city or even a country. More recently, this systems approach has gained currency as it is has become clear that forecasts of behavior within single subsystems or segments (i.e., hospitality demand, etc.) of the system often lead toward a number of unanticipated consequences. As such, a renewed emphasis on systems reflects our improved understanding and appreciation that all components which comprise tourism and the recognition that all systems are dynamic, adaptive and highly interdependent. With this perspective, it is argued that the design of tourism places (and by extension the experiences which are co-produced) must reflect the environment within which it exists, and further, the underlying processes which stimulate or support tourism experiences at one level are scalable from small to large settings.
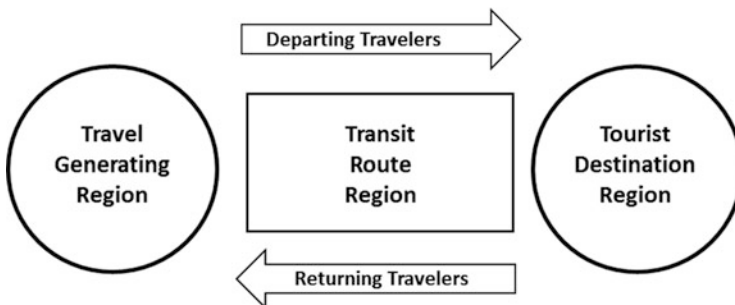
Fig. 2 The tourism system following Lieper (1990)

3.2   Design Thinking as Guiding Principle

Tussyadiah (2014) in her seminal article on the theoretical foundations of experience design traces the transformation in the concepts underlying 'design' as a noun (or adjective) and as a verb (or adverb) (i.e., designing) to design *thinking*, where the first refers to a product or outcome and where the second refers to an activity, process or plan, and the third describes a creative process leading to the design of an artefact. Further, she argued that the goal of design is the creation of an artefact which may be a physical entity such as a hotel or resort, processes such as business plans or communication strategies, symbolic systems such as programming language, symbolic scripts such essays or software, laws (including rules or codes), and human activity systems which are characterized by marketing and management functionalities as well as universities and hospitals. The notion of design has gained new currency as it is widely recognized that it (i.e., design, designing or design thinking) is a hugely important facet of the value creation process, and as such, provides competitive advantage within an increasingly competitive and crowded market place. Further, design thinking is often used to describe the thought processes and methods used to create some form of artefact. Importantly, it emphasizes the iterative process of design, development, and evaluation and is the basis of innovation.

In an excellent review, Johansson-Sköldber et al. (2013) refer to this as 'designerly thinking' which may take on a variety of meanings ranging from the process for creating artefacts to a way creating meaning wherein the artifact is simply the method used to convey or transmit meaning. Simon extends the notion of design thinking to **Design Science** in The Sciences of the Artificial (1996) wherein he argues that the process of design is an explicitly organized and rational activity, and therefore provides its own logic and outcomes while embracing the central tenets that science provides. More recently, Hevner et al. (2004) in building upon the work of Simon (1996) and Denning (1997) proposed a basic framework within which to conduct research of design science, arguing that it must follow seven essential guidelines when designing and evaluating artefacts (see Table 1). These seven postulates emphasize the focus on creating alternative artifacts, the use and rigor of science-based logic, the evaluation of proposed artefacts and the communication of the results to appropriate audiences. Thus, design-as-a-way-of-thinking AND conducting research is seen as unique perspective which provides many essential tools to be used to guide tourism design and therefore experience creation and management.

3.3   Information Technology as Enabler

The Internet and mobile computing has transformed travel (Xiang et al. 2015). In particular, smartphones and associated apps have expanded the scope of the tourism experience by enabling travelers to contact and share their experiences with family

Table 1 Guidelines for design science research (Hevner et al. 2004)

Design as an artifact	Design science research must produce a viable artifact in the form of a construct, model, a method, or an instruction. They represent innovations which represent the ideas, practices, technical capabilities and products situated within the human domain.
Problem relevance	The objective of design science research is to develop solutions to important and relevant problems. Thus, design science research seeks to address specific needs of specific stakeholders.
Design evaluation	The utility, quality and efficacy of a design artifact must be rigorously demonstrated via well substantiated methods. Design is explicitly iterative and therefore the evaluation of the artifact may use a range of techniques, approaches and processes.
Research contribution	Design science research must provide clear and verifiable contributions in the areas of design artifact, design foundations, and/or design methodologies. The importance—impact of the artifact must be situated within its use by the constituent community.
Research rigor	Design science research relies upon the application of rigorous methods in both the construction and evaluation of the design artifact. Design science research explicitly follows the scientific paradigm, and as such, similarly uses constructs, models and methods to test stated hypotheses with a focus on how well the artifact addresses the needs of the community.
Design as a search process	The search for an effective artifact requires using available means to reach desired ends. Design is an explicitly iterative process with the goal of discovering (developing) an effective solution which is often identified using 'heuristics' which is based upon the use of *a priori* defined measures of optimality.
Communication of research	Design science research must be presented effectively both to multiple audiences where the focus is not only on the inherent properties of the artifact but also on the knowledge created to design the artifact.

and friends in different places whenever and wherever they want (Wang et al. 2012, 2014). Parallel to these developments, wearable devices (e.g., Google Glass, Apple iWatch, fitness bands, etc.) and other forms of sensors have been widely adopted by consumers owing to their advantages of portability and new affordances for travel purposes (Tussyadiah 2014; Choe and Fesenmaier 2016). Further, new terms such as 'citizens as sensors', 'people as sensors', and 'collective sensing' have been coined to describe the nature of collective behaviors in terms of understanding and capturing contextual information through social media, sensing technologies, and wearable devices (e.g., Goodchild 2007; Sagl et al. 2015). That is, many people actively collect and submit data about their surrounding environment as well as their physical/emotional states (and stored personal historical data) in real time; for example, many outdoor enthusiasts collect and share information when seeing various birds species, or consistently collect weather information for local reporting, or search the skies of sightings for new phenomena (Goodchild 2007). Within the context of tourism, managers in a theme park can now easily monitor the flow of incoming visitors at a particular time during the day via the users' location data from the mobile app or RFID tag-embedded ticket. Thus, these technologies

have moved us toward an increasingly data-driven 'sensor society' wherein an individual leaves a huge data footprint during the course of everyday life as well as during travel (e.g., Andrejevic and Burdon 2014; Swan 2012, 2013; Önder et al. 2016).

As part of this technological growth, scientists have developed a huge number of tools including applications (apps) and devices (such as cameras, watches, etc.) which can be used to support the mobile traveler, storage and data processing strategies (such as cloud computing), as well as a number of new analytics which can be used to detect relationships between any number of seemingly unassociated factors. For example, Önder and her colleagues (2016) conducted a study to examine the usefulness of 1,183,889 photos uploaded to Flickr as an indicator of tourism demand in Austria. Similarly, researchers such as Girardin et al. (2008) and Zheng et al. (2012) clearly demonstrate that such 'digital footprints' can be used to provide insight into the both the spatial and temporal aspects of tourism travel. Further, a number of systems (see for example, Fuchs et al. 2014; Fesenmaier et al. 2016) have been developed which use these types of data as the basis including highly personalized mobile tourism guides (i.e., recommender systems) as well as customer relationship management systems. An example of these systems is illustrated below in Fig. 3.

Davenport (2013) and others (e.g., Gretzel et al. 2015; Neuhofer et al. 2015) argue that these types of systems and the analytics which drive them have effectively transformed basic business processes. In particular, Davenport suggests that these data can be used as a central function wherein it guides the design and development, implementation, and deployment of all systems within the firm's value chain. Indeed, Davenport and his colleagues (Davenport 2013; Davenport et al. 2010) argue that this new era in analytics offers the capacity to combine many forms of data including large unstructured information such as photos, text, and
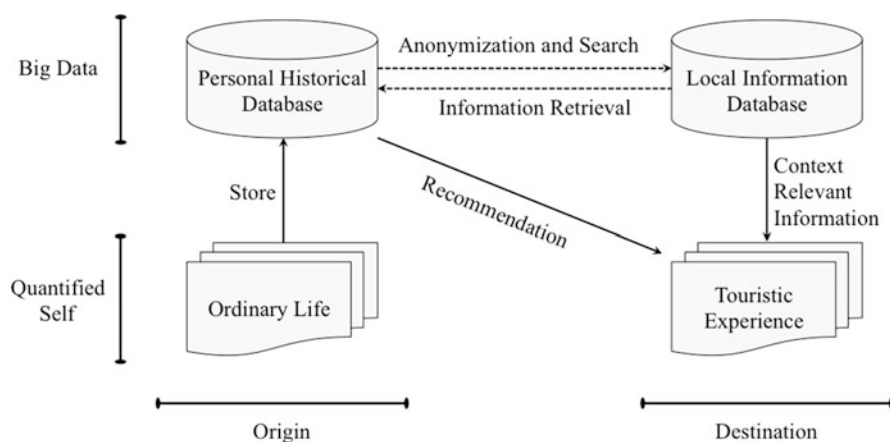
Fig. 3 A basic system integrating the quantified traveler and the touristic experience for SMART tourism destinations

location information as well as smaller 'deep data' which may be collected through online surveys, etc. in order to provide detailed information on most aspects of the trip including experiences, satisfaction, and perceptions of travel products. Porter and Heppelmann (2015) argue that SMART products ranging from smart thermostats to smart cars to smart services actually transform the entire business process as connectivity and sensory devices, and therefore data become central to the product. Further, the focus changes from 'product creation' to one which is continually adapting (via experimentation, data collection and analysis) and updating itself and therefore evolving in response to customer behavior (and needs). They conclude that this new technology including underlying business processes will result in radically reshaped companies and their competition, which in turn, suggests that the fundamental nature of industry itself will change.

3.4 The New Tools for Communication and Management

Social media has changed much within the travel industry and now is changing travel itself (Xiang and Gretzel 2010; Xiang et al. 2015). Perhaps most important is the realization that travelers, through the decisions they make, the photos they take, tweets and reviews they provide, control much of the travel market place. In response, the travel industry has been struggling to catch up by understanding how to communicate within this 'new' system. However, the advent of the sharing economy (exemplified by Airbnb.com and Uber) places communication, coordination and management with the customer at the center of the business model, thereby taking advantage of these emerging systems/capacities and points the direction for the tourism industry. Indeed, it is argued that one of the most important changes/developments over the past 40 years which supports tourism design relates to our ability to empower the traveler while the industry plays an unseen supporting role. The increasing power and sophistication of computer technology has now reached the point where it is embedded within a multitude of other technologies and therefore is essentially 'hidden' from the consumer. Examples of this evolution include apps on our smartphone which guide (i.e., make recommendations) the visitor to and through a destination; watches or bands or other similar devices embed within SMART clothing which track a range of human activities such as distance traveled, steps taken, heart rate or calories burned; as well as automobiles or smart highways which assist us as we travel. Recent articles highlight a new development whereby sensors are placed within shoes so to identify the location of the user, the extent which he/she is 'lingering' (essentially widow shopping) in or near a store so that nearby shops may send promotional offers to prospective customers. These systems have expanded and have become so pervasive and so powerful that Davenport (2013) argues the new customer relationship management systems (i.e., eCRM) have become THE dominant paradigm for customer management which emphasizes on-going communication throughout all stages of the trip BECAUSE they enable firms to build and maintain deep relationships with the

traveler. With this in mind, it is argued that the new eCRM tools and resulting processes focusing on the traveler journey provide essential new capabilities supporting the design of tourism places.

4   Thinking About Design Science in Tourism

As evident from this brief overview, the nature and process of design is both an art and a science. The artistic aspects of design are strongly linked to creativity and those aspects which seek to address the human condition. As a science, however, tourism design is a systematic process which is creative, iterative and discovery oriented. As such, many designers have outlined the basic stages (ranging from four to six steps) beginning with understanding and discovery, progressing to proposing solutions (i.e., developing a prototype artefact) and finally to evaluation and redesign. With this process in mind, it is argued that the basic principles of tourism design are applicable at any scale; that is, they can be used to design very small places (artifacts) such a park bench or, following the works of Professor Gunn, they can be used to guide the planning of city or region, both real or virtual; the same principles can be used to guide development of a theme park or a concert; and, the same principles can be used to design a new service such as Airbnb or a recommendation system or even a food truck. However, many examples show that the best places are those which mix art and science in ways that are unexpected, and which offer to somehow refresh the human spirit.

Importantly, design science in tourism is: (1) experience (human behavior) focused, (2) science based, (3) employs new tools and metrics; (4) systems oriented; (5) scalable from small to large settings; and, (6) action—constructive oriented. Since Clare Gunn first imagined the process of tourism design, it is argued that we now have progressed such that tourism design and the experience production system provides a useful framework within which to design and build new systems supportive of tourism experiences. The subsequent chapters of this book explicitly focus on each of the components of the tourism design system. In particular, they can be organized into four distinct but interconnected and mutually supportive parts. The first three chapters (Part 1) provide a rich and thorough discussion of experience and its connection to emotions. Interestingly, the wide range in our conception of experience is highlighted by many different interpretative lenses and the various strategies for its measurement. In particular, Kim and Fesenmaier (in chapter "Tourism Experience and Tourism Design") begin the conversation by arguing that visitor experiences and therefore visitor emotions vary continuously in response to changes in the environment. Volo builds upon this literature and providing essential discussion between liking tourism experiences and emotions. Scuttari and Pechlaner in chapter "Emotions in Tourism: From Consumer Behavior to Destination Management" further elaborate on the role of emotions, tourism experience, tourism design and tourism management, providing excellent foundation for future efforts (both research and application) in tourism management.

Rickly and McCabe in chapter "Authenticity for Tourism Design and Experience" continue the conversation, focusing more concretely on memorability and the importance of authentic experiences when designing (staging) tourism places (and experiences). Finally, Salmela, Valtonen and Miettinen provide a fun and intriguing description of the phenomenon of glamping through a case study of 'An Uncanny Night in a Nature Bubble: Designing Embodied Sleeping Experiences.'

Part 2 consists of three chapters and focuses on the tools for understanding and creating tourism experiences. Moscardo (in chapter "Stories as a Tourist Experience Design Tool") expands considerably on the work of Pine and Gilmore (1999) and their use of theatre as a metaphor to guide the design and management of tourism places. In particular, she provides a truly ground-breaking discussion of how stories provide the essential foundation for communication and therefore the staging process; she concludes this essay with what she calls "a story framework for tourism experience design" which includes a set of five principles that guide interpretation and implementation of this framework. In chapter "Destinations and Value Co-creation: Designing Experiences as Processes", Juergen Gnoth elaborates on the fact that tourism experiences are intrinsically a co-creation process which ultimately results in the creation of value, and then he highlights the current and often competing perspectives of experiences and service design. Gnoth ultimately concludes that a 'deep understanding' of this process enables tourism places to gain competitive advantage including destination brand equity. In chapter "Social Systems and Tourism Design", Mike Peters changes the conversation, or rather extends the focus of the conversation, on service design by highlighting the importance of various social systems which support the co-creation/experience creation process. Importantly, he argues that service design thinking and tourism design can be conceptualized as a three step integrative and interactive process which includes: (1) Tourism value chain analysis; (2) Cooperative behavior; and, (3) Tourism design activities, and concludes that service design thinking and value chain analysis are two primary requirements for successful tourism development.

The three chapters which comprise Part 3 focus on important and concrete components of the tourism production system. In particular chapter "Atmospherics and the Touristic Experience" presents the concept of atmospherics as a feature of the Servicescape. Anna Mattilla builds upon her extensive experience in hospitality and the emerging literature in this area to highlight the importance of various forms of stimuli (i.e., visual stimuli, aural stimuli, olfactory stimuli, and tactile stimuli) in creating visitor emotions (affect) which, in turn, lead to evaluation (including both cognition and behavior). She concludes the chapter by suggesting that with the growth of the internet (and related technologies) characterized as 'virtual atmospherics' will increasingly take an important role in shaping tourism experiences. Magnini in chapter "Designing Tourism Services in an Era of Information Overload" posits that information overload is an important factor affecting how visitors evaluate alternatives, and suggests that 'positive script deviations' are essential to creating high level consumer value (i.e., experience). As part of this discussion he offers ten concrete steps for 'creating a surprise culture among

frontline staff' and cautions us about the huge power of negative script deviations. The final chapter in this part is chapter "Technology and Behavioral Design in Tourism" wherein Tussyadiah provides an extremely thoughtful and provocative essay outlining the various roles technology can play in shaping the visitor experience. As part of this discussion, she contends that technology is an essential tool and design thinking is the process, which together establish the basis for a four-step 'toolkit' for tourism design which is rooted in design science research.

The next three chapters of the book (comprising Part 4) focus on the dynamic nature of the tourism system and offer a valuable insights into potential strategies for managing such complex systems. In particular, Beritelli and Laesser (in chapter "The Dynamics of Destinations and Tourism Development") focus attention on the dynamics of tourism management using case studies from Switzerland to document the huge variation in visitor flows and therefore the complex relationships among the various stakeholders. This truly pioneering perspective offers new and innovative strategies for flow-based planning and management. Zach and Krizaj (in chapter "Experiences Through Design and Innovations Along Tourism Points (EDIT)") offer the EDIT model to guide new service development which integrates the basic properties of travel behavior, design and innovation so as to establish the starting point for understanding and managing value creation for a variety of different stakeholders. The final chapter in this part (chapter "When Design Goes Wrong: Diagnostic Tools for Detecting and Overcoming Failures in Service Experience") is written by Dickinger and Leung wherein they recommend a series of five diagnostic tools which can be used to identify, understand and overcome services failures; they then through several examples clearly demonstrate how these tools can used successfully to manage tourist experiences.

In the concluding chapter of the book (chapter "Concluding Remarks: Tourism Design and the Future of Tourism") Joseph O'leary offers his views of tourism design and its progress over the past 40 years and where it will continue to advance. Dr. O'Leary has had an unprecedented view of the evolution of tourism design as a scholar conducting research in the area of environmental management, destination management and tourism marketing, teaching students about the environment, social systems, and destination management at Purdue University, and then heading the department at Texas A&M University where Clare Gunn (and his colleagues) first proposed the concept of the Vacationscape.

With this introduction, we are hopeful that readers will develop a new appreciation for the progress in tourism related research made over the past few decades, which now provides substantive guidelines for tourism design. Indeed, much like many true futurists, Clare Gunn long envisioned the day when we would have the tools to guide science-based development of tourism places. It argued here that this vision is finally realized through a paradigm which might be best characterized as Design Science in Tourism (DST). We truly hope that you enjoy reading this excellent collection of essays written by many of the leading tourism scholars, and that you find this information useful in guiding your work in tourism design.

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Tourism Experience and Tourism Design

Jeongmi (Jamie) Kim and Daniel R. Fesenmaier

Abstract This chapter argues that experiences are dynamic and emotional in nature and should be conceptualized as a series of 'micro-events' during the trip. Further, the advent of new sensor technology provides new tools for understanding the ways in which these experiences—events are perceived and the meanings created hold great promise in addressing a number of critical questions empowering the design of tourism places. We then describe traveler experiences through a series of case studies.

Keywords Tourism experience • Emotion • Events • Physiological response • Tourism design

1 Introduction

A meaningful 'experience' is seen as the main factor effecting traveller satisfaction, engagement, and long-lasting memory. Over the past decades, acknowledging the important role of experience in tourism has resulted in a large number of interpretations and descriptions of the term 'experience' (Pine and Gilmore 1998; Lockwood 2010; Poulsson and Kale 2004). With this research, the basic of concept of experience has been interpreted in many ways and its measurement has been the focus of much debate. Research in psychology, geography, landscape architecture, and tourism has focused mainly on stimulus-response relationships, and more recently, on information processing and decision-making processes (Lubart and Getz 1998). Because the nature of experience is temporal and psychological, it is argued in this chapter that the tourism experience has a vitality not captured by simply examining aspects of the tourist's internal factors (e.g., needs, motivations, prior experiences), external factors (e.g., physical environment, social environment), or outcomes (e.g., satisfaction, future behavioral intentions) separately. Rather, it (i.e., the tourism experience) should be understood as a part of a continuous creative process wherein travellers create (share or reshape) meaningful

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experiences across all aspects/activities which comprise a trip (Arnould and Price 1993; Aho 2001). Indeed, traveler's emotions, one's experience and its components change across time and space and the tourism experience should be considered as fleeting phenomena rather than stable attributes of an individual that come and go with the ebb and flow of the trip (Kuppens 2015).

This dynamic nature, however, poses substantial obstacles to understanding the true nature and structure of the tourism experience (Mannell and Iso-Ahola 1987). For decades, researchers have measured the tourism experience using the self-report method based upon the assumption that travelers' experiences during a trip are strong mediators of overall satisfaction (Bigne and Andreu 2004; del Bosque and Martin 2008) and behavioral intention (Bigné et al. 2008). This approach is strongly supported by Bagozzi et al. (1999) who found that verbally expressed self-report methods can be useful because: (1) They can be easily adapted to accommodate diverse reactions; (2) They afford anonymity and minimize reactive effects due to the physical absence of the observer; (3) Do not require special equipment; (4) Enable the researcher to reach wider samples; and, (5) Enable the research to measure both the direction (positive or negative), as well as the content of the emotions. However, there are a number of important limitations to this approach to measuring travelers' experiences. First, self-report measures can be (and, often are) subject to huge biases created by the respondent's ability to remember or explain (Wilhelm and Grossman 2010). Second, the timing and goal of the experience moderate the relationship between cognitive reappraisal and self-reported emotions (Russell 2003). Third, very few of studies in tourism have examined experiences after the trip whereby the results (i.e., the overall assessment) represent aggregate or summary appraisals of the events (e.g., Hosany and Gilbert 2010). Some studies have examined traveler experiences using an experience-based sample design approach whereby the visitor was asked to respond to the same questions at regular intervals throughout the visit (Graham 2008; Gretzel and Fesenmaier 2010; Tussyadiah and Fesenmaier 2009). However, even in these studies there is usually a significant time lag between the time of the experience and the reporting time and therefore are subject to potential bias.

With the advent of a variety of sensor technologies, a host of alternative approaches to measuring experiences are based upon neuro-physiological observations including facial-expression, eye-tracking, functional magnetic resonance imaging and skin conductance (Wilhelm and Grossman 2010; Kim and Fesenmaier 2015). Physiological measurement has been used in consumer research as early as the 1920s to measure advertising responses (Bagozzi et al. 1999) and is based upon automatic body reactions that are partially (or, largely) beyond an individual's control when encountering an environmental stimulus. Further, physiological measurements complement self-report methods in that they can provide systematic and moment-to-moment information on useful relations between particular stimuli (e.g., place, event or food) and elicited reactions in varying aspects of emotion on different time scales (Gretzel and Fesenmaier 2003; Sørensen 2008; Wilhelm and Grossman 2010). As such, it is argued that the study of experience should be understood as first a physiological process within the human body that can be

captured (i.e., measured) using a variety of new technologies and which can be used to capture traveller sensory experiences and other psychological responses in real time (Kim and Fesenmaier 2015; Carù and Cova 2003). We begin this chapter defining the concept of 'experience' within the context of tourism design by considering its epistemological foundation. We then outline the psychological basis of experience in tourism research through the use of a series of case studies.

2   Meanings of Experience

According to the Oxford Advance Learners' Dictionary, experience as a noun can be defined in four perspectives: (1) the knowledge and skill that you have gained through doing something for a period of time; the process of gaining this; (2) the things that have happened to you that influence the way you think and behave; (3) an event or activity that affects you in some way; and, (4) events or knowledge shared by all the members of a particular group in society that influences the way they think and behave. Experience as-a-noun refers to an action (e.g., observation and spatial participation in an event), an outcome (e.g., an emotional, psychological, or learning outcome), and entertainment (Ek et al. 2008; Hosany 2012). In this perspective, space and time of the actor (e.g., an attractive and dynamic artifact) the experience designer or the consumer of the event) is limited (Ek et al. 2008). However, Svabo et al. (2013) defines experience as "a process where people undergo the influence of things, environments, situations and events, and a wide range of materials play active roles as mediators of experience" (p. 316). Thus as a verb, experience refers to a process such as an emotional sensation (Ek et al. 2008) or a transformation process (Aho 2001). With this perspective, a traveller is considered an active agent tightly engaged in a series of experience creating processes. Further, experience is seen as "a mental journey that leaves the customer with memories of having performed something special, having learned something or just having fun".

   Importantly, the different interpretations of experience reference different spans of time (and space) as they cannot be separated from them (Nath 2004; Lindberg et al. 2014). As illustrated in Fig. 1, the concept of experience (as either a noun or verb) can be described as an instantaneous response to some event having just occurred; within this perspective, a trip may be comprised of many (perhaps millions or billions) micro-experiences (e.g., think of the many times one feels the wind and/or the sand and sun while at the beach, or the smells of a city such as Vienna, New York, Sydney or Beijing) which are 'assembled' using a variety of cognitive and emotion-based processes to create meaning. At the other end of the spectrum, one's experience is comprised of the multitude of micro or macro experiences, but these are 'capsulized,' 'summated' or accumulated through a lifetime into an overall assessment (Chronis 2006; Dewey 1934); an easy example would be to say that one is an experienced traveller because he/she has visited many international destinations. Finally, an experience may simply reflect a single event

Reflects an overall integration
of a life time

Reflects an instantaneous
response to the environment

Reflects an evaluation of
interaction at an event or trip
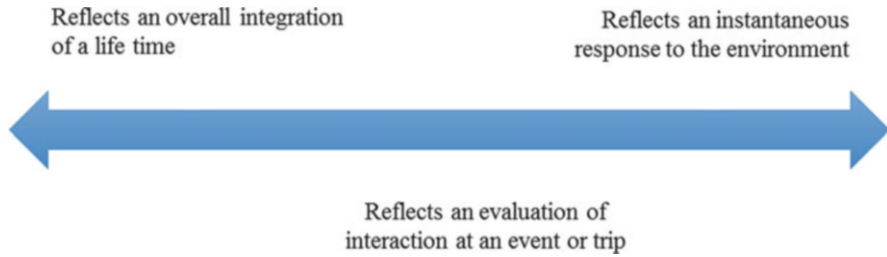
Fig. 1 The meanings of experience

within an overall trip (Gibson 1966; Tuan 1977); for example, one may indicate that a concert or visit to the zoo was an exciting experience.

3 Physiological Foundations of the Tourism Experience

Within the continuous framework, experience as a response to the environment is generally considered a systematic process which starts from detecting external stimulus to sensing and reacting to the stimulus, and bringing knowledge to the perceived situation (Hekkert 2006; Goldstein 2010). Thus, sensation is the first order of experience. According to the Oxford Dictionaries (www. oxforddictionaries.com), sense is defined as "a faculty by which the body perceives an external stimulus; one of the faculties of sight, smell, hearing, taste, and touch", and "a feeling that something is the case; an awareness or feeling that one is in a specified state". The first definition emphasizes the basic processes of detecting environmental stimuli such as light, sound waves and encoding those information into neural energy so that our brains can process and is referred to as 'sensation.' The second definition focuses on how people 'interpret' the stimuli and 'make' meaning from them and generally is framed within the mechanisms of perception.

As classified by Aristotle, it has been widely accepted that humans have five senses including vision, hearing, smell, touch, and taste. However, recent research suggests that human have more than basic five senses (Gardner and Martin 2000). For example, Gibson (1966) argues that people have exteroceptive (external) senses and interoceptive (internal). More recent findings suggest that human senses are physiopsychological systems consisting of a group of sensory cell types that not only respond to an explicit bodily phenomenon but also relate to a specific area in the brain (Craig 2002). Therefore, Craig (2002) suggests that interoceptive senses also should be recognized as important human senses. Although subject appreciation of some interoceptive senses such as balance, pain, temperatures are below perceptive thresholds, they affect (and are affected by) both emotional states and motivation (Damasio 2000; James 1981). Converging evidence from functional imaging studies suggest additional human senses which relate environmental stimulus and feelings, emotions and various activities (Craig 2002; Damasio 2000).

According to Jung (1981), the collective unconscious and complexes of collective unconscious create emotions and meaningful experience; hence, a big part of human experiences, especially sensory experiences, is not accessible for conscious awareness (Craig 2002). Thus it is argued, travellers' perceived senses are not direct records of the world around them. Rather, they are 'constructed' internally along with constraints imposed by the construction of the nervous system and its functional abilities (Gardner and Martin 2000). Hence, the notions of sensation and perception are complex "behind the scenes" processes (Goldstein 2010, p. 5). For example, taste buds in the mouth and olfactory receptor cells enable people to perceive the texture, temperature, and sweet taste of the dark-colored liquid. This is sensation. However, recognizing 'dark-colored liquid' as a 'hot chocolate'—that is, turning sensation into meaning—is perception. Of all kinds of environmental stimuli around us, people record limited information through receptor cells and process these information through brain. Thus, colors, tones, smells, and tastes that we experience are mental creations constructed by the brain out of sensory experience (Gardner and Martin 2000).

4   Emotion and Tourism Experience

Emotions are understood a result of interaction within the touristic environment (Hosany 2012; Kim and Fesenmaier 2015). Cognitive appraisal theories argue that emotions arise in response to an evaluation of an experience in relation to goals, motives or concerns produce (Frijda 1988). According to Roseman, Spindel, and Jose (1990, p. 899), emotions are "evaluations and interpretations of events, rather than events per se, [that] determine whether an emotion will be felt and which emotion it will be." Thus, cognitive appraisal theorists have tried to explain the antecedents of certain emotions and its effects on decision-making and memory (Hosany 2012). Further, they argue that emotions are produced by the cognitive processes that arise after comparing an actual state with a desired state rather than by actual events or physical stimuli (Ellsworth and Scherer 2003). In contrast, other researchers have focused on more internal and on-going processes of emotional responses (Zajonc 1980) wherein they argue that emotions may occur with minimum deliberation or even without cognition (Hoch and Loewenstein 1991; Zajonc 1980). Recent findings from consumer behavior research shows that human senses can be used as unconscious triggers which can result in emotional states without cognitive deliberation (Tussyadiah and Zach 2012). Thus, Izard (2009) argues that emotions should be considered as a phase rather than a consequence of the neurobiological activity or body expression of emotions, and that they are similar to the other neurobiological activity.

Within this perspective of experience, especially tourism experience, it is argued that experience is inherently emotional in nature and therefore is the outcome of an on-going meaning-making process (Russell 2003). The key principle is that emotional experience is not a single process, but rather is constituted by a collection of

more basic elements (Barrett 2006). It is often referred to as "emotional meta-experience", which means all its components produce low-level experiences in-of-themselves such as the sensation of smell, the surprising of new encounter which lead the felt arousal and valence and this interactional process continually (re) shapes one's tourism experience (Davidson and Milligan 2004). As Russell (2003, p. 165) puts it: "Emotional meta-experience is the construction of a coherent narrative, interpreting, packaging, and labelling the episode—thereby integrating this episode with general knowledge." Therefore, we argue that both tourism experience (and emotional experience) creation processes share the same logical address space (Hosany and Gilbert 2010).

Research confirms that emotions can play dual roles in tourism experience: antecedents and consequences (Hosany and Gilbert 2010). Firstly, emotions provide the basis to understand work motivation and acts as constraints on the current situation which then influence basic cognitive processes (Bagozzi et al. 1999). Based on the Affects-as-Information Theory, Clore and Huntsinger (2007) argue that people process information at different levels of detail based on their emotional states. For example, positive emotion leads to "global, category-level, relational processing" whereas negative emotion leads to "local, item-level, stimulus-specific processing" (Clore and Huntsinger 2007, p. 395). Further, positive evaluation can be induced by one's positive emotion because individuals tend to use their current emotional states as reference points (Clore and Huntsinger 2007). This research also shows that emotions influence our level of attention (which is referred to as motivational activation) wherein it "initiates a cascade of sensory and motor processes, including mobilization of resources, enhanced perceptual processing, and preparation for action" (Bradley 2009, p. 1). Further, in a series of studies based on Appraisal Tendency Theory, demonstrated that by stimulating a particular value through activating emotional states makes appraisal more accessible for the evaluation of certain objects/situations. Thus, a change in emotional states can be induced by internal physiological events or artefacts such as the influence of smoking on the brain or a sudden drop in blood pressure and further, Kleinginna and Kleinginna (1981) find that emotion can generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labelling processes.

5   A Framework of Tourism Experience Creation

Figure 2 describes a conceptual framework for the tourism experience creation process and can be seen as comprised of four levels: (1) A sensory level which is below the conscious level (Craig 2009); (2) A perceptive level which travelers are fully aware (Volo 2009) of those aspects effecting how they see and experience a place; (3) A cognitive and emotional level where travelers' brains, minds, and bodies actively respond to the world around them; and, (4) An action level where information transformation, learning, and memory occurs (Volo 2009). Thus, the tourism experience is based first upon embodied cognition and emotion and posits
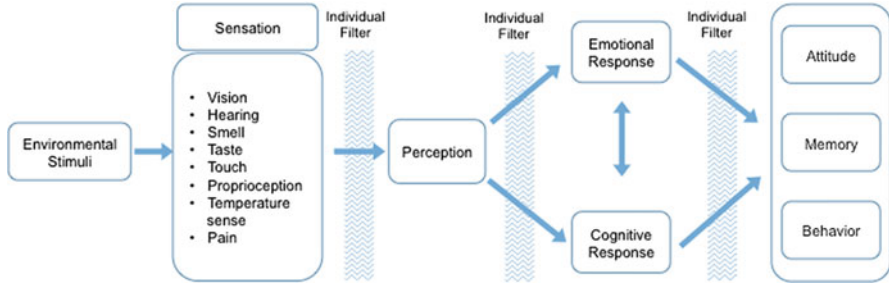
Fig. 2 Framework of tourism experience creation [adapted from Krishna (2012)]

that the sensory process begins with environmental stimuli affecting the human body's sense organs, the gates of the emotional and cognitive responses. While the tourism experience is the result of unconscious sensations and conscious perceptions during the trip (Volo 2009), outcomes of tourism experience process vary based on individual and situational filters (Sandström et al. 2008). Psychological filters such as goals, prior experiences, culture, or travel companions shape perceptions and they cause variations in the individual responses towards environmental stimuli. In other words, how people 'interpret' various stimuli and 'make' meaning from them accounts for the underlying mechanisms of the perception, whereas the basic processes of detecting environmental stimulus such as light, sound waves and encoding those information into neural energy so that our brains can process is referred to as 'sensation' (Goldstein 2010). Further, sensations occur before our conscious mind can evaluate or attach significance to current situations.

The framework of the tourism experience creation process is based upon general models of human-environment interaction and expands the scope/role of information-processing. Importantly, this framework is psychologically sustainable and multidimensional, emphasizing all five subsystems—sensation, perception, emotion and cognition, and behavioral outcomes and memory. With a wide array of fundamental psychological characteristics, the framework provides a basic description of the experience creation process and the mechanisms responsible for translating 'objective' (i.e., sensation) into subjective meaning (Takatalo et al. 2013).

6   The Tourism Experience and Tourism Design

If we focus on a single event resulting from an interaction with a place or an object, then understanding and designing an experience may be easy. All we need to do is to identify what the environmental stimuli are and how one processes it psychologically. However as emphasized previously, tourism experiences should to be considered as an on-going dynamic and reflective process involving a series of 'micro-experiences' which, in turn, produces a series of sensory, emotional,

cognitive, behavioral and social outcomes (Schmitt 1999). Designing tourism places within this perspective of the tourism experience requires new approaches to the measurement various psychologically relevant aspects of tourism experience. The following provides two studies which describe traveler experiences as measured by emotional response to stimuli within substantially different contexts using biophysical responses to stimuli.

6.1 The Dynamics of Visitor Emotions in Philadelphia

A case study of city tour bus riding in Philadelphia, Pennsylvania describes the emotional experiences of two travelers during a four day visit to Philadelphia in real-time. As described in Kim and Fesenmaier (2015), they were exposed to a range of events and places during the trip and their physiological arousal data using skin conductance responses were collected simultaneously. For this study, we used the Affectiva Q-sensor to measure EDA based upon the premise that, when one becomes mentally, emotionally, or physically aroused, a response is triggered in one's skin; this response is described as EDA and can be used as an indicator of one's level of excitement or relaxation (Strauss et al. 2005). It is a wrist worn, wireless sensor (two electrodes are placed on the ventral side of the arm) that measures EDA for 24 hours with a sampling frequency of at 2, 4, 8, 16 and 32 Hz. It has been shown to produce stable and comparable results across a range of environments and location. The EDA data were then combined with post hoc interviews including time, locations, activities and perceptions to aid interpretation. The follow-up interview revealed that travelers could recall only certain events from the entire trip (i.e., visited murals, riding a tour bus etc.). On the contrary, their arousal data (Fig. 3) shows much richer information documenting their response to the many stimuli they experienced throughout their visit to Philadelphia: the visitors exhibited substantial variation in emotions depending upon the places visited, their activities, and the people they met. Also, the two visitors responded differently to the environment throughout the four-day period. In sum, traveler's body and sensory experiences are continuous (Dubé and Morgan 1998; Kang and Gretzel 2012). The study demonstrates how one's sensations, perceptions, as well as emotions and cognitive responses can vary substantially across time and space.

6.2 Evaluation of Online Tourism Advertising

Next, we take a look at how people draw meaning from a story (i.e., something that they are reading, seeing or experiencing) provided within online destination marketing websites. Since TV/online tourism advertising can be considered a series of audio-video messages, this lab-based study focuses on the viewer's perceived experiences while viewing different destination online ads (e.g., Utah, Louisiana,
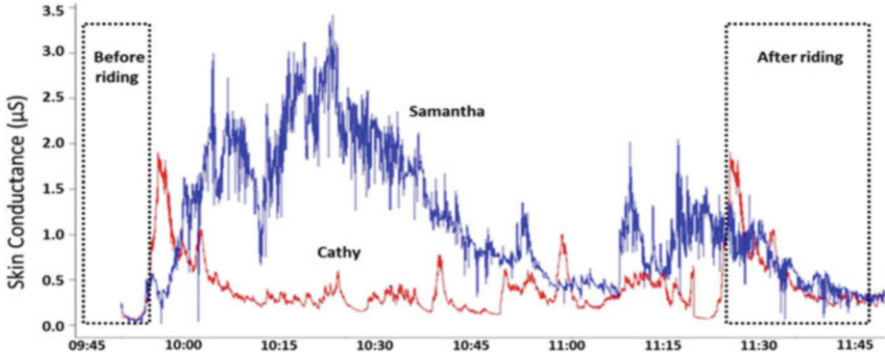
Fig. 3 Two travelers' arousal (emotion) data of tour (Kim and Fesenmaier 2015)

Fig. 4 Mapping Utah's advertising with EDA data

Oregon, and Ohio). Specifically, ten participants viewed four different online ads in random order and their physiological arousal data (EDA) and self-reports data were collected during the experiment. In this study, even though the online ads for both Oregon and Utah contain similar images (e.g., mountain, hiking course), the patterns of arousal data are completely different.

Combined with self-reported data and image data from actual destination ads, the results indicate that online ads which evoke dynamic emotional response (e.g., Fig. 4) are more effective at obtaining higher positive outcomes and better attitude toward ads than monotonic or decreasing ones (e.g., Fig. 5) (see Table 1). Also, the findings from this study indicate that simple scene changes are not sufficiently salient to affect the meaning-making of story at least for participants used to viewing online advertising.
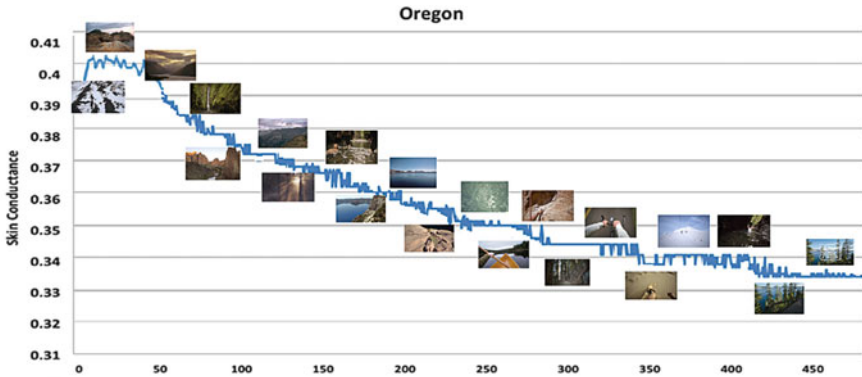
Fig. 5 Mapping Oregon's advertising with EDA data

Table 1 Means for verbal self-report measures

	Utah		Oregon		Louisiana		Ohio	
	M	S.D	M	S.D	M	S.D	M	S.D
Positive emotion	4.4	0.70	3.8	0.79	4.2	0.84	3.4	0.94
Negative emotion	1.3	0.48	2.2	0.84	1.8	0.42	2.0	0.67
Attitude toward ads	6.4	0.97	4.4	1.16	6.1	0.87	4.7	0.96

7 Concluding Remarks

The tourism experience is subjective, multidimensional and provide a vital foundation for the design of tourism places. What constitutes an experience, however, has long been debated. In this chapter, we argue that experience is a continuous process which shapes and reshapes itself through interaction in time and space. Further, we argue that experiences are initiated through sensing using basic human physical capabilities and translated into meaning through three subsystems—perception, emotion and cognition and translated into behavioral outcomes and memory. Finally in this chapter, we argue that with the advent of new technology it is now possible to identify key moments in real time that become meaningful, and the measurement of these key moments provide new essential information for tourism design. We illustrate our conception of experience and its measurement within the context of tour bus riding and a lab-based study of online advertising and found that patterns of emotional response can be very powerful indicators of meaningful experiences. Thus, the emergence of new tools for real-time measurement and multi-data analysis provide a useful new framework for designing tourism places and experience.

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Emotions in Tourism: From Exploration to Design

Serena Volo

> *Traveling tends to magnify all human emotions*
>
> Peter Hoeg

Abstract In the era of value co-creation, meaningful tourists' experiences are the result of individuals participating in the creative process. The emotions that tourists raise during their vacation have a pivotal role in their final cognitive evaluations and behavioral responses: only truly personalized and unique co-creation experiences are going to thrive in the competitive marketplace. This study reviews the literature on emotion focusing on its nature, breath, depth and intensity and discusses them within the tourism experiences framework to conclude by outlining the relevant connections to tourism experience design. Implications and suggestions for future theoretical and empirical studies are then discussed.

Keywords Tourism emotion • Experience • Emotions measurements • Tourism design

1 Introduction

Emotions permeate tourists' experiences and guide their responses to external stimuli affecting attitude, behavior and memory. Emotions are seen as "fleeting phenomena rather than stable attributes of an individual that come and go with the ebb and flow of daily life" (Kuppens 2015, p. 297). Tourism experiences are fundamentally shaped by emotions (Kim and Fesenmaier 2015) and they leave travelers with a newborn's gaze; emotions contribute to experiences processing onsite and affect the creation of long-lasting memories, thus influencing future behavior and travel choices. In this vein, tourism emotions are transitory occurrences that trigger tourists' approach to vacationing, their deeds during the holiday and their lifelong travel memories. Used by individuals to assess their interest in repeating certain experiences emotions are also shared with others through

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storytelling, thus becoming powerful motivators of future behavior for the self and for others. Fleeting but powerful, emotions are associated with individuals' past experiences and related to personal mental association. Thus, the direction and the strength of emotional responses to stimuli can differ significantly from one tourist to another, leading to a variety of responses. The peculiar nature of emotions poses several challenges to tourism scholars and to the tourism and hospitality industry alike. The role of emotions has been investigated in different tourism settings and with different methodologies (Bigné and Andreu 2004; Graham 2008; Tussyadiah and Fesenmaier 2009; Hosany and Gilbert 2010; Kim and Fesenmaier 2015), but the tourism emotion literature remains at germinal stage and the role of emotions' as antecedents and consequences ought to be further investigated. The recent interest in the contribution of emotions to tourism experiences is also well justified by the needs of the industry to use scholarly findings to better design services and products. Tourism experiences are a bundle of perceptual, cognitive and emotional aspects and tourists' behaviors are strictly influenced by them (Oh et al. 2007). Thus, destinations and tourism providers ought to engage tourists effectively as by engineering positive emotions they can create enjoyable and memorable experiences. Indeed, knowledge about tourists' emotional touch points, the type and variability of emotions at tourism destinations and attractions, the strengths of emotions during vacations' activities can provide useful information to effectively design tourism experiences. This chapter first reviews and discusses the recent emotion literature, presenting the consensual viewpoints and highlighting the diverse responses to critical questions about the structure of emotions. Then to inform the analysis of emotions in tourism experience design, three different but related aspects are discussed: (1) the breath of emotions; that is their type, range or variability, (2) the depth of emotion; that is the intensity of their strengths, and (3) the responsiveness to emotions; that is the degree with which tourists react to changes in their context. Conclusively, the role of emotions for vacationers is discussed as to offer suggestions to tourism providers and destinations on the design of experiences that can elicit certain emotional responses.

2 Emotions: Definitions, Characteristics and Structure

Defining, analyzing and measuring emotions are challenging tasks. The debate on emotions currently present in the tourism literature mirrors only partially the development in emotional research. Theoretical and empirical investigations in psychological research have moved along two complementing paths: identifying the consensual viewpoints on the nature and characteristics of emotions and highlighting the diverse responses to critical questions about the structure of emotions. Most available definitions agree on the complexity of the construct and on three basic characteristics: a subjective experience, a physiological response and a behavioral one (Kleinginna and Kleinginna 1981; Hockenbury and Hockenbury 2007). However when digging into the literature definitions differ across

disciplinary boundaries with lack of agreement (Mulligan and Scherer 2012). Within the emotion's community, definitional issues have been addressed by several scholars and Izard (2010) concludes by stating that emotion "has no generally accepted definition" (p. 370). Shuman and Scherer (2015) consider emotions as a particular kind of affective phenomena having three characteristics: (1) they have an "event focus" (Mulligan and Scherer 2012, p. 346); that is emotions are triggered by events either actually occurring or imaginary or even remembered; (2) they last a short amount of time, and the length is influenced by personality and situational factors; (3) emotions are made by different components: subjective feeling, cognitive appraisal, action tendency, and motor expressions. Evolutionary and social influences alike contribute to emotions: in confirming the joint role of these factors in determining emotions Shuman and Scherer (2015) pose the central question of the strength they exercise on emotions. Furthermore, Shuman and Scherer (2015) highlight other central issues debated in the emotion literature: the difference between the emotional and non-emotional episodes (Scherer 2009), the characterization of the emotion space (Moors 2009) and roles and interrelations among components of emotions (Izard 2007; Russell 2003).

The theoretical perspectives on the relationship among the components of emotions have been addressed by the four diverse groups of family theorists: basic emotion, appraisal, social constructionist, and nonlinear dynamic system theorists (Shuman and Scherer 2014, 2015). The four controversies that permeate the current debate on emotions are addressed by the different theorists in different ways as summarized in Table 1. These controversies among the different theorists have enriched the study of emotions and contributed to build complementary bodies of knowledge about emotions so that more integrative approaches to the study of emotions have recently emerged (Shuman and Scherer 2015). Furthermore, several advancement in neuroscience have recently provided the methodological tools to assist theorists involved in the study of emotions (Scherer et al. 2010). Finally, while scholars will certainly continue to discuss the critical issues herein analyzed as they are central to the understanding of the construct, others will venture in the new field of affective sciences which includes scientists from diverse fields and is valued as quite promising (Sander and Scherer 2009; Shuman and Scherer 2015).

3   Emotions in Tourism Research

The tourism literature of the last decade has dedicated unparalleled attention to the role and assessment of emotions in a variety of settings (Bigné and Andreu 2004; Hosany and Gilbert 2010; Prayag et al. 2013; Hosany and Prayag 2013). The role of emotions at different vacation stages has been investigated: (1) at the decision-making stage, emotions are crucial as they might direct towards certain destinations (Walters and Sparks 2012); (2) during the holidays, emotions are decisive components of memorable experiences (Aho 2001); (3) after the experience, it is agreed that emotions shape future behavioral intentions (Tsaur et al. 2007). Furthermore,

Table 1 Critical emotions' controversies among different theorists

	Basic emotion theorists (Ekman 1992, 1999; Izard 2007; Panksepp 1998; Plutchik 2001)	Appraisal theorists (Ellsworth and Scherer 2003; Roseman et al. 1996; Scherer 2009)	Social constructionist theorists (Barrett 2006; Russell 2003)	Nonlinear dynamic system theorists (Camras 2011; Fogel et al. 1992; Lewis 2005)
Roles and inter-relations among emotion's components (feeling, action tendency, appraisal, motor expression and physiological activity)	Components are seen as occurring jointly.	Appraisal precede and causes changes in the other four emotion components.	Emotions are made of subjective feeling (seen as core affect) with none, few or all other components.	Any emotion component can cause changes in the others.
Difference between the emotional and non-emotional episodes	Emotional states are characterized by the joint activity of all components	Emotions occur when an event is seen as highly-relevant as result of appraisal	Emotion occur if registered/recognized by conceptual knowledge	Emotions are associated with motivational charge
Strength of evolutionary and social influences	Convergence on the evolutionary approach, thus emotions are universally shared	The link between appraisal and other emotion components is shaped by evolutionary pressure	Only subjective feeling (core affect) is a result from evolution whereas social pressure determines the boundaries of emotions	Evolution has determined both the ability to reach self-organized systematic patterns of emotions
Characterization of the emotion space	Emotions are discrete. There exist between 3 and 11 basic discrete emotions and others are variants.	The emotional space is made of underlying appraisal dimensions (made of an unlimited number of emotions).	There is an underlying valence and arousal dimension at the core affect level	The emotion space is structured in relation to control parameters related to an unlimited number of emotion components patters

Source: Adapted from Shuman and Scherer (2014, 2015)

emotions and their role on tourists experiences have been studied in different tourism and leisure contexts for example in: theme parks (Bigné et al. 2005), restaurants (Han and Jeong 2013), shopping settings (Yuksel 2007) adventure tourism (Faullant et al. 2011) and festivals (Grappi and Montanari 2011).

   A recent study reviews the current methods used to measure the emotions produced by tourism experiences (Li et al. 2015) and reveals that self-reported measurements of emotions are the most commonly used methods to study

Table 2 Some recent contributions to the study of tourism emotions

Methodology	Focus	Modalities	Authors
Tourists' self-reported measures	Subjective interpretation of emotions	E.g.: questionnaires, diaries, interviews	Hosany and Gilbert (2010), Prayag et al. (2013), Lin et al. (2014)
Psychophysiological responses	Automatic body reactions	E.g.: electrodermal activity, hearth rate	Kim and Fesenmaier (2015)

emotions. Despite the low cost and the easiness of application, several shortcomings permeate this type of measurement for example the possible distortion of emotions due to the delay in collecting the data. Thus, strong interest has recently been posed to real-time psychophysiological methods to capture tourists' emotions (Kim and Fesenmaier 2015). Table 2 presents some of the recent contributions in the tourism emotions research pointing out the different methodological approaches, focuses and modalities. Using available tourism research that focuses on emotions, the next section provides an overview of three different but related aspects: the breath of emotions (type, range or variability), the depth of emotion (intensity of their strengths) and the responsiveness to emotions (the degree with which tourists react to changes in their context).

4 Emotions' Breath, Depth and Responsiveness

Interpreting the complex and delicate tourists' experience is certainly not an easy task for researchers and even more challenging is to collect, interpret and meaningfully use emotion data.

Lin et al. (2014, p. 417) point out how "confusion concerning the structure of emotions has hampered the full interpretation and use of emotions in tourism research" and they suggest that attention should be paid to the dynamics of emotions before collapsing them into abstract dimensions. Indeed, for Kuppens (2015, p. 297) emotions "continuously evolve across time in different forms and shapes, can linger on from one moment to the next, vary in duration". Thus, emphasis ought to be put on the time-dynamic of emotions (Kuppens and Verduyn 2015). Which have been studied for too long in a static manner.

Psychology-based self-report measurements of emotions have been extensively used in the study of tourists' behavior and scales emerging from both the basic emotion and the dimensional approaches have been used (Li et al. 2015). The commonly used scales are: the pleasures, arousal and dominance (Mehrabian and Russell 1974), the differential emotion scale (Izard 1977), the eight primary emotion scale (Plutchik 1980) and the positive affect and negative affect scale (Watson et al. 1988). Table 3 summarizes the emotions in each of these approaches. Both approaches, basic and dimensional, have been explored within the tourism literature either in their original form or in a modified version (e.g.: Zins 2002;

Table 3 Four commonly used emotion scales

Basic emotion approach		Dimensional approach	
Differential emotion scale (Izard 1977)	Eight primary emotion scale (Plutchik 1980)	PAD (Mehrabian and Russell 1974)	PANAS (Watson et al. 1988)
Guilt, shame/shyness, fear, contempt, disgust, anger, distress, surprise, enjoyment, interest	Surprise, expectancy, disgust, acceptance, sadness, joy, anger, fear	Pleasure, arousal, dominance	Attentive, interested, alert, enthusiastic, excited, inspired, proud, strong, determined, active, upset, distressed, hostile, afraid, irritable, scared, ashamed, guilty, nervous, jittery

Bigné and Andreu 2004; Bigné et al. 2005; White and Scandale 2005; Faullant et al. 2011; Matzler and Faullant 2011; Lin et al. 2014). A recent study criticized the direct applicability of such scales into the tourism domain (Li et al. 2015) and calls for psychophysiological measures to be used. Still, much can be learned by analyzing the self-reported literature as to progress this field of research.

A first area of interest in looking at the scales is that of their breath (type, range or variability of emotions). Most commonly used scales include positive and negative valence (types of emotions expressed) and for each type of emotion several dimensions are usually identified (e.g.: see the Hosany and Gilbert 2010). However, little information is provided on the tourists' ability to flexibly switch among a broad range of positive and negative emotions (range or variability of emotions). The self-reported nature of most studies does not allow to understand the interplay between negative and positive emotions. Furthermore, in many studies tourism scholars use only positive emotions reducing the valence of tourists' emotional space. Given the high number of interrelated service encounters during the holiday experience, both positive and negative emotions can be triggered (Hosany and Gilbert 2010) and more research is needed to assess the different types of emotions. Moving away from post-consumption evaluations, alternative approaches based on psychophysiological responses are developing (Kim and Fesenmaier 2015) and can lead to recording of moment-to-moment information on the emotional state of tourists, thus providing a more complete picture of the types of emotional responses associated with specific touch-points and even with negative service encounters.

Another relevant aspect in the study of emotions is that of their depth; that is the intensity of their strengths. Table 4 presents—with reference to a set of recent tourism studies—the extent within which the used scales move. The scales used in tourism studies are certainly based on validated scales used in consumer behavior and in the emotion literature, nevertheless tourism scholars rarely discuss the issue of emotion's intensity as one of relevance in the study of tourism. It is evident that in self-reported studies the scales are chosen by the researcher whereas in studies that apply psychophysiological responses, the levels of arousal, the patter and the

Table 4 Depth of emotions in selected tourism studies

Hosany and Gilbert (2010)	Faullant et al. (2011)	Lin et al. (2014)	Kim and Fesenmaier (2015)
7-point Likert-type scale (from 1 = not at all to 7 = very much)	5-point Likert scale (from very slightly to extremely)	Scale from 1 to 5	Determined by the electro-dermal activity

peak points are recorded by the used instrument (e.g.: skin conductance in Kim and Fesenmaier 2015). Still, the intensity of emotions (flat, blunted, exaggerated) is hard to capture in tourism studies and—given the high variability with which individuals react to stimuli—more attention is needed in this area of investigation.

Finally, a significant aspect is that of individual responsiveness to emotions; that is the degree with which tourists react to changes in their context. This areas also relates to the study of emotion patterns, regulation and inertia. In tourism studies that have used a self-reported measure of emotions there is no mention of responsiveness (responsive or unresponsive to the stimuli) as those studies are investigating post-consumption experiences. In Kim and Fesenmaier (2015) there is no explicit mention to this relevant issue, but implicitly the authors do consider the responsiveness of the two participants to several stimuli. Psychophysiological responses can certainly answer to many questions related to the tourists responsiveness and can help in the study of the emotion patterns and might assist in detecting anomalies in the emotional responses (emotional resistance and the general failing of emotion regulation goals and efforts).

5 Concluding Remarks

This overview of methods used in the investigation of emotions within the tourism literature shows that self-reported approaches are not rendering an appropriate picture of tourists' emotional responses to holidays, as stated also by recent contributors to the study of emotions in tourism (Kim and Fesenmaier 2015; Li et al. 2015). Overall, tourism studies use available emotions' scales and move within the established sets of emotions with some occasional modifications. The thread of destination emotion studies (Hosany and Gilbert 2010; Hosany and Prayag 2013; Prayag et al. 2013; Hosany et al. 2015) is certainly tailored towards the specificities of tourism albeit moving inside the established sets of emotional valences. Promising are the features of the psychophysiological responses methods (e.g.: Kim and Fesenmaier 2015) as they can provide alternative and complementary snapshots on the tourists emotional space identifying by continuous measurements the responses to tourism stimuli (e.g.: attractions, places, events). Furthermore, recent studies pose increasingly attention on how emotions vary during holidays (Nawijn et al. 2013), reinforcing the idea that measuring emotions only at post-consumption stage is not enough to render a full picture of tourism

emotions. The knowledge of the emotional tourists' space is essential in designing services which enable providers to relate with tourists in personal and memorable ways creating moments of engagements (i.e., service touch points) (Tussyadiah 2014). Careful construction of the tourism' environment will help providers to connect and engage with tourists, thus creating emotional bonds. Certainly, when vacationing, individuals seek satisfying, pleasurable and memorable experiences: tourism providers can—by carefully designing touch-points—amplify tourists' emotions. Indeed, it is argued that congruity with tourists' goals realization can elicit positive emotions while incongruity can generate negative emotions (Hosany 2012). In this line, tourism can recharge tourists with positive emotions as tourism providers proceed with what can be called the *emotionalisation* of tourists' experiences. Still, most of the available tourism literature confines holiday emotions' types within the well-known scales, provides limited information on the emotional range and does not mention the responsiveness to stimuli. Lin et al. (2014, p. 417) points out how the "confusion concerning the structure of emotions has hampered the full interpretation and use of emotions in tourism research." Izard (2009) affirms that emotions should be considered as a *phase* instead of being seen as consequence of neurobiological activities. The very nature of emotions, seen as a phase of one's living experience, calls for investigations on: (1) the reference points in individuals' emotional states—emotions in the non-tourism space—and how they affect the type/valence of emotions during the holidays, (2) the intensity of emotions generated by specific attractions, events, locations and the awareness of the individuals with respect to a possible match between stimuli and emotions; and (3) the changes in specific emotions during a vacation and the effect of traveling habits. The knowledge of these emotion elements and the orchestration of appropriate service encounters can ensure that tourism experiences can be designed as to stimulate tourists' interaction with the physical, social and virtual elements of the destinations that can enhance their emotions. Presenting alternative ways used to study emotions, this chapter contributes to our understanding of different viewpoints used in tourism literature as to isolate useful insights to design tourism experiences.

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Emotions in Tourism: From Consumer Behavior to Destination Management

Anna Scuttari and Harald Pechlaner

Abstract We argue in this chapter that tourism practice is emotionally charged, but tourism research is less so. In fact, emotion research in tourism was mostly borrowed from marketing studies, which limits its application mainly to customer satisfaction and customer loyalty issues. Little is known as yet about the complex nature of the emotion concept and the dynamic relationship between tourist experiences and emotional states. Therefore in this chapter we aim to: (1) clarify the emotional concept and the underlying theories in modern psychology; (2) identify the crucial connections between tourist experiences (pre-, on-, and post-trip) and emotional states; and (3) assess the main domains of interest for future emotion research in tourism. We propose a conceptual framework to bridge consumer behavior and destination management/marketing research through studying emotional states. Further, we argue that human interactions between host and guest (as well as among guests), emotional valence of tourism activities (and on-line behaviors), as well as attention to eliciting emotion in destination marketing/ branding and service design are the main issues for a future research agenda. To investigate these issues, combined use of (qualitative) self-reported techniques and (technologically advanced) observation techniques will be crucial.

1 Introduction

Emotion has gained increasing importance in tourism research (Hosany and Prayag 2013). Nevertheless, its application to tourism studies has been sparse and fragmented (Nawijn et al. 2013), due to the absence of well-structured interdisciplinary approaches. In fact, the adoption of emotion-related contents in tourism studies has arisen through marketing research (mainly customer satisfaction

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research) and not directly through psychological studies. This has led to very limited implementation of the concept of emotion, as well as paying less attention to the implication of different theories, measurement methods and definitions in tourism. Moreover, the issue is further complicated by the interchangeable use of emotion-related terms (emotion, mood, feeling) in tourism and marketing research (Bagozzi et al. 1999; Hosany and Gilbert 2010), as well as the underexplored relationship between these and the *tourist experience* (Pearce 2009).

In this chapter, we summarize the salient aspects of emotion research in modern psychology and provide an interpretative framework to apply these aspects to tourism in a structured, extensive way. Thus we bridge the gap between traditional tourism demand research on emotions (consumer behavior) and potential destination management and marketing research. We find that deeper analyses are needed, both in consumer behavior and in destination management and marketing, as well as at the interface between the two. Future research concerning these aspects will open up new horizons not only for product development and service design strategies, but also for tourism promotion and on-/offline communication.

2 Emotions: Understanding the Black Box

Emotions are complex constructs borrowed from evolutionary and psychological studies and more recently from cognitive psychology. Etymologically, the word emotion finds its roots in two Latin words ("ex-" and "movere"), meaning "to stir up" or "to disturb" (Donada and Nogatchewsky 2009). Hockenbury and Hockenbury (2007) define an emotion as "a complex psychological state that involves three distinct components: a subjective experience, a physiological response, and an expressive response." These *responses* occur in relation to external impulses, so that one common definition of emotion is "a valenced reaction to events, agents or objects" (Ortony et al. 1988, p. 202). Despite these seemingly simple definitions, the nature of emotions is complex and not univocal in research (Bagozzi et al. 1999, p. 202). In fact, depending on the referenced literature, emotions might be interpreted as processes in continuous change over time (Ellsworth and Scherer 2009, p. 202) or global feelings (Lee et al. 2007). Additionally, marketing research distinguishes between emotions and consumption emotions (Havlena and Holbrook 1986). Consumption emotions correspond to the affective responses generated specifically during product usage or consumption experiences (Havlena and Holbrook 1986, p. 564; Davidson et al. 2009; Han et al. 2009). They are less intense than other emotions, but more specific and narrower in terms of characteristics, although several might be experienced at the same time, as is generally the case with emotions (Han et al. 2009; Hosany and Gilbert 2010). A critical issue that adds complexity to emotion research is the interchangeable use of the terms *affect*, *emotion* and *mood* (Hosany and Gilbert 2010). To make our approach clearer, we will distinguish these terms from emotions below.

2.1 Affect and Moods

Affect is "an umbrella term" (Hosany and Gilbert 2010, p. 515) for mental feeling processes referring both to mood, emotion and feelings (Cohen and Areni 1991). According to Russell and Carroll (1999) affect differs from cognition in that it has a subjective and emotional nature.

> By affect, we have in mind *genuine subjective feelings and moods* (as when someone says, 'I'm feeling sad'), rather than thoughts about specific objects or events (as when someone calmly says, 'The crusades were a sad chapter in human history').
>   Russell and Carroll (1999, pp. 3–4).

Emotions, together with moods *are* affects. Nevertheless, *moods* are considered to be of longer duration and of lower intensity than emotions (Bagozzi et al. 1999, p. 202; Hosany and Gilbert 2010, p. 514). Moreover, moods are usually unintentional—i.e. not related to an external stimuli—and they tend to be global and pervasive (Frijda 1993), whereas emotions are typically intentional—i.e. responding to a precise object or referent-based stimulus—and more intense (Lee et al. 2007, p. 202).

3 Emotion Research: Theoretical Approaches

Several emotion research theories have developed, starting in the nineteenth century and dating back to Darwinism and evolutionary psychology (Adelmann and Zajonc 1989). For the sake of brevity and in order to focus on those theories that have influenced tourism research, we will only concentrate on modern psychology theories. These can be basically classified into two groups, according to their reference to emotion content or emotion structure (Laros and Steenkamp 2005, pp. 1437–1438). Emotion content refers to the nature or type of response (physiological, affective, expressive) to a stimulus and to the sequence of these responses across time; in contrast, emotion structure refers to the relationship between different emotional states and their (possible) belonging to a general global feeling.

3.1 Content-Related Theories

Theories dealing with emotion content aim to understand the relationship between the three types of reactions connected to an emotional state: the physiological response, the expressive response and the subjective experience. Some of these theories involve cognition (cognitive theories), some do not (non-cognitive). Among those including cognition processes, the appraisal theory of emotions (Roseman 1984; 1991; Lazarus 1966) and the affect-as-information theory (Clore and Huntsinger 2007) are the most recent, and have the widest application in market

and tourism research. The *appraisal theory of emotions* is based on the assumption that different people can have different types of emotional reactions (as well as no reaction at all) to the same stimulus (Bagozzi et al. 1999). It is the interpretation of an event (the *appraisal* process) rather than the event *per se* that determines the kind and intensity of the emotional response. The appraisal process might happen consciously or unconsciously and it is influenced by different determinants, such as motivational or situational states, probability, legitimacy, and agency (Roseman 1984). All these conditions and the subjective appraisal process determine, in a second moment, an expressive response, which is supposed to be part of the emotional response.

Appraisal Theory has some affinity with the cognitive-centered expectation-disconfirmation paradigm in customer satisfaction research (Oliver 1980)—where satisfaction results from the comparative process between expectation and performance—and it is seen as a complement to this theory (Han et al. 2009). As a result of the interaction between appraisal theory and expectation-disconfirmation theory, the affective component of satisfaction has become acknowledged (del Bosque and Martín 2008), and the significance of consumption emotions has been tested in several research fields (Han et al. 2009).

In contrast to appraisal theories, *affect as information theories* postulate that "affect assigns value to whatever seems to be causing it" (Clore and Huntsinger 2007). In other words, the interaction between affective state and cognition in this case happens in the opposite direction: emotional states can influence the way cognitive processes occur, in that they create a biases for interpreting external stimuli. Affect-as-information theory has been widely tested in different psychological experiments, and evidence suggests that positive affective information promotes, and negative affective information inhibits cognitive responses (Clore and Huntsinger 2007).

At least two additional theories can be mentioned in the wide range of approaches to emotional research in modern psychology: the *James-Lange theory* (James 1884) and the *Cannon-Bard theory* (Cannon 1927). Both do not consider cognition to be part of the emotional response, but rather focus on physiological or expressive responses to stimuli. The James-Lange theory assumes that subjective experiences arise as a reaction to physiological arousal, while the Cannon-Bard theory argues that neither influences the other, but rather they happen simultaneously. These theories have been used to test physiological reactions to stimuli (e.g. facial expression) (Adelmann and Zajonc 1989).

3.2   Structure-Related Theories

There are two diverging approaches to emotional structures: the *categorical theories* of emotion (Izard 1977; Plutchik 1980) and the *dimensional theories* (Izard 2009, p. 35). Based on these two, a third and more recent approach was developed: the *hierarchical theory* (Laros and Steenkamp 2005).

Categorical theories (Hosany and Gilbert 2010, p. 35) assume that emotions are a limited number of discrete entities and that they represent "unique experiential states that stem from distinct causes and are present from birth" (Izard 1977). These types of emotions are supposed to be produced without any interaction with cognition (Ellsworth and Scherer 2009) and they can only be experienced separately. Scholars have developed several scales to measure emotions as discrete entities: Plutchik's (1980) ten primary emotions, Izard's (1977) Differential Emotion Scale (DES), Mehrabian and Russel's (Mehrabian and Russell 1974) Pleasure, Arousal and Dominance (PAD), and Watson's Positive Affect and Negative Affect Scales (PANAS) (Watson et al. 1988). This perspective was criticized, arguing that more than one emotion can be experienced at the same time (Lee et al. 2007) and this was the premise for an alternative approach, the dimensional approach.

Dimensional theories understand emotions as subjective experiences and global feelings. Emotions are therefore not classifiable into a limited number of affective states, but rather an infinite range of emotional states evaluated according to a multidimensional perspective. Two or more dimensions may exist to evaluate emotions according to these theories (e.g. valence and activation/arousal (Ellsworth and Scherer 2009) or alternatively pleasantness, excitement and tension (Wundt 1874). What is important is that "each emotion occupies a unique region in this multidimensional space" (Ellsworth and Scherer 2009). The infinite number of emotional states is a common aspect that dimensional theories share with appraisal theories, even though the infinite nature of emotions depends in the first case on its dimensions, and in the second case on appraisal.

A third and more recent perspective on structural classification of emotions attempts to reconcile categorical and dimensional theories: the *hierarchical theory of emotions* (Laros and Steenkamp 2005). According to this last perspective, there is a superordinate level of emotion (positive vs. negative affect), a basic emotion level (four basic positive and four negative emotional states), and finally a subordinate level (42 classified emotions). The psychological nature of the emotional construct and the confusion in the literature between structure and content-related theories determined the evolution of several different measurement tools, and at the same time, restrained the use of emotions in consumer behavior theory and empirical research of emotions (Bagozzi et al. 1999).

4 Measuring the Immeasurable: Self-Report and Observation Techniques

According to the interpretation of the emotional construct, it can basically be measured using self-report or observation techniques. Self-report techniques (Lee et al. 2007; Bagozzi et al. 1999; Isomursu et al. 2007) are normally suitable in cases where a subjectivity of feeling is assumed (e.g. appraisal and dimensional theories). In contrast, observation techniques (Kim and Fesenmaier 2015a, b) are used to

monitor the non-cognitive (physiological and expressive reactions) and normally apply categorical theories of emotion with a set of basic feelings.

4.1 Self-Report Techniques

Self-report techniques basically include questionnaires, diaries, and focus groups (Isomursu et al. 2007, p. 427). Since emotions might be difficult to verbalize, in self-report techniques, questionnaires for data collection might use not only verbal scales (protocols), but also non-verbal ones (pictograms) (Desmet 2002). Self Assessment Manikin (SAM) and Emocards (Desmet et al. 2001) are two examples of measurement through pictograms used in marketing research to understand consumption emotions or emotional responses related to advertising stimuli, based on pictures of facial expressions (Isomursu et al. 2007, p. 427). Notwithstanding the strength of investigating the subjective nature of feelings, self-reported techniques have some weaknesses, mainly since they imply a cognitive understanding of the scales and emotional states (in the form of lexical units or pictures) by interviewees. Moreover, the self-judgment process might lead to some bias in emotion measurement (Isomursu et al. 2007). Finally, these techniques often imply data collection after emotional arousal has happened, which is thought to have a distortive effect, and recalling feelings *about* emotions and not emotions *per se* (Russell 2003; Kim and Fesenmaier 2015a). To overcome some of these weaknesses in self-reporting, digital technologies have provided some helpful instruments. The 3E method, based on free drawing responses on digital interfaces (Tähti and Arhippainen 2004), helps overcome the cognition bias in pre-defined categories of emotions; the Mobile Feedback Application (Arhippainen et al. 2004), where the feedback on the questionnaire is given in real-time, helps overcome biases due to post-experience reporting; finally the Experience Clip Method (Isomursu et al. 2004), using video observation of customer couples during experience consumption, helps to partly overcome self-judgment biases.

Parallel to self-reporting techniques, observation techniques are common methods to measure emotional states (Kim and Fesenmaier 2015a, p. 422). They tend to record the more objective physiological/expressive nature of emotional responses, and focus on behavior (facial expressions, speech, gestures) or neurophysiological responses (skin conductance, body responses: pulse rate, blood pressure, brain activity). The advantages of observation techniques are that they usually happen in real-time and they can record the evolutionary process of emotion creation. Nevertheless, they often require specific expertise, special (sometimes bulky) equipment, and a laboratory environment; thus the emotional reaction might be biased by the measurement system and the artificial context (Kim and Fesenmaier 2015a, b).

Since the construct of emotion is defined according to different perspectives, and given the fact that "experiential, physiological, and behavioral measures are all relevant to understanding emotion and cannot be assumed to be interchangeable"

Table 1 Measuring emotions: theoretical approaches and emotional responses

		Measurement techniques	
		Observation	Self-report
Content-related theories	Cognitive appraisal theories		x
	Affect as information theories (cognitive)		x
	James-Lange theory (non-cognitive)	x	
	Cannon-Bard theory (non-cognitive)	x	
Structure-related theories	Categorical theories		x
	Dimensional theories	x	
	Hierarchical theories	x	x
Emotional responses	Expressive response	x	
	Physiological response	x	x
	Subjective experience		x

(Mauss and Robinson 2009, p. 522), there is no best type of measurement to use in applied research. Rather a preferred measurement technique is chosen according to the theoretical framework used and the type of emotional response to be measured (see Table 1). In brief, we could say that cognitive theories tend to use dimensional scales and rely on self-report techniques; non-cognitive theories refer to categorical scales and observation techniques. Nevertheless, recent studies tend to overcome these traditional approaches and combine self-reported and observation approaches, mainly because it was found that objective measurement of physiological arousal helps with investigating how cognition works in the appraisal process. Initial studies on the correlation between cognitive and physiological responses reveal that appraisal *per se* is relevant, since there is no perfect congruence between observed and self-reported responses (Lee and Kyle 2012; Kim and Fesenmaier 2015a, b). In the following sections we focus on the application of these theoretical frameworks in tourism research, analyzing the actual panorama of emotion research in tourism, and building a framework for future research.

5   Emotions and Tourism Experiences

Emotions are part of consumer experiences (Pine and Gilmore 2011) and are also relevant in tourist experiences (Aho 2001; Morgan et al. 2010). A tourist experience is in fact "an individual's *subjective* evaluation and undergoing of events (i.e., *affective*, cognitive, and behavioral) related to his/her tourist activities, which begins before (i.e. planning and preparation), during (i.e. at the destination), and after the trip (i.e. recollection)" (Tung and Ritchie 2011, p. 3). Therefore the relationship between emotions and tourism experiences relies on the fact that emotional responses occur all along the tourist experience, in relation to different

interactions and interfaces. In fact, no single emotional state is related to an entire tourist experience, but rather a sequence of emotions associated with corresponding external stimuli. To understand when emotional responses occur in tourist experiences, it is worth analyzing the possible nature of their elicitation.

According to the literature, elicitation occurs in relation to on-trip interactions with the landscape (Hosany 2012; Hosany et al. 2005; Hosany and Gilbert 2010), artificial environments (Barsky 2002; Han et al. 2009) or humans (Hosany and Gilbert 2010). Moreover, it may also occur in a post-trip phase, e.g. through sharing vacation experiences on social media (Kim and Fesenmaier 2015b, pp. 514–515) or through memories and nostalgia (Kim et al. 2011). Despite the relevance of emotions in tourist experience at the interface between destination offer (space or hosting communities) and consumers (tourists), and despite the cross-cutting nature during different stages of consumption (mainly on- and post-trip), emotions have been mainly studied from the single guest's perspective (Nawijn et al. 2013, p. 427) and in relation to post-consumption behavior (Malone et al. 2014). In fact, emotion was initially used as an *evaluative construct associated to post-consumption behavior* (Malone et al. 2014, pp. 514–515). For instance, applying cognitive appraisal theories, it has been proven that positive emotional states have an effect on customer satisfaction (del Bosque and Martín 2008, p. 522; Hosany and Prayag 2013, p. 522; Martínez Caro et al. 2007, p. 522; Phillips and Baumgartner 2002, p. 522), on loyalty (Barsky 2002, p. 522; Han et al. 2009, p. 522) and on behavioral intentions (Bigné et al. 2005, p. 522).

Only sparse, recent and very specific contributions have assessed *pre-consumption and consumption behavior*. For instance, Malone and her colleagues postulated the role of pre-consumption emotions as motivators for choosing ethical tourism holidays (Malone et al. 2014, pp. 514–515), while Sirakaya and his colleagues discovered that—as it is argued in the affect-as information theory—mood can mediate emotional and cognitive responses to a holiday experience (Sirakaya et al. 2004). Hosany (2012, pp. 514–515) proposed three determinants of emotional appraisal while on vacation (pleasantness, goal congruence, and internal self-compatibility) and three main emotional states (joy, love, and positive surprise). Nawijn and colleagues confirmed the positive nature of emotional states during a holiday (Nawijn et al. 2013, p. 427) and investigated their dynamic nature.

This recent focus on consumption behaviour on-trip has opened up new horizons for emotional research that go far beyond consumer behaviour studies, and have involved e.g. emotional geography or emotional engineering in service design. For instance, Hosany and colleagues applied emotion research to tourism destinations and studied the affective value of locations (Hosany and Prayag 2013, pp. 514–515; Hosany and Gilbert 2010, pp. 514–515; Hosany et al. 2005, pp. 514–515; Hosany 2012, pp. 514–515), while Kim and Fesenmaier (2015a, pp. 514–515) provided "emotion maps" derived from real-time measurement of experiences using dermal responses. Finally, studies on experience design recently aimed at increasing affective connections between the service provider and the consumer (Tussyadiah 2014, p. 427) through designing emotional exchanges rather than service encounters. Notwithstanding this pioneer research, we argue that there is more room to

explore emotional states at the interface between destination management studies and consumer behavior studies. In the next section we provide a framework to assess future research.

6 A Framework to Investigate Emotion at the Interface Between Tourism Demand and Supply

The arousal of emotions in tourism experiences occurs through an interaction between consumer and destination, i.e. between tourism demand and supply. This interaction occurs before, during and after tourism trips and is sometimes mediated through digital interfaces (e.g. websites, applications, booking/ranking portals, social media). Emotions that arise from this interaction have proved to be important for the satisfaction of tourists and relevant to their loyalty to destinations. Nevertheless, the interaction *per se* is scarcely explored in tourism literature or applied research. To fill this gap, we provide a framework to assess the emotion-based interface between consumer and destination, and thus create a connection between tourism management/marketing research and consumer behavior studies (see Fig. 1). We identify three main stages where emotion may occur: pre-trip *(anticipated emotions)*, on-trip *(consumption emotions)* and post-trip *(post-consumption emotions)*. These different phases of emotional arousal have often been neglected and only consumption emotions have been addressed, which in our opinion is a limiting approach. Moreover, even when focusing on consumption emotions, their antecedents have rarely been studied, while their consequences (in terms of satisfaction and loyalty) are widely explored. Given these limitations, we propose investigating several domains of consumer behavior, destination management studies, and the interface between the two.

With regard to consumer behavior, three main aspects might be relevant:

– emotional significance of tourism activities, both in natural or artificial environments (e.g. outdoor sports, adventure tourism, cultural tourism);
– tourists' emotional responses during specific service encounters (e.g. encounters with hotel hosts or local service providers);
– social interactions among tourists before, during or after their holidays (e.g. emotion in group behavior, emotional influences of online sharing and service evaluation, word of mouth).

These could offer new insights into understanding behavioral patterns of consumption, identifying relevant dynamics in social interactions, and thus designing emotion-based consumption profiles. Concerning destination management and marketing, four main areas of interest arise:

– investigating emotional reactions to promotional or advertising material and more generally assessing the affective meaning of the destination brand (anticipated emotions) as well as its impact on purchase-behavior;

Consumer behavior

• Destination choice • Booking & planning • Online behavior	• Interaction with space & humans • Co-creation of services • Online behavior	• Place attachment • Satisfaction & loyalty • Word of mouth • Online behavior

Emotion

• Anticipated emotion • Antecedent to consumption emotion	• consumption emotion • moods	• Post-consumption emotion • Consequences of consumption emotions

Destination management

• Market research • Product/service design	• Co-creation of services • Service recovery • Management of peaks in demand	• Relationship marketing • Fidelisation

| pre-trip | on-trip | post-trip |

Fig. 1 A framework of emotion at the interface between tourism demand and supply

– including emotion engineering in tourism product/service design
 (e.g. considering "emotional chains of reactions", see e.g. (Stacey and Tether
 2015);
– influencing emotional feedbacks in critical moments of the service encounter
 (e.g. peak season, service recovery);
– managing emotional responses in post-consumption online behavior
 (e.g. relationship marketing and social interactions on online ranking portals).

Including the affective component in destination management and marketing means being able to not only overcome the cognitive-based service quality paradigm, but also embrace the affective-based experience economy and design tourism products accordingly.

7 Concluding Remarks

Emotion research has entered the tourism research field through market research on post-consumption behavior. Nowadays it is expanding towards pre-consumption and consumption behavior, and is exploring innovative real-time observation techniques. Here, we draw a picture of the main interpretations, theories, and

measurement techniques of emotion research and investigate their application and applicability in tourism studies. We argue that there is scope for greater expansion of emotion research in tourism, both in consumer behavior studies (e.g. emotional valence of specific activities, emotion in face-to-face service encounters), and—most importantly—in destination management and marketing studies (e.g. destination image and branding, service design, relationship marketing, and hospitality research with specific consideration to host-guest relationships). Digital technologies are relevant in this context for two main reasons: they increasingly mediate the interaction between host and guest in pre- and post-trip phases and they offer innovative techniques to measure emotional responses. Nevertheless, these techniques are often observation-based and need the parallel use of self-reported techniques to catch the cognitive aspects related to emotion arousal. Therefore, besides the need to apply emotion research in wider contexts, we identify a need to use self-reported and observation techniques in a complementary manner, in order to capture cognitive, physiological, and expressive emotional states. The connection between tourism demand and supply through emotion research, as well as the integration of observation and self-reporting techniques are two conditions required to shift from a cognitive-centered and service-based perspective of tourism towards a cognitive-affective and emotion-based perspective, which recognizes the affective nature of tourist experiences. This shift is only possible if an interdisciplinary approach is employed in tourism research, which encourages applying theoretical frameworks based on psychological studies to traditional tourism management and marketing approaches, encouraging applied research based on ICT-tools for emotion measurement.

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Authenticity for Tourism Design and Experience

Jillian M. Rickly and Scott McCabe

Abstract Traditionally, the role of design in tourism research has been oriented towards planning and designing spaces for tourism and recreational uses. In the context of the experience economy this process focuses on experience design so that spaces become stages in which experiences are enacted, performed and valued. As a result the subjective and affective aspects of the experience have become somewhat neglected. Interestingly, while the debates surrounding the concept of authenticity in tourism studies are concerned with similar aspects of tourism experience, few in the design literature have engaged with the idea of authentic experience of place and culture. Because authenticity is a relational concept that functions to interlace notions of originality, genuineness, symbolism, encounter and experience it holds great value for tourism design and planning. As such, we propose a few questions to spark conversation: What is the role of authenticity in experience of place in the context of design thinking? Can we truly design spaces for authentic engagement? Is it ever possible to experience places authentically that have been designed? With the tremendous value placed on designing spaces for entertainment purposes, what value is placed on the 'real' or un-designed spaces of tourism? This chapter questions conceptions of experience design in the context of theories of authenticity and touristic experience, thereby aiming to bring a much contested concept into greater consideration in the more grounded debates of tourism planning.

Keywords Authenticity • Authentic engagement • Experience • Tourism design • Entertainment

1 Introduction: Understanding the Tourist Experience

Although 'experience' provides the fundamental basis for the development, design and marketing of tourism services, it is only more recently that the tourism industry has recognised that engaging and memorable experiences comprise the core of the

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offer to consumers (Kim 2010). As the tourism sector has matured, it has evolved from a focus on concerns about understanding and meeting customer needs as a route to satisfactory outcomes, developing quality as a means to achieve competitive advantage, and building relationships with consumers to garner their loyalty. Alongside developments in marketing thought and practice in other product and service categories, the industry writ large is increasingly recognising that the essence of tourism is the development of travel and visitation experiences (Tung and Ritchie 2011). A clear challenge, then, lies in the ways to design tourism spaces for optimal touristic experiences, which are meaningful to each individual.

The tourist experience comprises all the behaviour, perceptual, cognitive and emotional aspects of tourist's engagement with destinations and service providers, both expressed or implied (Oh et al. 2007). Tourism is often conceived as being distinct to other consumption contexts, however, due to the difference from everyday experiences (Cohen 1979), the complex emotions and long-lasting memories related to experiences in destinations, and the link between tourism experiences and sense of self-identity (Cutler and Carmichael 2010). Therefore, tourist experience and the meanings attached to them for individuals have been explored in some detail; yet, there is a disconnection between these theories and the emerging literature on experience design.

Theorising on tourist experience has been prolific. Whereas early analysis focused on the phases and modes of experience (Clawson and Knetsch 1966), as the literature developed it became clear that tourists often seek to connect their experiences in places and with people they encounter to their self-identity constructions (Bruner 1991a; McCabe and Stokoe 2004; Rickly-Boyd 2010). Furthermore, from the psychological perspective, researchers have found that tourism experiences often involve deep immersion and/or involvement in an activity or place/culture such that they develop symbolic meaning (Ekinci et al. 2013). Thus, tourism can involve skill acquisition, learning and development or mastery associated with certain forms such as sport tourism, mountain climbing or other recreational activities (Cutler and Carmichael 2010). These experiences provide a context and conduit for various meanings on the individual scale. A sense of achievement, camaraderie and belonging, connection with the surrounding environment that comes from conquering a specific goal, identity, self-empowerment and global citizenship lend memorability and depth to life-narratives (Wilson and Harris 2006 for example). The majority of the research on tourism experience has focused on the more existential effects whereas the majority of tourists' concerns are profoundly more mundane, driven by a desire for relaxation. Visits to theme parks and day trip activities, short breaks to cities or other destinations, package holidays, all-inclusive breaks, cruises comprise the bulk of tourism experiences for most ordinary people. Yet, it is possible to relate these theories to the design of mass vacation experiences.

The rich diversity of tourism experiences often leads to a conflation of the mundane and profound, the sacred and profane in conceptualising tourist experience, but some essential qualities that connect all types can be identified. The notion of 'memorableness' as a key construct has been identified (Ritchie and Hudson

2009; Mathisen 2012) highlighting the subjectivity underpinning tourist experience. While Tung and Ritchie (2011) claim academic studies are increasingly examining tourism as a function of memorable experience, there is still a need to uncover the essence of what exactly makes certain experiences special, spectacular and fittingly memorable (see Morgan and Pritchard 2005).

Memorability can be defined in terms of the 'enduring' sense of the experience in the consciousness of individuals, and also in terms of the 'indelibility' of the experience over time, the sense of permanence and prominence of the experience in the context of the totality of accumulated lived experiences. A second defining feature is the significance of the emotions in tourist experiences. Whereas the more symbolic and existential styles of experience may involve visceral emotions of both positive and negative valence, the standardised holiday experiences on the other hand elicit heightened hedonic emotional engagement, with joy, happiness and pleasure as outcomes. A third key feature of tourist experience is encapsulated in the concept of authenticity. Tourism studies have long argued that tourist experiences can be defined in terms of their engagement with places. All types of tourism experiences require some sense of authentic engagement, a term that captures a range of feelings, the literature on experience design, however, has yet to factor authenticity into design thinking. These three key principles are discussed in this chapter to inform our analysis of experience design as performance.

2 Key Aspects of the Tourist Experience—On- and Off-Site

Of crucial importance in the design of tourism spaces is the acknowledgement that tourist experiences are not restricted to the destination. They are informed by marketing and word of mouth well before the tourist even leaves home (Gretzel et al. 2006). On the ground in tourism destinations, tourist experiences are embodied, reflexive and intersubjective. These touristic moments are recalled and retold over time, further solidifying the individual's impressions of the destination (Morgan and Pritchard 2005; Rickly-Boyd 2010). The extension of tourist experience to include holistic temporal and spatial dimensions illustrates the power of emotion and memorability, which can be greatly influenced by perceptions of authenticity—that is, whether tourists feel they are experiencing what is promised in a destination's marketing. Authenticity of destination does not necessarily mean that a space must be original or genuinely reproduced, but that it must correlate to the tourist's expectations. As such, a replica presented as original is generally unsatisfying to tourists as they feel they are being tricked. Similarly, a destination sold as an imaginative, family playground, such as a theme park, can be equally unsatisfying if one travels as a family but finds the atmospherics and design of the park too dated, dangerous and boring, thereby preventing a day of togetherness.

2.1 Emotion and Memorability

Tourism destinations are rich contexts for experiences and are intrinsically linked to emotions (Otto and Ritchie 1996). Thus emotions have become an important area of research in terms of their influence in decision making and for behavioural outcomes, such as satisfaction (see Bigné et al. 2008; del Bosque and San Martin 2008; Hosany and Gilbert 2010). Therefore there is a strong impetus for destination managers and other tourism service providers to encourage positive emotional engagement on the part of tourists during the experience. Yet there has been relatively little research on the customer perspectives of emotions in tourist experience, despite a wide interest in general consumer research (see Johnston and Kong 2011 for example). Instead, tourism research has focused on the supply side perspectives on consumer emotions (with some recent exceptions, e.g., Malone et al. 2014). Experience providers can facilitate 'emotional work' (activities that enhance emotional well-being) by allowing tourists to cope with situations, co-create and participate in the production of the experience to learn and to be active participants (Prebensen and Foss 2011). Positive emotions can be engineered to create enjoyable and memorable experiences. Emotions have been seen as important in the design of theme park experiences. The classic Disney concept of 'Imagineering' for example, combines the need to stir the imagination of consumers together with the art of touching the heart, eliciting emotions of love, happiness, delight, wonderment and so on to create memorable experiences (Nijs and Peters 2002).

However, still too little focus is placed in tourism research on the psychological processes underpinning experience, as Larsen (2007) observes, when in fact tourists who are asked about their holidays often refer to experiences as memories emanating within the individual and not necessarily or specifically about destinations. Larsen (2007) argues that there are two kinds of memories; explicit (general facts and knowledge) and episodic (personally experienced events; store of factual memories concerning personal experiences). Similarly, but distinct, Sather-Wagstaff (2008) divides memories into two types based on the way we engage with memory socially, particularly through visual cues. Prosthetic memories are publicly circulated, shared through the engagement with distributed imagery, such as tourist photographs, whereas heteropathic memories are empathically driven, as the viewer of the visual imagery imagines oneself in that the situation pictured (Sather-Wagstaff 2008). In comparing these approaches, it becomes apparent that memory and emotionality are important to tourist experience both individually and socially.

Memorability can also be related to motivation and goal directed behaviour as a driver of tourist experience. Cutler and Carmichael (2010) remind us that tourists are not motivated to achieve 'satisfaction' but rather by felt needs to escape, learn, relax, rejuvenate, etc. They suggest five elements that affect satisfaction (memory, perception, emotion, knowledge and self-identity) can be considered as constituting travel experiences. Memories are representations of experiences in and through

narrative recreation or re-constitution. They are different from actual experiences, as they may change (Cary 2004). This is the 'rose-tinted spectacles' view of how experience is reconfigured in the memory over time. As humans, we draw on important episodic memories, such as family holidays, over the life-course, to build a sense of coherence to our identities, through narrative retelling (Bruner 1991b). Nostalgia is an important construct in tourist experience, because it is used as a specific device to engage tourists' emotions in the creation and staging of tourist experiences (such as historical re-enactments at heritage sites for example). Indeed, Bruner's (1994) study of Abraham Lincoln's boyhood home in the US shows that tourists engage with nostalgia towards a number of ends. Nostalgia is used to rejoice in the myth of America's early history, but it also, conversely, is used to celebrate the tremendous progress the nation has undertaken from the 1850s to the present. Nostalgia is also an important link to memorability in the long-term reflection phase of tourist experience.

Tynan and McKechnie (2009), in discussing the gaps between theory and practice of experience marketing, highlight enjoyment, entertainment, learning, skills, nostalgia, fantasising and evangelising as post-experience outcomes. Some experience marketing and design has specifically employed nostalgia as just one technique used to elicit emotional responses. Emotions are central to 'experiences', but despite a wealth of recent research, some authors argue that there has been too much focus on understanding the role of emotion in experiences, leaving unanswered questions about how to elicit emotions in the design of experiences (McCole 2004). Since 'peak' experiences, such as tourism, engage basic and visceral emotions, they become memorable. Memorability also derives from the episodic nature of tourism experience, but also importantly, both emotions and memory are intertwined within consumer's self-narratives, and thus stretch before and beyond the actual on-site experience. A key concept that can be used to address the integration of consumer's psychological states into experience design is that of authenticity. It is by employing authenticity into experience design, and understanding the ways tourists attribute perceptions of authenticity into their off-site reflections of experience, that tourism destinations can engage emotions and memorability.

2.2 Authenticity

On first contemplation, the term 'authenticity' brings to mind, for many, rather rigid distinctions between original and replica as well as genuine and fake, among others. It is no surprise, then, that some of the first scholars who used the term in the study of tourism did so with rather limited interpretations. Boorstin (1961), among the first to argue that tourism is comprised of pseudo-events, seemed to take pleasure in pointing out the inaccuracies, indeed inauthenticity, of tourism settings. This started a trend, particularly among tourism anthropologists and historians, of deconstructing tourism sites with critiques of staging that left no metaphorical

rock unturned in their quest to dismantle the 'illusions' that had been presented to tourists (see Gable and Handler 1996). In such investigations, the tourists themselves were not spared, as 'uneducated' people fooled by the tourism industry and, worse off, unaware of it even happening, they took pleasure in the experience nonetheless. While this trend does continue to have some momentum in tourism research today, for the most part there has been a shift towards understanding the nuances of the tourism experience which, crucially, requires a recognition that we are all (not just our research subjects) tourists. The emphasis on reflexivity and breaking down dichotomies that has come about with postmodernity has, indeed, been fruitful in such tourism research.

The work of MacCannell (1976) and Cohen (1979, 1988) was instrumental in changing the course of study of authenticity in tourism. MacCannell (1976) called attention to the sophisticated staging mechanisms of the tourism industry as integral to tourism as a larger sociological phenomenon. From the use of markers and signposts that direct our attention towards attractions to the desire to both engage with staging, by way of theming, as well as to see behind it to the back regions of tourism operations. Similarly, Cohen (1979) identified various motivations in regards to authenticity. He noted that while authenticity, as in originality and genuineness, may be a factor for experiential, experimental and existential tourists, it is, in fact, the staging and theming of tourism as recreational and escapist that drives many tourists. Further, he was among the first to suggest the flexibility of the concept of authenticity in tourists' minds, and therefore, as applicable in tourism design. He argued for recognition of 'emergent authenticity' (1988), that an object, action or place could become authentic over time. For example, Disneyland in southern California is the original fantasyland and amusement park that inspired all of the others in the worldwide franchise. What was once new could be deemed the original, and thereby authentic over time. Moreover, Cohen (1988) contended that staged authenticity could, in fact, be useful in the protection of the original. As is the case in zoos, for instance, as the staged landscapes and soundscapes in which tourists encounter animals allows for the imaginative potential of the space. If such encounters are found satisfactory, further desires to travel into fragile natural environments may be quelled thereby protecting them from greater impact. In all, Cohen (1979, 1988) and MacCannell (1976) were introducing what would come to be known as constructivist approaches to authenticity, which in contrast to objectivist approaches that focus on originality, are more concerned with the power of symbolism and narrative (see Wang 1999).

Thus, while there remains an interest in critiquing the staging of tourism, particularly as it reveals social powers that privilege specific tellings of history and/or representations of race and class, such work does little to illuminate the ways tourists engage with and make meaning in tourism spaces. Bruner's (1994) research on the boyhood home of Abraham Lincoln distinguishes such differences in approach as positive and negative, as he advocates moving beyond a negative reading of tourism spaces to take a positive approach interested in ways tourists make meaning both with and despite the staging of the tourism industry. Several other studies developed from this approach have found that tourists, once in a

tourism designed space, define its authenticity using a variety of parameters (see Bruner 1994; Rickly-Boyd 2012). Further, tourists especially respond to various forms of authenticity all within the same space, as the mixing of originality, genuineness, symbolism and experience help to build a richer and more individualistic interpretation, enabling subjective stories of place to emerge (see Buchmann et al. 2010; Rickly-Boyd 2012, 2013). Such ideas are becoming well-known among researchers of the tourism experience, but they are less frequently included in the dialogue of design and planning. In other words, theoretical interests of some tourism scholars have led to the investigation of how tourists make meaning in a whole host of spaces, which could be quite productive if circulated back to practitioners. Those in the area of experience economy are notable exceptions, as that work is more actively engaged with tourist experience research, marketing communication and tourism design.

A burgeoning area of authenticity and tourism experience research, which has significant implications for the experience economy and tourism design in particular, is the concept of existential authenticity. Wang (1999) proposed this form of authenticity as an alternative reading of touristic experience which is activity-based. Rather than the object-oriented approaches of objectivism and constructivism, existentialism foregrounds notions of identity and embodiment. More specifically, Wang (1999) suggested intrapersonal (bodily feelings and self-making) and interpersonal (family ties and communitas) modes of experience. Because this perspective looks beyond the epistemological understandings of authenticity to the way authenticity is experienced and felt, it has been essential to the study of the nuances of tourist experiences. Existential authenticity points to the power of subtle staging, atmosphere, companionship amongst travellers and intersubjectivity. As such, it has the potential to help bridge the theoretical interests in authenticity and tourism experience and is inextricably linked to emotion and memory, through which can be interpellated, with the more practical considerations of design and planning. However, in order to bridge the connections between emotion, memorability and authenticity in tourism design, it becomes necessary to understand tourism experience as a co-constructive performance.

3   Tourism as Performance: Staging and Design

Tourism scholars have long recognized that tourism is a performative act. Performative extends beyond what Pine and Gilmore (1999) suggest as "work as theatre", but tourism is a co-creation process that includes staging and improvisation, choreography and exploration, along with direction and imitation, among other performances. A key example is the work of Edensor (2000), who argues that in addition to tourism being a series of staged events and spaces, it is also an array of performative techniques and dispositions. Edensor claims that tourist experience can be related to actions or practices, which are constantly being worked on and played out in the performance of the vacation. Edensor's theorizing draws on

Goffman's (1959) ideas about how people present versions of themselves in different contexts (backstage and frontstage), and thus he argued that social life can be thought of as a dramaturgical performance in which social actors perform their identities relationally in time and space, depending on the social context. Edensor argues that tourist spaces, or stages, can be defined as 'enclavic' (prescribed and regulated) or 'heterogenous' (more varied and less clear-cut, where a diverse range of activities can occur). And while specific performances can be encouraged, tourists can adopt different and varied performances within these spaces.

This conceptualization of performance has been developed from MacCannell's (1976, 1999) stage metaphor by a number of tourism scholars (see Crang 1997, 1999; Desmond 1999; Edensor 2000, 2001; Baerenholdt et al. 2004; Rickly-Boyd et al. 2014). Whether tourism takes place in parks, museums or cities, such destinations are bounded (symbolically or physically) and they are organized so as to suggest, and in some cases police, appropriate behaviour by tourists (see also Neumann 1988; Chaney 1993 and Baerenholdt et al. 2004). While perhaps one of the more overlooked elements of staging, the boundaries that delineate tourism spaces from the surrounding areas are important. In the case of New Orleans, Atkinson (2004) observes the ways in which music is used to shape tourism spaces. Where the music stops, so do the tourists. As a result, following new waterfront developments (pre-Hurricane Katrina), the city employed musicians to play along the area in the hopes that tourist's would follow. Indeed, they did. And now as the city continues to rebuild in the hurricane's aftermath, music once again serves to revive tourist spaces. Rather than the use of signage, music (or silence) forms the symbolic boundary of touristic New Orleans. Further, tourists have come to associate an authentic New Orleans experience with music. This extends well beyond Mardi Gras to the city as a whole. As such, a holiday in the city would likely be regarded as less authentic if one was to not have at least one musical encounter while visiting. Thus, Edensor (2001, p. 71) contends, tourists do not simply serve as an audience to a staged tourism performance, they are an essential part of the performance, as "tourism constitutes a collection of commonly understood and embodied practices and meanings which are reproduced by tourists through their performances—in alliance with tourist managers and workers".

The stage metaphor, thus, extends to many aspects of touristic experience. Notions of scenography and stage design, directors and stage managers, actors and intermediaries, and tourists as performers and audiences are all active in the staging of tourism. Staging does more than offer direction towards particular behaviours, it sets the atmosphere and can encourage particular emotionalities— playfulness at a theme park, contemplation at a museum, relaxation at a spa. Indeed, it is such heightened emotional states that encourage memory formation. Yet, despite efforts to choreograph and direct tourists, tourism staging and design cannot determine performance and experience (Edensor 2000, 2001). Further, the stage metaphor does not account for the spontaneous moments of being a tourist. It is through tourism moments—the being, doing, touching and seeing of tourism—and embodied practice that tourists are able to have a sense of experiencing "real"

places (Cloke and Perkins 1998; Coleman and Crang 2002; Baerenholdt et al. 2004; Larsen 2008; Rickly-Boyd 2013; Rickly-Boyd et al. 2014). While atmospherics may suggest a feeling and a performance, it is up to the individual tourists to work with this raw material in relation to the motivations that inspired their visit to actually perform the space—that is, to make meaning from and with the designed space. In other words, design can only go so far, tourism experience is co-creative, tourists must bring their imaginations as well.

Tourism space design can offer the proper staging and atmospherics, but the actual experiences, and from that, memories, come from the work of the tourists to actually in engage with such design elements (Larsen 2005). Tourist's perceptions of the authenticity of these elements influence how seamlessly these associations can be made. As Rickly-Boyd (2013) has suggested elsewhere, the moments of existential authenticity—feelings, identity, companionship, family ties—do not happen independently from the materiality of the tourism setting. Atmospherics, staging and design offer the materiality through which tourists perform the space, with others (companions and tourism service personnel). By way of example, Buchmann, Moore, and Fisher's (2010) study of Lord of the Rings tourism in New Zealand illustrates the ways material setting, fantasy, intersubjectivity and embodiment work relationally to produce a satisfying, authentic, albeit highly imaginative experience. Tourists traveling to New Zealand for LOTR tourism are motivated, primarily, by the film series developed from Tolkien's books. Because imagination and fantasy are key elements of their desired experience, the tour operators engage them with mediated hyperreal simulacra by way of combining scenes from the films with actual locations of filming. It is from this combination that the authors suggest tourists expressed a sense of an authentic experience, as they note being able to relate to the themes of Tolkien's stories—fellowship, adventure and sacrifice. An experience of fellowship results from touring with others of common motivation, and this extends to the guides who lead the group on their adventure. Further, the experience of travelling far distances to places only imagined adds to the element of adventure. Embodiment, then, comes from being in the physical landscape of filming, feeling the sun, wind, rain and walking the terrain. The authors argue that embodiment "helps counteract feelings of surreality" (2010, p. 241). It is through this combination of materiality and imagination that tourists describe a feeling of authenticity, are able to emotionally engage with the tourism space, and therefore are more likely to make lasting memories. Thus, what a performance approach offers to the experience economy, by way of designing tourism spaces, is not necessarily a prescriptive agenda, but a broader perspective from which to consider the ways tourists engage with such spaces.

4   Concluding Remarks

In this chapter we have noted that experience design is gathering pace as an important driver of the development of tourism destinations (Tussyadiah 2014). However, we also claim that the design concept, whilst recognizing the need to incorporate tourist's subjectivities into the design process, has considered only the surface textures of tourist's psychological processes. We argue that central to ideas of tourist experience are emotions, memory and nostalgia. Tourists' motivations for holiday are immeasurably diverse, but some unifying themes include the need to expand one's cache of worldly experiences and to build a stock of happy memories. As such, the concept of authenticity takes centre stage as a driver of positive, rich emotional engagement and memorability. Experience design must take account of this psychological context and create destinations as stages in which tourists are able to create their own experiences with the input of others (tourists and service workers).

With this in mind, we can recommend the following considerations for the design of tourism spaces:

- Materiality—the stage upon which the tourism performance takes place is of the utmost importance. This establishes the type of performances offered to tourists, the boundaries of the performance, and the roles of other actors. For tourism taking place in natural settings, this requires a close interaction of tourism infrastructure, perhaps including the management of flows of tourists to ensure that people are able to engage with the natural environment in uncrowded ways (Lawson and Baud-Bovy 1977). For constructed spaces, however, atmospherics must be employed that follow a general narrative of the place such that tourists can place themselves within that narrative as they move through the space. Thus, it is the materiality of the tourism space that allows for the embodied performance of tourism, which elicit emotional responses and create the visceral components of memory-making.
- Simulacra and hyperreality—In addition to the materiality of tourism spaces, symbolic and simulated elements are important to engaging tourists' imaginations. With the exception of highly themed environments, such as amusement parks, care should be taken to balance the presence of simulacra with genuine landscape features. In other words, while simulation offers the potential for hyperreality and highly imaginative spaces, an over-preponderance can produce the sense of frivolity. Blending the genuine artefacts of place with simulations allows tourists to ground their imaginations in a material reality, acting as a counterbalance to surreality.
- Signposting—Distinguishing points of interest within the landscape is central to tourism practice. In fact, MacCannell (1976) has raised the question of which came first—the marker or the tourist? In any case, signposting attractions facilitates a number of tourism practices—it grounds authenticity in the material landscape, it encourages tourists' attention and even photography, and in so doing, it directs tourists to shared space experiences. Thus by directing tourists'

movement through the landscape signposts also foster moments of togetherness, where individuals stop together to take in a view or admire a cultural remnant. It, however, also goes without saying that signposts used too frequently (like the overuse of simulacra) can have the effect of oversaturation of information leading tourists to be less impressed by the marked attractions.

- Encounter—Tourists are rarely alone. Most people travel with others in groups and/or with family. Moreover, travelling requires encounters with persons at the destination, be they other tourists, service workers or local residents. So while there is little that can be done regarding the management of intra-family encounters, tourists do assess and remember the hospitality practices experienced, and thereby the feelings of welcome induced, at destinations. This notion is far from novel, yet the roles of other encounters beyond the control of the service environment need to be factored into the design process.
- Marketing correlation—While each of these components feeds into notions of authenticity, a sense of correspondence between tourism advertisements and on-site experience is crucial. First and foremost, authenticity in tourism is about the meeting of expectations. Marketing messages need to be appropriately framed and communicated, to ensure that tourists engage the experience with the right emotional goals. Memorableness is partially linked to the emotional strength or depth of the experience and so marketing communications are crucial to the emotional context-setting as antecedent to authentic and meaningful tourist experience.

Tourists' perceptions of authenticity are important, as they are the means by which individuals connect the materiality of tourism spaces to the significance of their own experiences while on tour. Experience is made of key components, namely emotion/memory, sense of identity, intersubjectivity and embodiment, all of which relate to existential authenticity. So while designers may not be able to control for existential authenticity, they can encourage particular emotions and mindsets through atmospherics. The use of appropriate staging, theming and scenography can offer the raw materials with which tourists can begin to perform the holiday they want, individually. When staging corresponds to tourists' preconceived notions of the place, there is a greater likelihood of satisfaction and perception of authenticity of the space. So rather than attempting to force positive emotions and lasting memories from the design process, building in objective (material) and constructive (symbolic) notions of authenticity into the staging allows for subjective, meaningful performances, and psychological engagement will result. Existential authenticity, as a facet of experience, is a co-creative process. Tourism design can only go so far in encouraging particular experiences, at some point it is up to the tourists to perform the holiday they desire from the materiality afforded them.

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An Uncanny Night in a Nature Bubble: Designing Embodied Sleeping Experiences

Tarja Salmela, Anu Valtonen, and Satu Miettinen

> *I hear rustle. If that is a squirrel, it must be gigantic.*
> *Or is it so that I'm just so very little?*
> *In a matter of fact, lying down here in my Bubble in my*
> *pyjamas, I have never felt as small and subsidiary as I do*
> *now.*
> *I'm an alien and a friend at the same time.*
> *Me in my plastic Bubble.*

Abstract This article is an uncanny journey to the Bubble. It provides an autoethnographic exploration of a novel form of tourism—glamping—and takes the reader into an adventure to a see-through plastic Bubble located in a nature park in France. Moreover, it unfolds a specific form of glamping, namely *sleep-centric glamping*, as part of a wider sleep tourism market in which experiences are sought for by way of sleeping in extraordinary places or spaces. By taking the sleeping body as its focus, the article explores how sleeping in an extraordinary place is bodily experienced. Furthermore, it sheds light to the ways the design of this particular tourist experience is a complex array, including both humans and nature, and which inevitably enables and constrains the connection between the human body and the nature's body. The multidisciplinary approach inherent in the article allows the authors to unfold a meaningful but indeed challenging research topic: sleep.

Keywords Body • Glamping • Sleep • Tourism experiences

1 Introduction

This piece of quote from the auto-ethnographic narrative of the first author invites us to scrutinize a tourism phenomenon that has to date received scant attention: the experience of the sleeping body in a novel type of tourism called *sleep tourism*.

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While sleep arguably plays a significant role in shaping and conditioning the tourist's experience, existing tourism studies have almost exclusively focused on exploring the experiences of wakeful customers (see however Valtonen and Veijola 2011; Valtonen and Moisander 2012). This is a considerable gap given that sleep tourism—a type of tourism in which experiences are sought for by way of sleeping in extraordinary places or spaces—is a rapidly growing industry (Keinan and Kivetz 2011). Consider, for instance, new kinds of sleeping facilities and services that are currently offered throughout the world: you are able to sleep surrounded by snow and ice in ice hotels or igloos; in a plastic bubble in the nature with the sky and the stars as your roof; attached to a mountain cliff hundred meters from the ground; underwater surrounded by marine animals and coral reefs; or down under in dark, quiet and chilly caves—just to give some examples (see Salmela 2012).

Those few studies that have drawn attention to this phenomenon have provided valuable insights of how sleeping is created as an acceptable, and even desirable, means for seeking entertainment, excitement, and experiences—and for filling the experience resume in a larger experience-economy (Valtonen and Moisander 2012; Valtonen and Veijola 2011; Valtonen, Miettinen and Kuure 2012; Keinan and Kivetz 2011; Pine and Gilmore 1998). Yet, they have not focused on exploring and detailing the *bodily aspects* of such an experience; that is, how sleeping in an extraordinary place is bodily experienced. Rantala and Valtonen (2014) offer an ethnographic account of bodies sleeping in nature, but we turn to explore sleeping bodies in an intriguing context that combines the elements of nature and urban amenities: *glamping*.

This recent trend in tourism industry exemplifies how our quest for experiences becomes entangled with our commoditized ways of living. As a luxurious form of camping, glamping is a descriptive example of the assimilation of our longing for excitement with more mundane practices; it provides a way to experience the nature without compromising comfort (see e.g. Brooker and Joppe 2013). It is also a culmination of western mankind's transformation from an outdoor society towards an indoor society (Hitchings 2011). Furthermore, by introducing a novel concept of *sleep-centric glamping* and providing an autoethnographic analysis of sleeping in a see-through Bubble made of recycled plastic in a nature park, this paper illustrates how the sleeping body becomes an inevitable part of this transformation from outdoors to indoors via an emerging tourism practice. This particular sleep-centric glamping service shapes the way the tourist and the nature (in which the tourist is located and which the tourist is an inevitable part of) connect; constraining and simultaneously enabling their relation. Here the design of the tourism service is of high importance (see Valtonen et al. 2012; Miettinen 2011); making dimensions that seemingly carry low importance strongly relevant in the ways this relationship becomes constructed.

What follows is that with our paper we continue the literature of bodies in nature (Macnaghten and Urry 2000; Rantala and Valtonen 2014) and further the emerging literature of glamping (Brooker and Joppe 2013; Boscoboinik and Bourquard 2011) by introducing sleep-centric glamping as a particular form of glamping and, in wider terms, of nature tourism. In this form of tourism the sleeping body comes to

the centre of attention together with the material and natural premises it is located in and with which it entangles. Moreover, sleep-centric glamping is part of the construction of a creative tourism experience, which engages tourists in creative activities and stimulates them in a creative process in a particular location. Here, the Bubble both becomes an aesthetic spectacle to be watched by the tourists and a creative and aesthetic activity in which the tourist is engaged. Thus, the Bubble becomes a creative space and interface between human and nature; it opens up a learning process and dialogue between them. This creative tourism experience is constructed through all senses. The feeling of the materials, smells, sceneries and sounds construct the landscape of experience (see Miettinen 2007; Rantala, Valtonen and Markuksela 2011).

The sleeping body in the Bubble provides us an intriguing case for advancing current understanding of the creation of bodily experiences in touristic nature-based settings. This is because the sleeping body in the Bubble situates at the dynamic interface of several dimensions: indoors/outdoors, nature/urban, camping/luxury, active/inactive body, alone/social body and small/predominant body—all dimensions being at once cultural and material. We suggest that the simultaneous and dynamic existence of all these hybrid dimensions, that are at once strange and familiar, creates the experience as distinct as it is. To grasp this distinctiveness we suggest the notion of *uncanny* (see e.g. Jay 1998) that helps us to render understandable how such as experience is made possible.

The chapter starts by opening up the phenomenon of glamping and exemplifying the empirical case of our study: the Bubble. Then follows our theoretical frame: a practice-based treatise of the sleeping body and of the body in nature, which is followed by the presentation of auto-ethnographic methodology and empirical materials. Next, we provide an analysis of the first author's sleeping experience in the Nature Bubble, constructed around the first-experience narrative and thus proceeding by following a chronological narration. To close, the article discusses the implications of the study for nature-based tourism, service design and cultural studies of human-nature relations as well as sets out future research agendas.

2   Glamping as a New Form of Nature Tourism

'Glamping' (glamorous camping) in its current form is a rather novel trend in tourism industry, representing a type of 'camping' accommodation with high comfort, providing luxury for tourists with an access to preserved areas that are often located in spectacular sites, usually in the nature (see Brooker and Joppe 2013; Boscoboinik and Bourquard 2011). Glamping is also referred to as an 'outdoor hotel experience' (UnionLido 2012), 'glam camping', 'lux camping' or 'luxury camping', and has even become a distinct category of travel. According to Glamping official website, the idea of glamping is to 'bring the world of luxury into nature in the most seamless way possible'. Thus glamping involves a high respect towards the nature. Still, there are also different emphases among glamping sites on

how the nature is 'valued'; as there are many designations of glamping, it also takes many forms. A tourist can glamp for example in airstreams and trailers, barns and farmhouses, cabins, eco lodges, huts, tents, tepees, treehouses and yurts. This reflects the multidimensionality of glamping that was highly evident also in our larger fieldwork on sleep market. Our empirical example of the Bubble can be categorized to a group of cubes, pods and domes—'a very unique category in the glamping world' that 'accompany a "green" or "eco-friendly" intent in both the way they are built and also how they exist in their various locations, with minimal environmental footprint and visually pleasing aesthetics' (Glamping official website). Thus sleeping alone in a Nature bubble made of recycled plastic in the middle of a national nature park has a different relation to the surrounding nature than, for example, spending a night in a wooden Moose Meadow Lodge with a magical treehouse, hot tub and a Sky Loft (a glass-enclosed gazebo at the highest point of the property) (Moose Meadow Lodge website).

In wider terms, glamping can be considered as a transition from outdoor to indoor hospitality—a blurring of boundaries between rural and urban spaces (Boscoboinik and Bourquard 2011: 149, 157). This 'special type of rural tourism' (ibid., 157) attracts tourists that are unfamiliar with or dislike traditional camping. By being guaranteed a sense of privacy, highly equipped personal space and even food-making options and a personal bathroom, glamping invites tourists to explore outdoors indoors. Thus tourists can enjoy the nature—the beautiful scenery, the starry sky, wild animals— while at the same time having not to worry about the 'discomforts' that are usually associated to an outdoor experience, such as insects, wet ground and the biting wind. When camping has traditionally been considered as a way to be close to the nature, allowing an experience where one is at nature's mercy, glamping offers a way to reach the nature but at the same time the contact with it is highly different than in traditional camping. By providing comfort and minimizing the 'effects' of nature, in glamping the tourist is able to easily retire to a hut, igloo or treehouse when it begins to rain or a swarm of mosquitoes comes by. More importantly, the tourist doesn't have to be equipped to survive in the nature; she can experience the nature with a groomed appearance—not a hair out of place.

As glamping situates to the interface between nature and urban tourism, it is also an illustration of a creative tourism service (see Miettinen 2007). As Richards and Wilson (2006) have described, creativity in tourism can be achieved in different ways: first, as a more *passive* tourism experience where tourists consume creative experience for example by watching spectacles such as travelling art exhibitions or festivals and; second, as a more *active* tourism experience where tourists visit creative spaces that have an arts, architecture and/or design focus. Our empirical example, the Bubble, stands for a creative tourism experience that engages tourists in creative activities and stimulates them in a creative process in a particular location. Here, the Bubble becomes *both* an aesthetic spectacle to be watched by the tourists *and* a creative and aesthetic activity in which the tourist is engaged— fostering interaction between the tourist, the Bubble and the nature. Moreover, the creativity of this tourism service intertwines around sleep.

2.1 Towards Sleep-Centric Glamping

Brooker and Joppe (2013: 5) point out how tourists' search for comfort, today culminating in glamping, isn't restricted to contemporary era; it can be traced back all the way to 1920s when tourism services became designed to imitate domestic facilities and were offered commercially. As a new form of tourism, glamping represents an outcome of a continuous product innovation that has taken place within decades (ibid.), that of 'a renewed perception of rural space, its symbolic representation, and the crisis of the agrarian sector, together with the need of innovation in the tourist industry' (Boscoboinik and Bourquard 2011: 151–152). Furthermore, *sleeping* in an unusual place is a rather new fashion in glamping (Boscoboinik and Bourquard 2011: 158). While glamping most usually involves sleeping in the nature, this form of glamping is for one *constructed* around sleep, as our empirical fieldwork of sleep market also exemplifies.

To conceptualize this particular form of glamping, we introduce a concept of *sleep-centric glamping*. Here the point is not to experience the nature and the local environment with versatile activities while being awake, but instead to sleep, for example, under the stars or to see the northern lights when lying down in a comfortable bed in a glass igloo. The focus on sleep makes the selection of the type of housing increasingly relevant before the destination (Boscoboinik and Bourquard 2011: 158). Sleep-centric glamping also effects on the temporal dimension of the tourist experience; one night can be enough for a tourist to sleep in an igloo or a plastic bubble with nothing much else to do in the area as other glamping opportunities might include short distance to a near-by village or a near-by beach or different services that are available on the site, such as massages and restaurants. One night was enough to have an unforgettable experience when the first author slept in the Nature Bubble, next to be described in more detail.

2.2 The Bubble

The Nature Bubble (nowadays called Love Nature) is a four meters wide and three meters high, completely transparent bubble made of recycled plastic, with a panoramic view to the surrounding nature. The Bubble is located in a regional nature park of Verdon in southeastern France, near a French village called Montagac-Montpezat in the Alpes-de-Haute-Provence department. According to Attrap'Rêves (the company behind the Bubbles), the aim is to share magical moments by creating 'a true poetic and sensory bubble experience through the installation of design and ecological tents but without sacrificing the environment' (Attrap'Rêves' website). Attrap'Rêves' is the first network in France that provides nights in Bubbles. The tourists can choose from different concepts of the Bubbles (be it the Suite Chic & Design, Glamour, 1001, Zen or Love Nature bubble) that vary in their privacy and interior design. The Bubbles have a silent blower inside

Fig. 1 The Nature Bubble. Photograph by the first author

that keeps the space inflated, while constantly recycling the air. The Bubbles also have their own private shower cabins and a private space outside the Bubble where to enjoy morning breakfast when longing for privacy (Fig. 1).

For us, the Bubble presents a theoretically interesting mixture of something that is 'normal' and at the same time 'strange'—it provides the tourist something familiar from home and indoor living (as the Bubble is domestically furnished) and at the same time brings this familiarity to an uncommon environment for such material equipment to locate (a nature park).

Thus the Bubble blurs the boundaries between material practices we have accustomed to carry and the ones that appear foreign to us. This 'distraction' forms also the basis for criticism towards the practice of glamping in more general; when being designed as a luxurious or glamorous form of camping, it has become a criticized mode of nature tourism. It is argued that the tourist doesn't actually sense

or enter the nature in a way that one would when actually camping *in* the nature and 'at the mercy of it'. Before opening up these notions in wider terms through our empirical illustrations, we will introduce the theoretical premises upon which we base our arguments.

3 Theoretical Background: A Practice-Based Understanding of a Sleeping Body

As tourist agency involves sleeping and waking as states of existence (see e.g. Rantala and Valtonen 2014), we identify the tourist as a sleeping-waking, experiencing and sensing body. While we cannot detach sleeping from waking (see e.g. Salmela et al. 2014), some distinctions still have to be made in order to emphasize the theoretically interesting particularities of the sleeping body. Thus, we define 'sleep' as a momentarily withdrawal from the social world (Harrison 2009), as a form of corporeal activity that is 'liminal, unconscious, aspect of bodily being and an "a-social", "in-active" form of corporeal "activity" (Williams and Bendelow 1998: 172). While the sleeping body is in some level unconscious to the world around her, situated outside the will (Harrison 2009), sleep involves feelings of fear and vulnerability (see e.g. Williams 2007b). In addition, sleep is not to be defined only in narrow terms of mere withdrawal; there are different phases and dimensions of sleep that are theoretically valuable to acknowledge, namely that of preparing to sleep (which indicates the entanglement of sleeping and waking), light sleep, half-sleep, deep sleep, dreaming, sleep-walking, waking and slumber (see e.g. Williams 2005: 70). These different dimensions emphasize the liminality of sleep; it is a state between consciousness and unconsciousness and between volition and involuntary (ibid.). When following a process philosophical thought (e.g. Tsoukas and Chia 2002), sleep is also a something we live *through*—unlike death (Williams 2007b: 144)—emphasizing its wavering character as something that cannot, or isn't justifiable, to be categorized as something 'strict' and one-dimensional. This understanding is in great importance when approaching sleep from a cultural viewpoint.

By taking the sleeping *body* as our focus, we join other scholars by theorizing the connection between sleep and a human body from a cultural viewpoint (Mauss 1932/1973; Williams and Bendelow 1998; Salmela et al. 2014; Valtonen and Veijola 2011; Valtonen 2013; Williams and Crossley 2008). Although research on sleep has a long history, it's been only rather recently that the sleeping body has gained the status of a respectable topic of socio-cultural analysis (Hancock 2008; Valtonen and Veijola 2011; Valtonen 2013; Williams 2005, 2011; Williams and Crossley 2008; Williams and Bendelow 1998). As attention has for long been paid to the biophysics of the sleeping body instead of its socio-cultural significance (Hancock 2008: 412), the socio-cultural, political and economic aspects on sleep have been effectively bypassed (Hancock 2008: 412). However, the roots of the

recognition of the body trace back to the famous sociologist Marcel Mauss (1932/ 1973). Although his attention towards the sleeping body was noticeably limited, his notion of 'body techniques' has been a great help to sociologists to make sense of embodiment in an empirical analysis (Crossley 2007) and thus of the sleeping body. It is of great help to us as well.

According to Mauss (1932/1973), along with versatile body techniques there are certain 'techniques of sleep'. What follows is that, for example, the assumption of the practice of 'going to bed' as something *natural* is completely misguided, as people along ages have slept with and without material equipment, in different bodily positions, at different times and with different company (Mauss 1932/1973). But for us modern westerners, sleeping in a well-equipped, private bed indoors in a vertical position appears self-evident. Moreover, versatile sleep-related practices, being material by nature, reaffirm our understanding of a 'correct' way to sleep; we like to brush our teeth, change our clothing, read a nice book and finally retreat to our comfortable bedding after shutting down the night lamp in our bedroom table. These practices are all part of the highly privatised nature of sleep in contemporary Western society (Williams and Bendelow 1998: 172).

In our treatise practices are considered as a manifestation of the world and its social dimension, being always socially, culturally and historically shaped and mediated (see e.g. Williams 2005, 2011; Salmela et al. 2014). Thus they can be considered as a vital condition for human bodies to exist—and vice versa. What remains utmost important for our study is that these socio-cultural practices do not bypass the sleeping body. The ways we sleep—how, when and where and what we 'do' of sleeping—are socially, culturally and historically laden (Crossley 2007: 324). Thus the sleeping body is socially pliable; it is highly entangled with changing socio-cultural and historical practices and logics (see Williams and Crossley 2008: 173).

In this chapter we pay particular attention to a sleeping body's bodily technique to sleep lying down (see e.g. Rantala and Valtonen 2014). This is a posture in which westerners have learned to sleep over the course of history and which holds specific characteristics that give us theoretical leverage to deliberate on the relation between the sleeping body and, in our empirical case, the nature in which the body locates. Moreover, we direct our focus to the material premises, which encase the recumbent sleeping body while being in the nature—the Bubble. Thus we acknowledge the impact of materiality and design in the formation of relationship between the body and nature as well as the unavoidable relationship between the material world and the fleshly, human body (see e.g. Barad 2003). This means that material constructions, such as the Nature Bubble, shape, limit and direct human (sleeping) experience.

4   Bodies in Nature

While there are only few studies in the field of tourism focusing on sleeping (Valtonen and Veijola 2011), and especially sleeping in nature (Rantala and Valtonen 2014), these openings have offered us the possibility to continue shifting the focus from the privileging of the waking in the context of tourism. Furthermore, Rantala and Valtonen's (2014) study has inspired us to take the deliberation of the bodily posture of a sleeping body further. In their study, Rantala and Valtonen (2014: 20) provide an empirical elaboration of a stilled body in nature—thus concentrating on concepts of 'stillness', 'being' and 'withdrawal' in the context of nature-based tourism. Their focus is on the *rhythm* of the tourist and/in the nature, providing a chronological rhythmanalysis of touristic sleep practices in the nature through an ethnographic research among nature tourist groups. Thus their empirical data rewards them with a time-bound understanding of the importance and valuableness of sleep and being still as part of a nature tourist experience. With our study, we are able to cherish the notions brought forth in this study and connect them with our autoethnography that has a shorter time span and that pays close attention to the bodily posture of a sleeping tourist when spending a night alone in a foreign place surrounded by nature, in a rather uncannily equipped environment.

Once discussing 'nature' with singular terms—as there would be something distinct from us that we call 'nature'—we are (rather unwillingly) taking part in a larger construction of separation between humans and non-human nature (see Williams 1980). Furthermore, when we explore the relationship between the tourist and the nature, we are indisputably recognizing them as separate entities, even if we would argue that in ontological terms we do consider them as one. We recognize the plastic Bubble as 'non-nature'—a man-made thing that is apart from nature, but being 'placed' in it. When considering nature parks (in which the Bubble locates), we simultaneously acknowledge the *entanglement* of human and nature—a nature park is part of human creation (see Williams 1980). When conserving nature areas from human touch with different regulations, humans are unavoidably part of the nature that they aim to enshrine. Furthermore, we recognize the long-lived tendency of tourism industry and of the modern human in general to consider nature as a place for retreat, a refuge and a solace (Williams 1980: 80). This way of conceiving nature is highly evident also in our empirical example. It's a way that tells as much about us as humans as it does of nature (Williams 1980: 81).

Once recognizing the problematic inherent in the separation of nature and human, the personification and abstraction of nature at the same time enables us to explore particularly clearly the very fundamental interpretations of our own experiences (Williams 1980: 71). Thus, in our paper we are able to say something valuable about a tourist who has accustomed to live in a built environment, indoors, without being in touch, on a daily basis, with plants and animals in the woods or with complete darkness or fierce wind without the opportunity to retreat to comfortable conditions. Furthermore, by conceptualizing 'nature tourism' as such, a profound distinction between 'human' and 'nature' is already inevitably made. But

as our empirical illustrations will indicate, we are challenging ourselves to question these separations that appear to us as self-evident. This allows us to also emphasize the *agency* of nature (see e.g. Starik 1995)—making the relationship between the tourist and the nature actively reciprocal and thus allowing no primacy to the human tourist. Thus the tourist's confrontation of the 'surrounding nature' and the 'nature within herself'—the agency of our bodily functions that 'happen' without our conscious will (see Haila and Lähde 2003: 17)—as well as the nature's confrontation with the tourist (which particularities remain only our own interpretations) all become dimensions under scrutiny. What follows is that while acknowledging our embodied entanglement with nature, we understand humans to take part in a valuable order of the nature *through* their embodiment—making it possible for the 'embodied self' to 'attune' to nature (Connolly 2002: 108).

5 Auto-Ethnographic Methodology

To approach our research subject, we use auto-ethnographic methodology, providing a close access to our topic. Auto-ethnography has quite recently become a popular form of ethnographic research in many fields (Ellis et al. 2011), including tourism research (Barbieri et al. 2012; Buckley 2012; Noy 2008; Scarles 2010). While there is no one standard form of auto-ethnographic method, generally, the auto-ethnography seeks to connect the personal to the cultural (Ellis and Bochner 2000: 739). Auto-ethnography thus entails a detailed analysis of the researcher's own experiences qua member of a social group or category. These experiences are analyzed so as to illuminate wider cultural aspects and processes. (Allen-Collinson 2008: 40.) The purpose of the fieldwork—during which the auto-ethnographer is simultaneously the researcher and the researched—is to invite 'others' to see the field from the point of view of 'the self' instead of 'seeing it from the point of view of the others' (Valtonen 2013: 203).

In this study, the first author gained first-hand embodied experience of sleep-centric glamping by way of sleeping in the Bubble. This personal and embodied experience is put into an analytic dialogue with wider, often contradicting, cultural practices and meanings that surround such a sleeping body. Thereby, while she writes about her own bodily experiences, they are located to a certain social and cultural context, and interpreted against it. In so doing, our study follows the general argument of auto-ethnography: by way of studying the most individual and unique, one can gain an understanding of the general (Reed-Danahay 1997: 9).

Auto-ethnography is a particularly suitable method for this study, because it allows us to have access to a phenomenon that has socio-historically been constructed as the most private and intimate: sleep. Furthermore, our focus on the body calls for a method that is sensitive to detailed and fine-grained aspects, such as inner bodily sensations at the moment of encountering strange sounds while trying to sleep, and auto-ethnography allows this. It makes it possible to observe, articulate and document private and intimate sleep-related corporeal experiences. While

observing one's own sleep-related corporeal experiences was, admitting, somewhat challenging in the beginning of the fieldwork (as we as academic scholars are used to observe wakeful and 'more active' experiences), the observation skills developed during the fieldwork. Namely, the night in the Bubble, that is the empirical focus of this study, was preceded by wider fieldwork period during which the first author spent nights in other places designed to provide extraordinary sleep experiences (partly in collaboration with other colleagues of the research team). During years 2012–2013, nights were spent in a hotel room surrounded by snow and ice in Finnish Lapland; an art hotel in a room filled with nude art in Berlin; a 'bird's nest' situated in a tree in Sweden; an indoor caravan in an old factory hall located in Berlin suburb; a glass igloo under the Northern lights in Saariselkä, Finnish Lapland and finally; the Nature Bubble.

In this study we are thus using the first author's autoethnographic data generated by spending a night in autumn 2013 in a see-through Nature Bubble in a glamping site provided by a French family company called Attrap'Rêves. The data consists of the following: photographs, taken by the first author, of the Nature Bubble and its surrounding environment, the regional nature park of Verdon and the site of Montagnac-Montpezat; written fieldnotes while being in the site and continued imminently when returning home, continued with; first-experience narrative and followed by; a reflexive dialogue. The data were analysed through a practice-based understanding of sleep and the sleeping body (Dale 2001; Williams and Bendelow 1998), starting already while being on the site and continuing as an ongoing process up to the writing phase, allowing room for a continuous interplay between data and theory (Alvesson and Kärreman 2007). The two other authors participated in the creation of the interpretive lens and also offered reflexive feedback to the auto-ethnographic narrative. Through this collaborative practice, certain themes emerged from the data. They were recognized when reading the data by leaning on two principals: first, the recognition of the particularities of the recumbent sleeping body and; second, the recognition of the enabling and constraining characteristics of the material bubble. The analysis that follows was constructed around the first-experience narrative and thus proceeding by following a chronological narration.

Now it's time to proceed to our analysis. In the upcoming chapter, we shall unfold the empirical data by focusing on the theoretically meaningful particularities of the sleeping body on the one hand, and the design of the bubble experience on the other. The analysis progresses chronologically, highlighting excerpts from the first author's field notes when sleeping in the Bubble. The analysis is followed by a discussion that integrates the empirical notions more tightly to the theoretical background of the paper.

6 Analysis

6.1 The Journey Begins

> I'm running with my 23 kg luggage in the train station to find my way to the bus that has replaced my train to Mountagnac-Montpezant…

While the Nature Bubble was an adventurous experience—something to be remembered by the first author perhaps for the rest of her life—it is rather amusing to point out that what she actually did was to travel by airplane, a bus, a metro, a train and a car to experience the nature through plastic. But, fortunately, the adventure entailed a lot more. The experience started with a memorable journey to the nature park of Verdon where the bubble located. The journey had its effects on the whole experience of the Bubble, even though it is not an exact part of sleeping in it, but forming an integral part of the entire service. The journey to the Bubble was interesting in other ways as well; it exemplified quite clearly the difference between glamping and camping. The first author entered the nature park with a car instead of, for instance, trekking—which would stand for the most typical way of moving while camping. In the Bubble experience, the destination was the one that counted. The journey to the site was only a transition, nothing else. Most importantly, it was sleeping in the Bubble that she looked forward to. Acknowledging this, the experience of sleeping in a Bubble, as a whole, was rather immobile when it comes to bodily movement. The first author travelled to the site in a comfortable sitting position in versatile motorized vehicles (see Ingold 2004). This also exemplifies the fact that 'nature' was something she travelled *to*, without the use of her feet, instead something she was *in*. This is the modern way of travelling from city centres where the nature is eliminated.

One essential part of the experience, namely *darkness*, was present already when travelling to the site:

> It was pitch black once we got to the final route to the Bubble hotel—the drive was approximately an half an hour and it was already around 8 p.m. There were no streetlights in the area nearby because of the stars—they didn't want to ruin the possibility to see them. We chatted and joked all the way through—Miguel (the guide that picked me up from the train station) with his bad English—and he asked me a couple of times if I was scared. I wondered why and he told me about the Bubble and the fact that it's going to be pitch black. At that time, I was more worried about the drive in the dark as our speed was fast and the roads were curvy…

The village had relinquished their power to keep the area lit in order to make it possible to see the starry sky. This made the first author delighted and anxious at the same time. It reminded her of the power of nature—of the billowing darkness that devoured the village with its houses and fields—making her and Miguel with their tiny car appear 'meaningless' and petite when compared to the hilly scenery that loomed beyond. The scenery seemed so strong and her imagination started to travel. But instead of being scared, she was confused—as she lived in the city she wasn't

accustomed to drive in pitch black; while being in the car seat she felt helpless and endlessly small.

6.2   Confronting the Bubble

> There it was, along a narrow path, uphill, surrounded, a little bit at least, with fences so it brought a nice sense of privacy for me. My first impression was "wow, ok, didn't see that coming"—even though I had seen the bubble in the pictures. It was a bubble made of recycled plastic—not a big one—but big enough for a small girl like me and for a couple.

Confronting the Bubble was astonishing. There wasn't any way to prepare for it—the Bubble seemed uncanny—a relevantly large, plastic 'thing' standing at the end of a private path uphill that was only reserved for the first author, in an environment where it didn't seem to belong. It almost appeared a bit amusing; the round shape of the Bubble didn't make it blend in with the nature—rather the other way around. It stood for an artificial installation—even more so during the next day when the first author saw the Bubble in daylight; then the modern interior design became unclothed for the surrounding gaze of the nature without any artificial lighting. As the Bubble had its own cabin for a shower and toilet, a fence covering privacy on one part of the Bubble and a base, which was covered with grit, it became a 'site' instead of a sole 'bubble' with limited amenities. This made the Bubble, at the same time, quirky and comprehensible. A modern cottage with an outdoor toilet, perhaps? Although the Bubble didn't leave a track in the nature—disappearing from it once emptied, like a soap bubble floats in the air—its premises still staid, setting a proof that something has been there, leaving an 'empty space' that disrupts the nature's harmony. The scenic viewpoint had been carefully selected, and space for the Bubble had been made. But still, while being artificial, it felt like a space reserved only the first author to be *safe*—even the guide didn't enter the Bubble once giving instructions. It was her own Bubble; for only her to be entered; her own retreat which welcomed her to sleep under the starry sky.

6.3   Settling Down to the Bubble

> Once I got back into the Bubble after the shower, I realized while standing outside, that yeah—it is completely see-through. My night lamp was on and you could see my Bubble as a showroom. What did I do once I arrived when I didn't understand that everybody could see? Oh my. . . I even ate my packed lunch in the Bubble even though it wasn't allowed. I was just so hungry!

Like Williams Shakespeare in *Hamlet* once wisely said: 'For some must watch, while some must sleep'. In the Bubble, the first author's body exposed to the eyes of nature and those of possible wanderers that could find their way to her private area. The desk lamp made the Bubble a stage—a scene of action, or in-action—where the

tourist was obliged to enter. There wasn't a choice to put the light off because otherwise her poor night vision wouldn't allow entering the Bubble without tripping or failing to reach the needed personal belongings after the shower. Even when the author's gaze would get accustomed to darkness, her night vision would still be extremely limited. When entering the Bubble with a light on, she felt subservient to nature and the animals living in the woods. They could see her as she didn't see them. With the lamp on, the only thing for her to see was the content of the Bubble—her gaze was indeed limited. But what she then realized was that her bodily exposure to the nature wasn't as oppressive as one could imagine...

> The other bubbles were covered with white cloth from the lowest part so the couples could spend their romantic moments in the Bubble and not be feeling "bare" to the outside nature and surroundings. But my Bubble was different—and to be honest, I liked it and didn't have any problem with it after the first confusion. My body was exposed to the outside world—but only with the natural one—the one that doesn't have any curious pairs of eyes to peep at something so private as one's bedroom. Or when I come to think about it, there are several curious pairs of eyes in the nature... But if there would be somebody or something that was interested in my Bubble, they wouldn't think about it the same way as people would do in a city hotel with curtains open. The animals going by wouldn't care less about me and my body in the Bubble—they would just be interested about the light and the fact that there's a round, plastic things in their path which they have to go around. As a thought it was relieving—who cares if somebody sees me in my pyjamas? I'm in the middle of a nature park, for god's sake.

Even though a sleeping body is commonly exposed only to the closest ones (see e.g. Brunt and Steger 2008: 23), the transparency of the Bubble turned to be liberating for the first author. In a matter of fact, she started, little by little, to recognize the comic aspects of the situation at hand; she was sleeping in a transparent and rather large plastic bubble with her downy pyjamas in the middle of a nature forest when an electric heater was keeping the Bubble warm and a blower kept it full of air. She wondered that if the Bubble seemed so uncanny for herself, how odd would it seem from the eyes of animals passing by? She recognized the difference between sleeping in such an environment, provided by a specific tourism concept, and sleeping 'bare' in the city. She felt lucky to have this opportunity to 'let go'...

6.4 Sleeping in the Bubble

> So it was time for bed—I was waiting eagerly to get under my sweet, green blanket and put my head into the two inviting pillows. So I did.

The Bubble was materially equipped with high-quality furniture and bedding. A king-sized bed, nightstand and reading lamp reminded the first author of her own bedroom or a hotel room—making the Bubble rather homely. At the same time, while being in the middle of a nature park, the equipment, involving also the first author's massive rollable suitcase, appeared utmost strange. It differed from the one of camping where the basic equipment consists of a tent, sleeping bag, slim

mattress, backpack and a pillow (or a bundle of clothes that replace it). Also the tourist's access to electricity and running water with an own private shower cabin represented luxury. The furnishing in the Bubble invited the tourist to sleep in pyjamas, as while camping we are often used to sleep with a particular set of underwear that keep the body warm or even with daytime clothing. Traditional campers' way of sleeping is partly against the sleep etiquette (Williams 2007a; Williams and Crossley 2008: 6), connected to a reckoning of sleeper's duties (Parsons 1951) according to which one must sleep in a bed or alike, in a private place away from the gaze of the crowd in a proper nightgown (ibid.). While feeling silly to put on pyjamas in the middle of the forest to sleep in, the first author fulfilled some of these 'duties', which the traditional camper doesn't necessarily do. But what remained 'unfulfilled' was the privacy, which, despite the Bubble's location, wasn't guaranteed—in the Bubble, the sleeping body was extremely exposed to the surroundings. Still, the tourist wasn't to be *touched at* or *smelled at*; she was insulated from the nature through plastic. When traveling alone, the first author also felt insulated from a human other. . .

> It felt like my relevantly small body was not designed for the bed to lay there on its own. The Bubble was somehow full of romance—the dim lights, the sky as a roof, the big bed, two pillows. . . It was clearly made for two people. I put off the lamp after skimming through my Facebook (just to get the grab on something familiar in this new situation) and yes—there they were—the stars, the moon, the airplanes flying by. . .

The design of the Bubble, as well as the first author's experiences of meeting only couples in the site, made sleeping in the Bubble a 'two of a kind'. Not only was she a stranger in the circling forest with her Bubble, she also felt a stranger in a large bed that appeared not to be designed for her lonely body. She found a companion from technology, but only after shutting down the light and seeing the sky with the stars did she make a phone call to her loved one back at home. . .

> I just felt a huge urge to share my feelings and the way I felt all the way in my body—the shakes, the goose pumps—I had to tell about them. We talked in the phone how it would be awesome to share the experience—to sleep under the stars together. Even though it was ok and nice to be there on my own and experience something that unique, it was truly something to be shared. The sleeping body of mine longed for another one to be there on my side.

The western habit of sleeping alone or only with a closest companion (see Tahhan 2008) doesn't exclude the fact that sleep is a profoundly *intimate* form of bodily existence (e.g. Valtonen and Veijola 2011). The empty space beside the first author while lying down in a wide bed reminded her of the lack of this intimacy, which need became ever more evident when being in an unfamiliar environment, providing a unique experience to be shared. If the Bubble were designed differently, having a narrow bed that would welcome only her and no others, the experience would probably have been different. Now the amazement turned into longing for that special someone to share the bed with—a bed that provided a 'window' and a foundation to nature's wonders in that peculiar site.

> The little humming sound was nice in the Bubble—it brought me comfort as it wasn't totally silent. If it would have been, I think I would have been a bit scared, listening to all the little noises coming outside—a squirrel passing by or a bird flying from the next branch to another. Just listening to the sound of the humming and also being aware of the nature around me was comforting—it was peaceful and my body seemed to go to a sort of a meditative level, even though my stomach hurt because of the different foods compared to Finland that I had eaten during the day.

The humming sound came from a device that kept the Bubble inflated. It brought the first author's sleeping body into the realm of something familiar—perhaps an air conditioning device at home or at the university that belongs to the soundscape of her everyday life (see also Hitchings 2011). Sleeping in the Bubble was indeed a multisensory experience, even though a lot different than the one of camping. While spending a night in the nature *without* a plastic wall between the tourist and nature, one can feel 'the wind and moisture, the freezing cold and warmth of sunshine' or the heat, smell or taste of the campfire (Rantala and Valtonen 2014: 27). The first author didn't experience any of that inside her Bubble. But what she did experience was a blurring of a familiar soundscape with that of unfamiliar, the rustle from the ground level where she slept in her bed as animals were active at night, the changing temperature of the Bubble (despite of the heater), the total darkness surrounding her, the dawning daylight in the early morning while the moon was still up in the sky... These are the same kind of sensuous experiences and atmospheres (Bille and Sørensen 2007: 270) that the campers are able to confront, such as natural colours, lightscapes and sounds (Rantala and Valtonen 2014: 27). Many of the sensorial experiences were natural of origin—they existed because the nature was living around, and in, the first author—but the silent blower that kept the Bubble inflated while constantly recycling the air inside stood for a manifestation of the plasticity of the experience. Instead of being natural, the air was produced— forming the condition for the material Bubble experience to exist.

> The bed was LARGE—flat, and wide. I hid under my huge blanket.

While being in the bed alone, the first author found comfort from her big blanket. When the lights were on, it allowed her to hide—she didn't feel that bare once being underneath it. It was also less oppressive to put the lamp light off and face the darkness while being under the blanket. Like the sleeping bag provides comfort for the camper (see Rantala and Valtonen 2014), the blanket does it to the glamper. This reminds us from children's stories of a boogieman underneath the bed that is told not to touch the child if all her limb are under the blanket. But in the Bubble, there wasn't space underneath the bed for the boogieman to lurk the sleeper—the bed was near the ground, without any legs. This brought comfort to the sleeper— making the bed a 'nest' to provide safety. At the same time, it was a strange experience; the design of the bed allowed the sleeper to confront her surroundings in a particular way as it brought a certain perspective to the world. In western world, we have accustomed to sleep being lift *up* from the ground. This arrangement carries along a certain level of control of the surrounding environment. When being on the ground, on her back or on her side in a recumbent position, the first author

experienced smallness; the world opened up around her in a different vein than she was familiar with. It wasn't the same experience as back then when she was a child, lying in grass with her arms and legs pointing in different directions, but it reminded her of it—even though when the real grass was replaced by a fake one in the Bubble and the 'ground' she laid on was a luxurious bed. Still, the trees around her looked bigger, the bushes wider, and the sounds of the creatures in the night were louder. . .

By being recumbent, the connection to the ground was different than when standing or sitting; the recumbent body approached the ground in its entirety, with shoes off, questioning the overriding condition for the 'intelligent man' to exist (see Ingold 2004; Rantala and Valtonen 2014: 9). The recumbent position gave way to creativity—while taking physically a different perspective to things around there was more space for novel thoughts to emerge. Moreover, the design of the Bubble allowed the gaze of the tourist to be wide-ranging; but instead of being a 'commanding' gaze as such, the human gaze was a 'wondering' one—shedding light to the particularities of the surroundings with no physical barriers, as the Bubble was see-through. The only barrier for the human gaze was the nature's darkness as we, as humans, are limited to see through darkness. The first author was all alone in the Bubble with her own impermanence, but rather than getting anxious about it, it was relieving to 'let go'. . .

> If there would have been no pain in my body, I think the feeling of floating into another dimension of world would have been even more present. I felt my body was so little in the middle of the nature—me in my little Bubble, responsive to the things happening around me—it was a refreshing feeling—I felt like I wasn't able to control things anymore. In that moment I could control only the way I was positioned in my comfortable bed. I wanted to stay on my back for quite a long time just to see the stars and the moon and the planes flying by. When I then started to feel tired I turned on my side and got ready to sleep—and that's really when I really started to feel my stomach hurt. Before that I think I was in sort of a mystified state and just enjoyed the spectacular scenery and the peacefulness the nature around me brought to my mind and to my body. I closed my eyes and hoped that the ache would go away. . .

The recumbent position of the first author, together with the see-through premises she was in, made her feel small and powerless—in a good and relieving way. Also her Bubble seemed to be smaller than when first confronting it. By lying down near the ground under her blanket she 'gave away' her imaginary human mastery; if there was something to do her harm that would just have to be accepted. Lying on her back was a bodily position perfect for wondering—turning on her side was a body technique that prepared her for sleeping. By turning her back to one direction, and thus to the nature behind her, was also one phase of 'giving up'; she lost her gaze and accepted that see couldn't see if there would be somebody approaching her Bubble. The ultimate 'giving up' culminated in the phase when the first author closed her eyes. In this phase of sleeping, she became even more vulnerable—entering an unconscious state, and even before that, diminishing her sensorial capacities to observe her surroundings. She wasn't in control either of the surrounding nature or the nature *within* her body; the ache in her stomach had a strong effect

on her experience in the Bubble and reminded her of her corporeality. Yet the nature brought calmness to her bodily being that would, at that stage, make her feel uneasier in a different surrounding.

6.5   Waking up in the Bubble

> In the morning I woke up to a silent alarm in my phone. The music was a "secret forest" that suited so well to the surroundings I was in. It was like from a dream as it was still dark and you could see the moon shining still above you. It wasn't long until you could hear the rooster shouting nearby. It was really something different. I felt just sooooo good. I would have just wanted to stay and lay down for a long time—even though I usually am a quick person to get up from my bed. The stars were still bright and even though it was dark you knew it was morning as the slightest strings of light were coming from the sky and the clouds were emerging. I felt like a baby—you know, when people say that they sleep like a baby? I felt like my cheeks were "plumped up" and I just wanted to stretch like a cat and lay in my bed for an undefined amount of time. . .

After spending a night in the Bubble, the first author felt more familiar with her surroundings. The confusion had passed and was replaced by marvel; the moment of waking up was calm—the ache in her stomach had vanished and her senses could be 'freed' to admire the sky above her. Somehow she felt 'pure', and the moment brought memories from a very early age of her life—reminding her of being once a baby sleeping in a crib. The nature within her had changed from stormy to serene. . . Her bodily feelings verified her good night's sleep and there was no hurry. The nature showed her signs of the dawning day and the clock became meaningless. The nature gently 'forced' the tourist to wake up little by little. As the first author woke up while it was still rather dark, she had a heightened perception of nature (Rantala and Valtonen 2014: 26), even though she wasn't sleeping under the open sky. Knowing that it's now morning gave her comfort. The mysticism of the night, and the scaring thoughts that were involved in it, became conceivable. Being able to see more clearly the nature around and above her because of subtle daylight made her feel comfortable—maybe because she felt being more aware of what's going on around her. Waking up was an important part of the sleep journey (see Valtonen et al. 2012) in the Bubble—a one that grabbed the sleeper away from the abyss of confused thoughts and anxiety that were inevitably part of the experience—and allowed the brightness to enter the mind and the body. Waking up in the Bubble was as if a 'second date' with the nature—it allowed the tourist to *enjoy* rather than *survive* with her running imagination.

> When lying on my back for a good while, I gradually started to arrange my departure from the Bubble in my thoughts. I knew I had to leave from the hotel quite early to catch my train back to Marseille. At the same time I felt delighted to be heading back home but at the same time I felt like the timetable spoiled something about the experience. And then. . . all of the sudden dogs began to bark somewhere nearby and you could hear a man shouting. My body sharpened up and my heart rate went up like a rocket. It wasn't long until I realized it was a hunt going on and then the guns started to shoot. Oh my god—what a nightmare—in this beautiful place the peaceful atmosphere was "raped" with guns and violence—I thought. It

truly was something you couldn't expect to happen in this kind of a destination. When taken into consideration the fact that I love animals and that I'm a vegan this was outstandingly awkward thing for me.

The first author's moment of calmness turned quickly to one of concern because of the timetable and later to a fierce shock because of the gun noises nearby. It was a breakdown of an experience—something that she would have never expected to happen during her stay in the Bubble. The whole experience appeared even uncannier now than when confronting the Bubble for the first time. In addition, in that very moment the whole experience of the Bubble seemed to change. The Bubble wasn't mystical anymore—it was just a strange accommodation, which also looked different in the daylight. Now, it looked rather meaningless—it didn't have anything to provide for the tourist anymore as she had now totally woken up (in an extremely unpleasant way) and wasn't willing to spend more time in the Bubble. She wanted to stay *outside* the Bubble and her thoughts were already on the journey back home.

Furthermore, during daylight, experiencing the *outside* when bein*g inside* seemed silly. The Bubble didn't invite the tourist to lie down in the bed during the day—the transparency of the Bubble somewhat 'screamed' for being awake in the daylight—making the interior look rather messy while the suitcase was open and the bed unmade. It didn't invite the first author to write or read in it either. For her, it was a place only for sleeping—experiencing something unforgettable in the night-time, in the darkness. The Bubble seemed to wait for clean up and for the next sleeper to see it as its best—in the night surrounded by darkness. All these experiences were framed by the unpleasant experience of hearing the gunshots nearby. It is likely that the surroundings of the Bubble alone would have tempted the tourist to stay for a longer time, if the shooting wouldn't have taken place. The shooting became a reality check of the entanglement of the tourist's and nature's body—it surely shocked them both.

> I just felt like I would have wanted to get back there when I didn't have a hurry, with somebody important to me, to share the experience in peace and without haste. Like the couples in the bubbles did—they were peacefully sleeping when I went to get my breakfast. Once I left and dragged my huge luggage down the hill, one couple was peacefully enjoying their breakfast with no hurry. Maybe time will "heal the wounds" and it would be a new adventure to go and experience the Bubble once again. But right now, I feel like I will take a little time off from the journey to the Bubble. What comes to my mind is that I had a spectacular experience of sleeping in the Bubble, but the other practices attached to the experience—the practicalities, so to say—ruined a bit of it. When I sat down in my taxi I felt good to be going home and to be surrounded by familiar things around me—even though I enjoy experiencing new ones. But what is of certain is that the utmost uncanny experience of sleeping in the Bubble will never fade from my memories.

7 Concluding Remarks

In this chapter, we have taken a journey back to the first author's unforgettable experience when spending a night in a see-through Bubble in a nature park in France. The journey is an example of a rather novel trend in tourism industry called *glamping*, representing a luxurious form of camping. Furthermore, it stands for an example of a certain form of glamping, namely *sleep-centric glamping*; a tourist service that is constructed around sleep. This service is, first and foremost, an experience—a one that is *designed* as such, through complex combination of versatile 'designers' that involve also the nature and the sleeping tourist. This creative design has an impact on the ways the tourist and the nature 'meet'—shaping their relation—enabling and constraining their embodied connection. With our body- and design oriented reading of the autoethnographic data we have been able to unfold some of these valuable particularities of the relationship between a tourist and nature.

The relevance of experiences in today's modern economy has been widely recognized in academic literature. Indeed, the vast body of existing studies on experiences have generated a sound body of knowledge of the production and consumption of experiences. Studies have, for instance, shown the significant role of guides (Arnould and Price 1993), social others (Arnould and Price 1993; Kozinets 2002; Tumbat and Belk 2011) and places (Kozinets 2002) in the orchestration of experiences. They also have pointed to the way experiences assume a set of—often contradictory—affects, sensations and emotions and a peculiar dynamics between something that is expected and simultaneously un-expected, or 'the thrill of the unknown'.

Through the concept of *uncanny,* we have been able to continue this valuable work of the aforementioned authors, to introduce a novel way to identify and grasp the way different contradictory dimensions are involved in the creation of experiences. The whole adventure in the Bubble was an uncanny journey. From the first phase of travelling to the Bubble, confronting the Bubble, sleeping in the Bubble, to the next morning of waking up in the Bubble and hearing the gun shootings nearby—it almost appeared as a strange dream. We have illustrated through our empirical analysis how the sleeping body in the Bubble is situated at the interface of indoors/outdoors, nature/city, camping/luxury, active body/inactive body, alone body/social body and small/predominant body. The uncanniness of all these dimensions renders understandable how, and why, the experience was both scaring and fascinating—and memorable.

The Bubble strongly contests our deeply-rooted assumptions of how to sleep, especially how sleep is considered as a private practice (Williams and Crossley 2008; Kraftl and Horton 2008). In a see-through bubble the first author's body became exposed to the nature. Above all, when she fell asleep, that is, when she 'let go' of the surrounding world and entered an unconscious state (see Leder 1990), the nature was still looking. This array made her sleeping body profoundly vulnerable (Williams 2007b) while being disposed to the gaze of her surroundings. This

reaffirms the nature's agency, appearing through a sensorial experience of darkness and the soundscape of the surrounding forest, in the interconnection between the tourist and the nature (see Waitt and Duffy 2010; Bille and Sørensen 2007; Rantala and Valtonen 2014). Furthermore, as the comfortable Bubble provided her the possibility to sleep in such clothing that is usually considered suitable for sleeping indoors, not in the middle of the forest, her bodily unveiling was attested—in her pyjamas and with her luxurious bedding in the Bubble she was at the same time a stranger, a being unsuitable to the environment surrounding her, and a being in a mysterious connection with the nature.

Furthermore, our study points to the complexity of creation of experiences. Firstly, it highlights the importance and powerful impact of the actual *design* of tourist experiences to the ways, in our case, the tourist and the nature 'meet'. It has, simultaneously, the power to *enable* and *constrain* the connection between the tourist body and the nature's body. In our case, designing a plastic see-through Bubble and the service around it had wide impacts on how the tourist came to perceive nature and her involvement in nature—it allowed the tourist to experience the nature in a particular way and, at the same time, built a plastic barrier and denied the possibility for the tourist and the nature to *touch, smell* or *feel* each other.

Secondly, our study points to the active role of several nature-based elements that are involved in the design of experiences, such as darkness, lightness and sounds of animals. If we weren't to consider the nature as a *primary* designer of the experience, we would be misguided. We acknowledge that our understanding of the Bubble, and the attendant service, is only one part of the way the experiences are created; co-production is a crucial activity during a creative tourism experience. This kind of activity enables the construction of space for simultaneous empowerment (Miettinen 2007). In our case the co-production took place in the interface of nature and the sleeping body, enabled by the Bubble. Understanding the context and the process of co-creation in a creative tourism experience is essential to the development of the service and service design. This understanding also makes it possible to question the anthropocentricity that can be considered to form the basis for tourism industry as a whole.

Thirdly, the sleeping body carries a set of socio-historical practices and understandings—such as human-nature relation and the relation between sleeping and waking—that inevitably shape the creation of the experience. Thereby the body—always unique as well as part of the shared logics with other bodies—itself takes part to the co-creation of experiences. These different co-designers, only together, were able to create an unforgettable night in the Bubble that the first author had a chance to experience.

While we have acknowledged the theoretical relevance of a sleeping body in tourism research as such (see Valtonen and Veijola 2011; Rantala and Valtonen 2014), we have taken the next step by theorizing the complex relation between a sleeping body and nature and connected the sleeping body to a new form of tourism that has yet remained unexplored in the field of nature-based tourism studies. Most importantly, we have paid attention to the embodied configuration where the nature and the sleeping body meet; here the plastic see-through bubble and the nature

encircling the recumbent sleeping tourist with her eyes wide closed became analysed. Here we have also unsettled the dominant bodily positions as part of tourist practices, that of standing up or walking (see Ingold 2004), by introducing a many times forgotten tourist bodily position of *lying down* (see also Rantala and Valtonen 2014). By pointing out the relevance of this bodily position when theorizing tourism agency, we have been able to make way for a reconsideration of power relations between nature and human beings—indicating the 'smallness' and 'bareness' of the human body beside, or entangled with, nature.

A multi-disciplinary approach used in this paper is highly relevant in exploring sleep, which can be represented as an entanglement of various relations—thus appearing as the 'most complex of topics' (Williams and Bendelow 1998: 173). Sleep stands for a critical but indeed challenging topic for researchers interested in the human body (Williams and Crossley 2008: 12). For us, service design literature has offered eye-opening concepts to explore the effects of design processes in the formation of the human body's relationship with nature, as well as of our prevalent understandings of sleeping, and the potential to question them. By acknowledging the agency of nature, cultural studies on their behalf can offer service design thinking a valuable perspective, which shifts the focus from the relationship between humans to the relationship between nature and a human being and their entanglement. The cultural approach to a sleeping body combined with design literature forms a new kind of understanding of emerging forms of tourism, enriching the existing literature and practice in the field of tourism.

To close, through our paper we have been able to tell something important about the contemporary western human-nature relations—indicating our simultaneous living 'in a bubble' and at the same time our openness to new experiences and understandings of our ways of being-in-the-world with others. The sleeping body has given us the possibility to focus on the often forgotten notions and dimensions of a tourist experience—being full of valuable details that might get bypassed while focusing merely on the waking tourist. We conclude by a quote from one of the key inspirators of our paper, Tim Ingold (2004: 199–200, 241):

> Human beings live in the world, not on it, and as beings in the world the historical transformations they effect are part and parcel of the world's transformation of itself.

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Part II
The Tools of Tourism Design

Stories as a Tourist Experience Design Tool

Gianna Moscardo

Sad is the man who is asked for a story
And can't come up with one (Lee 1957).

Abstract Stories are a fundamental and universal form of human communication and learning [Bruner, Telling stories: Language, narrative and social life. Georgetown University Press, 2010]. People use stories to organise, understand, learn, remember and communicate about the world [Herman, Storytelling and the sciences of mind. MIT Press, 2013]. It is not surprising then that stories have been discussed in literature linked to design thinking [Brown, Change by design. Harper Collins, 2009], design science [Hatchuel, Journal of Management and Governance 5(3):260–273, 2001] and user, consumer and tourist experiences [IDEO, Design thinking for educators, 2012; Battarbee, Proceedings of the 2003 international conference on designing pleasurable products and interfaces. ACM, 2003; Mathisen, Advances in Hospitality and Leisure 8:21–41, 2012]. While stories are often mentioned as elements of design and user experience or as key methods to understand experience, their use as a framework to guide the design process has not been examined in detail. Within the literature on consumer experience stories have been linked to drama and theatre [Pine and Gilmore, The experience economy: Work is theatre and every business a stage. Cambridge, 1999], but this use of the theatre metaphor has been criticized as a unidimensional and superficial treatment of experience [Gelter, Articles on experiences, 2006; Lugosi and Walls, Journal of Destination Marketing and Management, 2(2):51–58, 2013]. This chapter goes beyond both the use of stories as a method of understanding user experience and the dramaturgical approach to consumer and tourist experience to present stories as a framework for guiding the design of tourist experience opportunities. It begins by outlining the parameters of the topic and defining the main concepts of stories and experience. It then analyses the relationship between stories and tourism identifying the major dimensions of tourist stories and their links to design and experience. These dimensions and analysis provide a foundation for a story framework to guide tourist experience design.

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Once Upon a Time: Setting the Scene with Definitions and Delineations

> Every short story must include a setting. It provides the backdrop of the story, establishing the time, place, and context (Hood 2011).

1 Introduction

Cross (2001) provides a history and overview of three different traditions within design—design science (Fuller 1975), the science of design (Simon 1969), and design thinking (Brown 2009). While these three traditions come from different disciplines and continue to develop in distinctive ways, there is considerable convergence between them (Cross 2001). This convergence can be seen in both their definitions of design and their descriptions of the major components of design, as summarised in Table 1. Common elements in all three approaches include making decisions based on evidence about user intentions and evaluations, taking a holistic approach to problems and opportunities, and combining creativity and science for more effective innovation. Two concepts common to all three design traditions are stories and experiences.

2 What Is Experience?

Experience is conceptualized in two main ways in these design literatures. Firstly, it is used to summarize user perspectives and behaviours related to the designed product or service (IDEO 2012). Secondly, it is used to describe the outcome of the design process (Hatchuel 2001). So experience is simultaneously the thing being designed and user responses to that designed thing. In the former sense experience is what happens when users interact with the design and in the latter sense experience is about how users make sense of, evaluate and communicate about these interactions with the design.

Similar approaches to the use of the experience construct also exist in the consumer and tourism literature. In this chapter a tourist experience will be defined as a memorable episode within the constant stream of activity and sensory input that make up human lives, that occurs within a specific time period and spatial context, and that is associated with emotional responses, personal meaning and significant memories (Lugosi and Walls 2013; Moscardo 2009). This definition combines both aspects of experience and focusses attention on how tourists act in, make sense of, and evaluate specific episodes while they are in tourist settings. This definition was also chosen because it recognises that many tourist experiences

Table 1 Design definitions and elements in the three traditions

Tradition	Design science	Science of design	Design thinking
Definition of design	"Design is the deliberate ordering of components to realize intention" (Fuller quoted in Ben-Eli 2006)	"The essence of design is to devise courses of action aimed at changing existing situations into preferred ones" (Glaser 1976, p. 6)	"An intentional process in order to get new relevant solutions that create positive impacts" (IDEO 2012, p. 11)
Key elements in, or features of, the design process	Identifying intentions Formulating alternatives Realizing the chosen alternative Operating it Transformation	Proactive problem solving based on evidence from use Creative generation of solutions Adoption of innovation	Discovery Interpretation Ideation Experimentation Evolution

Sources: Ben-Eli (2006), Glaser (1976), and Goes (2014)

occur outside of and beyond the control of commercial and other management organizations (Darmer and Sundbo 2008; Lugosi and Walls 2013). This matters because unlike many other products and services, most tourist experiences have not been subject to any formal design process. Finally, in this definition experiences occur within the mind of the individual. In other words, if the individual cannot or does not focus their attention on an episode and recognise it as meaningful and memorable then it is not an experience. Thus organizations do not design experiences per se, they design and offer opportunities for individuals to create their own experiences. Whilst recognising the importance of this co-creation reality (Battarbee 2003), this chapter will use the phrase experience design as a shortcut to describe the design of experience opportunities.

3 What Is a Story?

While experience has been a central concept in both design and tourism, stories are a commonly mentioned but much less analysed idea. Neither the design nor tourism literature has focussed much attention on defining a story. Stories have, however, been subject to considerable analysis in other disciplines. There is a general agreement that a story is a description of an event or set of connected events, the reactions of characters to that event, their decisions and the consequences of these reactions and decisions (Adaval and Wyer 1998). All stories have a setting, characters, and plots which link actions to consequences and reactions (Chaitlin 2003; Herman 2013). According to Aristotle a story must have an adventure in which something unexpected, atypical or surprising happens (Husain 2002). The story then offers actions involving the events and reactions of the different characters to these events, followed by a resolution (Husain 2002). A story is therefore more than just a description of events, it is a form of entertainment that aims to

produce an emotional or affective response in its audience (Stein 1982; Brewer and Lichtenstein 1982).

In cognitive psychology stories are recognised as a universal structure for organising, storing and communicating experience (Stein 1982). There is substantial evidence from cognitive psychology (Brewer and Lichtenstein 1981; Bruner 2010; Herman 2010, 2013; Hogan 2011; Mandler 1984; Stein 1982), marketing (cf., Lundqvist et al. 2013), environmental education (cf., Shen et al. 2014) and heritage interpretation (Moscardo and Ballantyne 2008) that stories are the way people think about what happens in their lives, organise their memories and talk to others. If stories are universal, commonly used cognitive structures for organising and storing information about experiences, then it is not surprising to find that stories are also suggested as important tools for communication and education, in the design literature (Simon 1980; IDEO 2012), in advertising (cf., Green et al. 2004), and in heritage interpretation for visitors (cf., Curthoys et al. 2012).

This use of stories as an informative or educational tool recognises that stories have more than just cognitive functions they also have critical social functions. These social functions can be classified into two categories. The first includes functions related to personal development. Stein (1982) proposes that stories can help people resolve personal problems by providing examples of likely consequences from different decisions. Herman (2013) also argues that stories set out problems and their resolution, offering guidance to the listener/reader on what is normal and expected. The second category of social functions focusses more on the role of stories in establishing and maintaining social order by providing examples of what is socially acceptable and demonstrating the negative consequences of going outside these boundaries (Bruner 2010). Fables, parables and many stories told to children are typical examples of this story function.

The importance and universality of these story functions supports the idea that there exist universal archetypes for story plots, characters and themes (Mandler 1984; Hogan 2011). While there is widespread support for the existence of archetypes, there is little agreement on how many and what these archetypes are. One of the most common sets of story plot archetypes is that of Booker (2006) who described seven basic story plots—overcoming the monster and escaping death, rags to riches, the quest, a voyage and return, comedy, tragedy, and rebirth. Hogan (2011) argues for three archetypes, the heroic quest focussed on anger, pride and suffering; the romance focussed on happiness, union and attachment; and the sacrifice. Moraru (2011) describes six archetypal plots—creation, a hero's adventure, love, revival, return to origins and the sly trickster. There are multiple lists of archetypal characters but some common to most lists include the hero/heroine, the explorer, the adventurer, the artist, the magician, the warrior, the rebel, and the jester (Acuff 2010; Moraru 2011). Suggestions for universal story themes include death, survival under threat, family interactions, heroism, altruism, and standing against injustice (Davis and McLeod 2003; Sugiyama 2001).

Before examining how stories have been considered in the design and tourism literatures it is important to discuss what a story is not. The terms story and narrative, for example, are often used interchangeably but they are not the same

thing. Narrative has been used in two quite different ways, both of which are distinct from stories. In one tradition a narrative is seen as the description of a specific sequence of events presented in linear temporal order. This use of narrative sees them as "knowledge structures that consist of a sequence of thematically and temporally related events" (Adaval and Wyer 1998, p. 208) and stories then are a particular type of narrative distinguished by the goals of creating an emotional or affective response, providing explanations or interpretations of the events, and entertaining an intended audience (Stein 1982; Brewer and Lichtenstein 1982). In the second tradition the term narrative refers to a broad theme that connects a series of stories. In this use of narrative, stories are descriptions of particular events and a narrative is a theme that connects these stories and offers some more abstract or fundamental meaning (Chaitlin 2003; Halverson 2011). An example of this connection between stories and narrative as a theme can be found in Carl Hiaasen's series of crime novels set in Florida in the United States. Each novel has a different set of characters, often a different location and a different set of events but together they consistently portray tourism development as a negative and destructive force, consistent with Hiaasen's stated goal to use his novels to discourage tourists from coming to Florida (Hiaasen 2014). This concern about the destructive nature of tourism is the underlying narrative that links the stories presented in the novels.

In a similar fashion stories are linked to, but not the same as theatrical performances. At the simplest level not all stories are presented through theatre and not all theatrical performances are stories. While this may seem self-evident it is an important distinction in the present context because of the dominance of the dramaturgical approach or theatre metaphor in discussions of consumer and tourist experiences. MacCannell (1973) introduced the theatre metaphor to describe tourism based on Goffman's (1959) dramaturgical approach to social life. In this approach all social life is seen as being like a theatre with a front stage where social roles are performed for audiences and a backstage where performers can rest and prepare away from the audience gaze. MacCannell (1973) applied this to tourist spaces arguing that tourists are driven by a desire to look behind the curtain and see the backstage in other places and cultures. He further argued that they were never likely to achieve this, as all tourist places offer either a frontstage or a false backstage. In MacCannell's tourism as theatre metaphor, the tourist is always in the audience, plays no real part in the experiences on offer, and is usually unaware that he/she is being duped into thinking otherwise.

Pine and Gilmore (1999) revisited the drama metaphor describing the management of consumer experiences as a type of theatre production. In this more descriptive use of drama, the business designs the appropriate setting, offers props, structures a sequence of actions, and encourages staff to play a role akin to being in a theatrical performance (Harris et al. 2003). Experience design is then considered as a process of deciding on the production aspects of this performance (Zomerdijk and Voss 2010). Despite the appeal of this metaphor it has been critiqued with concerns raised about the treatment of consumers as passive participants within the experience, an almost exclusive focus on the staging rather than the meaning of experiences, and a tendency towards homogenisation of experiences

(Lugosi and Walls 2013). It has been argued that applications of this theatre metaphor rarely explicitly consider the role of the consumer in these produced experiences, and where it is described they are typically presented as the audience (Baron et al. 2001; Morgan et al. 2008). A wider set of roles for tourists could include voyeur, passive spectator, active audience member, critic, connoisseur, supporting cast member or extra, script writer, set designer, lead actor or director (Morgan et al. 2008; Williams and Anderson 2005). As noted by Mathisen (2013) and Williams and Anderson (2005), there are more roles for tourists within dramatic experiences than are usually considered, and arguably there are more stories than are, or can be, told through drama.

4 Stories in Tourism

There are two main themes in discussions of stories in the tourism literature—one that focusses on the stories about places told to tourists and one that focusses on the stories about experiences told by tourists to others. This first theme of the stories told about destination places to tourists can be further broken down into two areas, one concerned with destination representations and one with heritage interpretation. There is a long history of tourism studies analysing the ways in which destinations are represented in tourism marketing and management (Chronis 2012a). Central to these discussions are questions of how these destination representations influence tourist choices and actions and how various stories and myths are used to create these representations (Salazar 2012). Of particular concern in this work is whose stories are chosen to be told to tourists (cf. Hunter 2011) and how stories are created and/or changed in the process of building and selling destination images (cf., Larson et al. 2013). Discussion of how stories are chosen for presentation to tourists is also a major topic in heritage interpretation with similar concerns over whose stories are told and whose are ignored (Moscardo 2015). In both these areas there is also recognition of the power of place stories for building destination images, encouraging visitation and influencing tourist expectations and behaviours (Moscardo 2015; Salazar 2012).

The second theme focusses on the stories that tourists tell others about their travels. The bulk of this research uses these tourist stories as data collection tools to access to other variables (Botterill and Platenkamp 2012). Growth in online presentation of tourist stories has renewed interest in stories as a research tool (Banyai and Glover 2012). Research about the stories themselves is much less common with the most extensive program in this area offered by Woodside and colleagues (Woodside et al. 2008, 2007; Hsu et al. 2009; Martin et al. 2007). This research analyses the stories that tourists tell about their experiences in different cities in Asia and Italy and has generated a set of five principles linking stories to tourism:

– Stories are the way people think about their experiences;
– Stories are the way people store information in their memory;

– Stories are the way people make sense of the world;
– People tell stories about their travel because it is pleasurable and allows them to relive archetypal myths; and
– Companies can assist people in developing these experience stories.

The first four principles are consistent with what is already known about stories from cognitive psychology and other areas. The fifth principle proposes that tourist experience design should, at least, consider the ways in which experiences contribute to tourists' stories.

Moscardo (2010) expanded on this fifth principle and attempted to link the two traditions of place stories and tourist stories by connecting research about stories of places in heritage interpretation to the design of tourist experiences using the concept of mindfulness. Mindfulness theory is a type of dual processing theory from psychology that argues in any given situation people can be either:

– Mindful, defined as a type of deeper cognitive processing associated with greater mental activity and focused attention to the immediate situation that supports learning, better decision making and problem-solving, more positive affect and enhanced memory (Langer and Moldoveanu 2000), or
– Mindless, defined as shallow cognitive processing with little attention given to the immediate situation, behaviour guided by established routines, poor decision-making, feelings of boredom and poor memory (Langer 2009).

It has been argued that it is desirable to encourage tourists to be mindful (Ablett and Dyer 2009; Frauman and Norman 2004; Moscardo 2009). It has also been argued that mindfulness is a necessary prerequisite for a tourist experience as tourists must remember a set of events in order to recognise it as an experience (Tung and Ritchie 2011).

Moscardo (2009) noted that there was considerable consistency in the factors that encourage mindfulness in general and the factors associated with effective and memorable tourist experiences including:

– Unique, rare, novel or surprising elements;
– Variety across a range of experience features;
– Multi-sensory immersive settings;
– Perceived authenticity;
– Opportunities for interaction and participation;
– Allowing the individual to control aspects of the experience and make decisions;
– Personal relevance through connections to personal history or meeting individual needs;
– Perceived authenticity;
– Opportunities for learning;
– The use of consistent themes, especially archetypal ones; and
– The presentation of the experience as a story.

In 2010 Moscardo expanded this discussion of mindfulness and tourist experiences by arguing that stories should be the central element of on-site experiences.

In particular, she used the connections between stories and mindfulness to recommend that tourist settings be designed to support both the telling of stories to tourists and to allow tourists to enact, create or recreate stories, especially those based around archetypes. Like Woodside and colleagues (2008), Moscardo (2010) makes the suggestion that stories be used to guide experience design but does not elaborate in any detail on how this could be done.

5   Stories and Design

The discussion of stories in the three design traditions has focussed mainly on using stories as a research tool to study user experience and understand how people use and evaluate products and services (Brown 2009). In this case the word story is used to describe a simple narrative in which people describe their use of a product or service. A similar use of stories is given in discussions of how to explain the design process to key participants (IDEO 2012). There has also been some mention of stories as providing a holistic way to think about design (Hatchuel 2001). These exceptions aside, there has been little detailed analysis of stories in this literature.

In summary, what is sometimes hinted at (McLellan 2000), but rarely explicitly addressed, in the design literature is that stories, as they are defined for this chapter, might be used to guide the design process. What has been proposed (Woodside et al. 2008; Moscardo 2010), but not yet fully examined, in the tourist experience literature is how stories might be used to more centrally guide the design process. The rest of this chapter will describe a story framework for tourist experience design. Before presenting this framework it is important though to map out the main dimensions of stories in tourism.

6   Finding the Path: Dimensions of Stories and Links to Tourist Experience

> The universe is made of stories,
>   not atoms (Rukeyser 2000, p. 133).

An examination of Woodside and colleagues' (Woodside et al. 2008) and Moscardo's (2010) work on tourist stories indicates that they are operating on two different levels of analysis. The former looks at the stories that tourists tell about their travel to a whole destination, while the latter looks mainly at the stories connected to a specific experience within a destination. Figure 1 demonstrates the three main levels at which tourist stories can be analysed and how each is embedded in the next. At the top level is the ongoing life story of the individual tourist. It could be argued that this is less of a story and more of a narrative theme that contributes to their personal and social identity. At this level stories about whole trips contribute
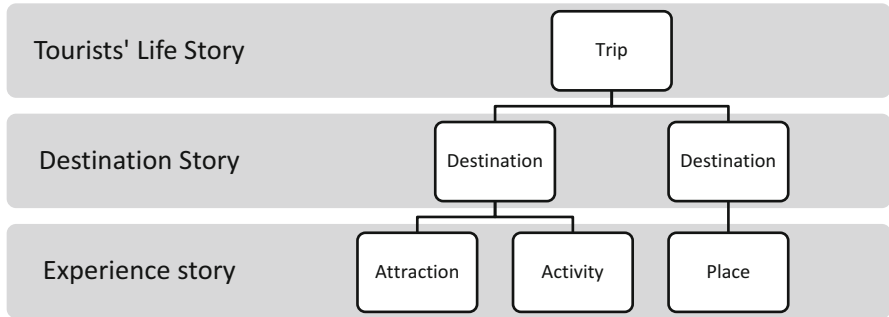
Fig. 1 Levels of analysis for tourist stories

to the narrative along with stories about work, family, and other leisure activities and incidents (McCabe and Foster 2006). The second level is the one referred to by Woodside (2010) and focusses on the story of a destination which is made up of multiple episodes. It could be argued that this level sits on the boundary between a multi-episode story and a narrative theme. The third level is the one focussed on by Moscardo (2010), which are the stories linked to experiences of specific places, attractions or activities within a destination. Within this third level a story can be either linked to a single location, for example within a specific historic site, or could be told across several locations, such as is encountered in a guided walking tour of an historic district. While it is possible to consider tourist experience design issues related to the second level, the destination story, this chapter will concentrate on the lowest level, the experience story.

Based on the key characteristics that define a story and existing research into tourist stories it can be suggested that there are three interconnected dimensions of tourist experience stories that need to be recognised:

– why the story matters;
– whose story is being told; and,
– what the role of the tourist is in the story.

The first dimension is that of why the story matters and it combines two concepts—the functions of stories, which can be connected to the motives of the different participants, and the timing of the story. Figure 2 provides the basic connections between these two concepts. Firstly the figure divides stories in terms of time into three categories—pre-existing stories, unfolding stories and post experience stories. Pre-existing stories are those that tourists can access before they arrive at the specific destination place, attraction or activity location which will serve as the experience setting. For tourists pre-existing stories matter because they provide information for planning and decision making. For experience managers these stories matter because they influence images of the potential experience and generate expectations that can influence on site actions (Pan et al. 2007). Pre-existing stories offer an opportunity for experience managers to encourage tourist participation and prepare them for the experience on offer. These stories
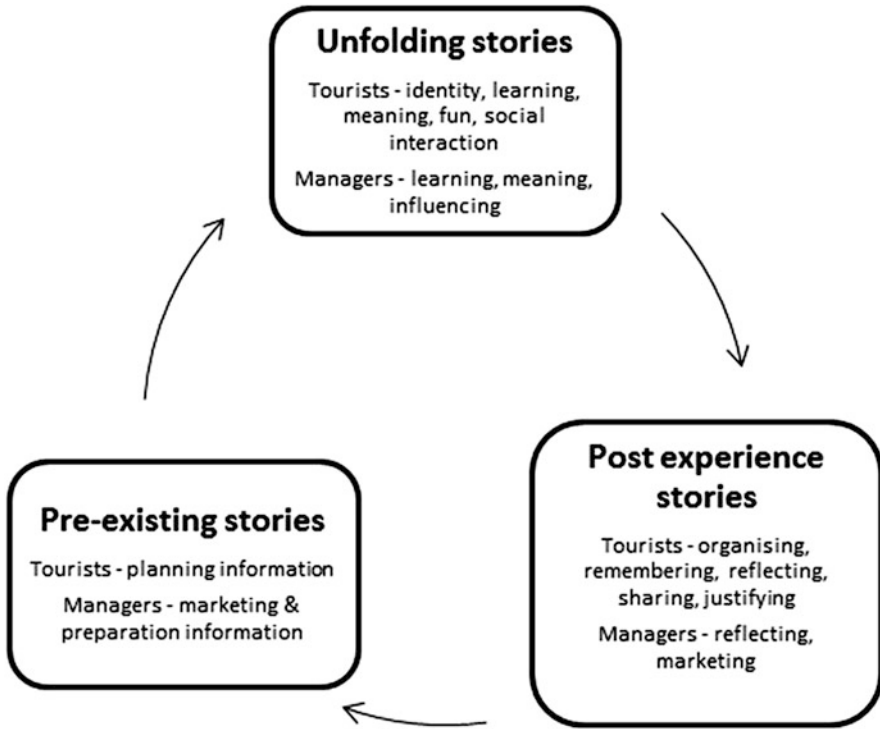
Fig. 2 Why different tourist experience stories matter

can be created either through formal marketing activities, or more informally by other tourists. The rise of travel blogs and reviews disseminated online has shifted the balance in these types of stories from the formal to the more informal (Lange-Faria and Elliot 2012).

The informal pre-existing stories that are accessed and used by tourists before they start the experience come from the post experience stories told by the tourists that have gone into the experience setting before them. For the individual tourists, telling post experience stories allows them to organise, remember and reflect on their experience, which is an important step towards integrating the experience into their destination story and the narrative of their life story. These stories also support social functions for the tourists such as connecting with significant others and enhancing social status. Post-experience stories also serve a number of functions for experience managers, such as marketing tools and as a source of service evaluations.

The stories that unfold during the experience matter to tourists in multiple ways as they provide opportunities to:

– relieve past memories and confirm identity;

– engage in challenges and/or live out imagined roles that contribute to their identity;
– share activities with others and enhance social and family bonds;
– have fun and be entertained; and
– learn about and understand the place being visited.

These different functions give meaning to the experience for the tourists. For the experience managers stories offer two main types of function. The first is that stories can enhance tourist experiences making them more satisfied customers and thus more open to management requests. The second is that stories are a useful educational tool for providing important information to tourists. Taken together these two functions support managers in their attempts to influence tourist behaviour. For some types of experience, managers want to influence tourists to buy more products or services and/or recommend the experience to others. For others, the goal may to be influence tourists to behave in more sustainable ways both on site and when they return home. Within the experience itself there are different types of unfolding story that can be distinguished by whose story is being told and the role of the tourist in the story.

Figure 3 provides an overview of the second dimension of whose story is being told. There are four main tellers of stories in a tourist experience. Firstly, there are the stories of the tourists themselves which can be used to explain who they are, why they have come to this experience setting and if and how an activity or place is significant to them personally. Such personal stories are linked to the life narrative and identity of the tourist and they are told to other tourists, to people at home and to tourist staff (Chronis 2012b; McCabe and Foster 2006). These tourist staff, especially guides and volunteers, may also tell personal stories that explain who they are, why they have come to the destination, how or why they work in tourism, and how an activity or place is significant to them personally (Moscardo 2010). These stories may be formally structured as part of the tourist experience and presented by local guides/interpreters, or they may be more informally told as part of the ongoing interaction between tourists and staff (Jennings and Weiler 2006). The various businesses and other organisations that manage and/or support the experience may also have stories that can be told (Woodside 2010). As in the previous two cases, these stories can be about the history of the organisation and its links to the destination. Finally there are the stories of the place, attraction or activity itself. These stories about the history, culture, people and environment of the place or activity are the ones most traditionally associated with tourist experiences. In many destinations these stories are central to heritage interpretation and are told through guided tours, interpretive signs, museums and guidebooks (Moscardo 2015). This dimension can also be linked to who has control over, or responsibility for, the story. On the far left of the dimension in Fig. 3 the tourist has the greatest control over and responsibility for the story, while on the far right control over and responsibility for the story resides in the experience managers. This control is also linked to the role the tourist plays in the story being told.
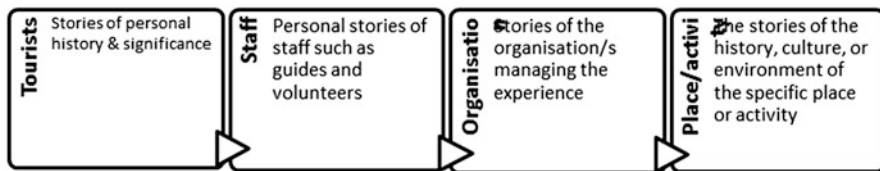
Fig. 3 Whose story is being told?

Fig. 4 What is the role of the tourist in the story being told?

One of the most common criticisms of the use of the theatre metaphor in the consumer experience literature has been that it typically limits the consumer to the role of passive audience member (Baron et al. 2001; Lugosi and Walls 2013; Morgan et al. 2008). As noted in the earlier discussion of these critiques a range of roles are possible and the key categories of these for tourists are presented in Fig. 4. In the first category tourists read stories from interpretive signs, guidebooks or websites, hear stories through various audio technologies, and/or watch stories told by guides or through audio-visual or theatrical performances. This is the most common role for tourists in destination stories and in this category they have very little control over the experience and the story is usually that of the destination place or business. In the second category tourists may be able to play a minor role in the story. For example, in many guided tours the guide may recruit members of the group to assist them. In various performances presented at tourist attractions it is also common for audience members to be asked to come on stage to assist the presenters in various ways. The control is still held by the presenters, but this option does allow the chosen tourists to build a stronger personal connection to the story.

The next two categories give much greater control and more active roles to the tourist but are much less common in traditional tourist experiences. One exception to this is the field of mobile and multimedia technology applications where considerable attention has been focussed on the use of storytelling as an educational and experience enhancement tool (Lombardo and Damiano 2012; Winer 2014). While there is some recognition of the potential for using these applications in tourism (Benckendorff et al. 2014), there have not yet been many examples in practice. Some exceptions are provided by Hansen et al. (2008, 2012) and Christrup (2008) with examples of mobile urban dramas which use mobile phones and location based technologies to provide information and options to users as they move through different spaces.

Some of the examples are summarised in Table 2 and provide a range of ideas on how tourists could be involved as either key characters in a story or as the directors

Table 2 Examples of tourist involvement in experience stories

Name	Objective	Plot synopsis	Settings	Tourist roles
Corridor[a]	Dramatic performance	A female journalist must find a PR manager to write a story due the next day. The manager keeps changing locations, her personal life becomes stressful and her boss keeps calling. A type of treasure hunt.	Different locations throughout the city	The tourist takes on the role of the journalist and moves to different locations interacting with paid actors in each location
Hikuin's Vendetta[a]	Themed self-guided tour of the city focussed on history	A murder mystery set in the year 1049 where the character Hikuin must try and solve the murder of his father.	Different locations around the city starting at the Viking Museum	The tourist takes the role of Hikuin and moves around the location, making choices that guide the story plot
The Battle for the Soul of Gullestrup[a]	Themed self-guided tour of the city aimed at new markets	An adventure story in which the key character, Mohammed, is contacted by the soul of Gullestrap asking for help to save the city from evil.	Multiple locations	The tourist takes on the main character role
Hasleinteractive[a]	Education about nature conservation (focus on children)	A science fiction thriller set in 2022 where two scientists are seeking to find out why large areas of nature are dying.	In a natural environment	Children take on the role of assisting the two scientists by conducting tests and collecting information
Black Rose Trick[b]	Tourism themed dramatic performance	A hotel has been taken over by a military regime and is in a state of emergency as a deadly virus has infected most of those in the hotel	A hotel which includes hospital ward, restaurant, casino, bar and suites	Participation ranges from voyeur where the guests can move around the space watching the performance, through acting as hotel guests making simple requests, interacting directly with the actors, to acting as a key character in the action

[a]Hansen et al. (2008, 2012)
[b]Christup (2008)

and producers of the story. They also demonstrate the power of new technologies to enhance tourist experiences. In these examples the tourist can be either the main character and/or the creator of what is explicitly presented as a story. It is also possible for tourists be the main character and/or creator of their own personal stories. These personal stories can be seen as implicit in that they are rarely described or recognised as a specific story. Mathisen's (2013) account of tourists participating in a dog sled race and a hunt for the Northern Lights in Norway provides examples of these implicit stories. Tourist directed implicit stories fall across the last two categories on this dimension in that stories created by tourist from a selection of activities available to them at a destination are likely to be told to others after the experience. The tourist as storyteller can also, however, retell stories they learn through their experiences to others after the experience and they can also tell stories as part of the experience.

Taken altogether it is clear that stories are embedded in tourist experiences in many ways and at many levels and in any given situation there may be multiple stories at play simultaneously. Figure 5 attempts to summarise these dimensions
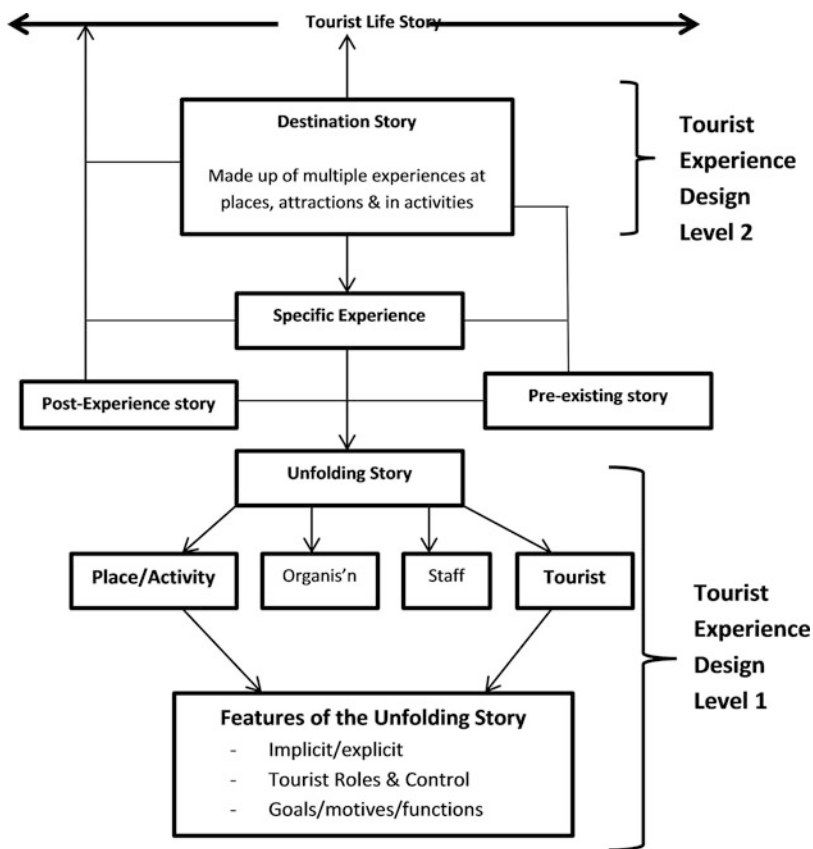
Fig. 5 A story framework for tourist experience design

and patterns and highlight where tourist experience design is most likely to be focussed. The figure indicates two levels or main areas for tourist experience design—the destination story and the unfolding story for the specific experience of a place or activity.

7 Crossing the Threshold: Using Stories to Guide Tourist Experience Design

> Because the story of our life
>> becomes our life
>> Because each of us tells
>> the same story
>> but tells it differently
>> and none of us tells it
>> the same way twice (Mueller 2003)

The typical approach to customer experience design, especially when based on a theatre metaphor, starts by describing the various production elements (physical setting, servicescape, sensory inputs, logistics, and staff training) that need to be considered and directing attention to questions specifically about each production element (Chang and Lin 2015; de Farias et al. 2014: Fawcett et al. 2014; Gelter 2006; Schmitt and Zarantonello 2013; Shaw and Ivens 2005; Zomerdijk and Voss 2010). Within this approach there is sometimes discussion about the use of a theme as a guide to direct the production of these different elements (Darmer and Sundbo 2008) and occasionally awareness that decisions about experience elements should consider the story you want customers to tell others about their experience (Shaw 2005). Taking stories as the central element of experiences suggests, however, a subtle but significantly different approach in which the story comes first and design principles are focussed on creating good stories. In this approach the various production elements are then seen as tools or strategies to achieve these story design principles not design features in themselves (Wyman et al. 2011).

Using a story framework for tourist experience design is therefore based on two fundamental premises. The first is that an effective tourist experience design must be organised around and for stories, and must recognise that any given tourist experience is connected to multiple stories. The second is that an effective tourist experience must encourage participants to be mindful. Therefore we can take what we know about the factors that encourage mindfulness (Langer 2009; Moscardo 2009), what has been shown to contribute to positive evaluations of consumer and tourist experiences (Moscardo 2009; Schmitt and Zarantonello 2013), and what is known about creating good stories (Beamish and Beamish 2015; Bruner 1990; Delgadiilo and Escalas 2004; Moscardo 2010; Pollock and Bono 2013; Tu 2015) to suggest a set of 12 experience design principles which are:

– Determine key story dimensions
– Consider story content carefully

– Offer surprise, build suspense and encourage curiosity
– Plan story pacing around a main event
– Establish authentic characters
– Support physical orientation and access
– Provide good cognitive orientation
– Provide choice and control for tourists
– Include appropriate challenges for tourists
– Encourage learning
– Build in connections
– Be consistent

The first principle directs the experience designers to analyse and make decisions about the various story dimensions summarised in Fig. 5, answering questions such as:

– Is this a destination story or a story for a particular place or activity?
– Is there a single dominant story or multiple stories linked by a narrative theme?
– Will the experience offer an explicit story or a set of potential episodes for an implicit story?
– What are the functions of the story for the various participants?
– Is this a story meant to entertain, inform or transform the participants?
– Whose stories are being told?
– What roles are available for the tourist in these stories?

Once these questions are answered it should be clear what the basic nature of the key story or stories are.

The second principle is that experience designers should consider story content carefully. This directs attention to the choice of story plots and themes. In terms of plot it is important to actually ensure that the experience has the key elements that distinguish a story from a sequence of activities, that is, some sort of challenge, unexpected event or incident, the opportunity for various characters to react to this challenge, event or incident and a resolution. As noted earlier there are several common types of story plot and experience designers need to consider which is best suited to both the place/activity that is the focus of the experience, the interests and expectations of the tourists, and the constraints and opportunities of the physical setting. A guided tour of the Predjama castle in Slovenia provides an example of these choices. It is would be easy to simply present the castle in terms of the history of how and when it was built. Instead more effective guides explain why the castle was built in its location and how it was constructed to meet the needs of its occupants through the story of one inhabitant, the knight Erazem. Erazem extended the castle in order to withstand sieges and protect his people, but was ultimately betrayed by a servant and killed. His story serves as both an explanation of the construction of the castle, and also builds a story around a universal theme. The use of universal or archetypal themes is an important aspect of story content. These themes, which include dealing with and/or avoiding death, survival under threat, managing family interactions, heroism and altruism, and changing injustice (Davis

and McLeod 2003; Sugiyama 2001), can be used to both guide the choice of story and to make the experience more vivid and connected to the tourists.

An effective story offers surprise, builds suspense and encourages curiosity (Hoeken and van Vliet 2000). The Historium Brugge is a visitor attraction that provides an example of building surprise and suspense into a tourist experience. This audio guided tour takes visitors through a series of rooms and uses film and special effects to tell a story of the van Eyck painting of the Virgin and Child with Canon van der Paele, a famous artwork associated with Bruges. Rather than describe the painter and the chronology of the painting, this attraction presents a story about a young assistant of the painter who has to collect the various items and the model the master requires for the painting. The assistant is responsible for the painter's parrot which escapes creating a series of adventures generating surprise and suspense and a reason to include information about multiple historic sites around the city. This example creates surprise and suspense within the story plot. It is also possible to create surprise and suspense through the physical design of an experience setting. One commonly noted feature of the Singapore Night Safari, a nocturnal Zoo, is the design of the pathways, lighting and animal enclosures such that animals are often encountered unexpectedly and appear to be free rather than in an enclosure. This adds to the sense of the tourist being on their own personal adventure journey.

The fourth principle is to plan story pacing around a main event. As noted previously stories are defined by having a major event, incident or challenge as a focal point. An effective and entertaining story is one that builds up to this focal point at an appropriate pace and that is neither too long nor too short (Pollock and Bono 2013). Story pacing includes a number of decisions about timing including the overall length of the experience, when it is offered, the amount of time taken to get to the focal point and how many episodes are required to explain the story in enough detail for the tourists (Göbel et al. 2006). The Imhoff-Schokoladenmuseum (Chocolate Museum) in Cologne Germany, offers an example of careful pacing leading up to a focal point. The museum presents a series of exhibits explaining the origins and history of chocolate which leads tourists through to a replica of a chocolate factory demonstrating how chocolate is made and packaged. At the end of the path through the manufacturing process the tourist reaches the key focal point of the experience—a three metre high chocolate fountain—where tourists are rewarded by being given the opportunity to taste the chocolate they have seen being made.

The fifth principle focusses on another critical defining feature of a story—the characters. Authenticity is a concept that has been much discussed in the tourism literature (Zhu 2012) with more recent analysis highlighting the relevance and importance of existential authenticity (Brown 2013). Discussions of this concept focus on individuals being self-aware, true to themselves and able to experience the world without artificial social constraints (Brown 2013). There are similarities here with discussions of authenticity in stories which focus on credibility and the creation of connections between the experience of the audience or reader and the experiences and reactions of the characters in the story (Hinken 2006). Effective

stories then need to have credible characters that respond to events in ways that are familiar to the audience or reader. Using stories of real people, the incorporation of personal stories of the staff into experiences, and the use of local people as story tellers and guides, are all ways to include authentic characters in an experience story.

The evaluations of the mobile urban drama experiences summarised in Table 2 identified wayfinding or physical orientation as a major issue for the story experience participants (Hansen et al. 2012). Being lost in a physical space has been shown to be very distressing and distracting (Carlson et al. 2010). Therefore the sixth principle for experience design highlights the importance of providing easy physical orientation and access for tourists. Issues to be considered here include:

– The effectiveness and location of maps and directional signage;
– The availability of transport options to and through the setting;
– The provision of alternative forms of access for people with a diverse range of physical abilities and needs;
– Clear entrances, exits and pathways; and
– The use of physical design features such as colour or architectural style to distinguish between different areas.

Effective experiences also need to have good cognitive orientation. Cognitive orientation includes logistical information such as what tourists will need to have with them when they come into the experience, how long the experience will take, what is included in the experience and some indication of what they might expect to happen. It also includes issues of what tourists need to know to understand the experience. Freeman Tilden, an often cited author on communication with visitors in national parks quotes a colleague as saying that every guide "has the tendency to overestimate the background the tourist brings to the scene and on the other hand to underestimate the intelligence of the average visitor" (Tilden 1977, p. 46). For example, many guided tours of the Gallipoli Peninsula in Turkey focus on the World War One battle between Turkish troops and the allied forces including Australia and New Zealand. The battle is an iconic one for Australians and often cited as central to the country's identity and amongst the stories told to Australian children is one about John Simpson and his donkey who is reported as having rescued many wounded soldiers during the battle. The English language tours of Gallipoli typically include a stop at Simpson's grave. For most Australian tourists this is an important element of the tour, but it can be a confusing option for tourists from other nations who do not know the story of Simpson and his donkey and so do not appreciate the significance of the grave. It can also be seen by some New Zealanders as insulting, as it is now realised that an iconic painting of the donkey being used to assist wounded men is not of Simpson but actually of a New Zealand soldier, Dick Henderson, who has not been given the same recognition despite similar feats.

The mobile urban dramas described in Table 2 provide examples of several ways in which mobile technologies can be used to provide choice and control for tourists. Choice and control are necessary for participation and engagement and allow

tourists to co-create experiences that have greater personal relevance and meaning (Moscardo 2009). The provision of choices and control can also allow an experience to be adapted to suit a wider range of tourists. While the examples in Table 2 use technology to provide choices and to give tourists control over their experience, this principle can also be enacted through other mechanisms such as providing a range of activities that tourists can select from to make up their experiences, the provision of different themed routes through attractions and settings, and by encouraging tourists to engage in personal journeys of adventure and discovery which can be done without technology (cf., Mathisen 2013).

Mindfulness has been proposed as a necessary precondition for Csikszentmihalyi's concept of flow (Kee and Wang 2008; Wright et al. 2006). In turn flow, which refers to a positive state in which an individual is totally focussed on their activity, has been linked to positive customer and tourists experiences (Palmer 2010). Flow is most likely to occur when there is an appropriate balance between the challenges of the task or activity and the skills and abilities of the individual (Palmer 2010). When the challenge is too easily met the individual is likely to become bored and disengaged, but when the challenge is too hard and beyond the individual's skills and ability then the individual is also likely to disengage and respond negatively to the experience (Wright et al. 2006). Experience designers therefore need to consider the challenges they offer tourists in their stories and what skills, knowledge and abilities are needed to meet these challenges. For some stories this will require considering the physical abilities of tourists, for others, such as those within dark tourism sites, it may be an examination of knowledge and skills needed to deal with confronting and distressing stories, or it may be that tourists need to be able to access the appropriate information to meet challenges.

Another important aspect of flow is that individuals respond positively to increasing their skills and being able to take on greater challenges (Wright et al. 2006). This suggests that tourist experiences that encourage learning are likely to be viewed as more rewarding (Palmer 2010). This tenth principle directs experience designers to think about what they would like tourists to learn, or what take home message the experience story should have. Research into tourist evaluations of wildlife based experiences suggests that linking the experience to specific directions for how tourists can change their behaviour at home is critical to support the wider conservation goals of the experience managers (Ballantyne et al. 2007).

This research into wildlife based tourist experiences emphasizes the importance of making connections between the tourists' travel experiences and their lives at home. Building connections is the eleventh principle and includes multiple connections. At the level of the tourists it means finding ways to connect the experience story to the tourists' personal interests, to their personal narratives, to things that are relevant to their lives and to their emotions. An example of these types of connection can be found at the Neanderthal Museum in Mettman, Germany. One exhibit area in this museum presents the stories of the daily challenges faced by two families—one contemporary and one Neanderthal. Each family member provides their perspective on these challenges and their interactions and the exhibit

highlights the similarities in these stories. At the experience setting level it means connecting the story to the unique features of the place, while at the destination level it can refer to building connections between different specific experiences.

Design for experiences across multiple locations and for multiple experiences that make up a destination story must not only have clear connections between the elements, they must also be consistent in supporting the unfolding story or the underlying narrative theme. Consistency does not mean that all the production elements, including the physical design and the personal stories told by the staff, are organised around a single topic, but rather that they either directly support the main unfolding story or they offer other stories that are consistent with the main story or a chosen narrative theme.

8 The Moral of the Story: Ethical and Sustainability Issues in Storytelling

> Have I found the moral?
>   Only in time we shall see,
>   For all I did was eat an apple-
>   From the Knowledge tree (Waters, n.d.).

An example of the ethical issues that can arise in stories for tourists can be found in the case of a story told to tourists about the Three Sisters in Australia. The Three Sisters, a rock formation on a cliff face looking out over the Jamison Valley, is a major tourist attraction in the Blue Mountains west of Sydney. Many tourists to this site will have read or heard what they are told is the local Aboriginal story of the creation of this rock formation (see Table 3, first column). But this is not the Aboriginal story, it was created by a Caucasian schoolgirl, Patricia Stone, for the children's section of the Sydney Morning Herald newspaper in 1931 (South Coast Register 2015). The story was reprinted in 1949 in a book of local legends and distributed to guests staying at hotels in the region by a naturalist, Mel Ward, who also acted as a guide for tourists to the region in the 1940s and 50s (Burge 2013). More recently an alternative, and supposedly more authentic, Aboriginal story has been presented (see Table 3, second column) to tourists but the earlier story persists and there continues to be doubts about the authenticity of any of the stories told about the attraction (Burge 2013). This story within a story highlights the issues of authenticity in stories and determining who has the authority to present and/or alter stories that originate with the destination residents. This question of who tells stories to tourists can be extended to include a consideration of the stories that are not told. As noted in the introductory sections, a contentious area of heritage management and presentation is about power and conflict within destination communities and how the presentation of some stories and not others to visitors can disempower certain groups (Bramwell and Lane 2005; Wong 2013).

A second group of ethical issues around stories for tourists can be linked to sustainability concerns. A major theme in Fuller's design science was the need for

Table 3 Two versions of supposed aboriginal story of the three sisters

Earliest version	More recent version
Three sisters, 'Meehni', 'Wimlah' and 'Gunnedoo' lived in the Jamison Valley as members of the Katoomba tribe. These beautiful young ladies had fallen in love with three brothers from the Nepean tribe, yet tribal law forbade them to marry. The brothers were not happy to accept this law and so decided to use force to capture the three sisters causing a major tribal battle. As the lives of the three sisters were seriously in danger, a witchdoctor from the Katoomba tribe took it upon himself to turn the three sisters into stone to protect them from any harm. While he had intended to reverse the spell when the battle was over, the witchdoctor himself was killed. As only he could reverse the spell to return the ladies to their former beauty, the sisters remain in their magnificent rock formation as a reminder of this battle for generations to come.	The Three Sisters legend is about three Aboriginal sisters, Meenhi, Wimlah and Gunnedoo. Long ago there was a fierce Bunyip who lived in a deep hole. Passing this hole was very dangerous so whenever the girls' father, Tyawan, went into the valley he would leave them safely on the cliff. One day, Tyawan waved goodbye to his daughters and descended down into the valley. At the top of the cliff, Meenhi was frightened by a large centipede. She took a stone and threw it at the centipede. The stone rolled over the cliff, crashing into the valley below which woke up the Bunyip. The creature emerged from his hole and charged at the sisters. To protect them, their father used a magic bone to turn them into stone. This made the Bunyip really angry, and he chased Tyawan instead. Tyawan escaped by changing himself into a magnificent Lyre Bird; however, in the process, he dropped his magic bone. Once the Bunyip had disappeared, Tyawan returned to the valley to search for his magic bone. The Lyre Bird has been scratching around in the undergrowth looking for the magic bone ever since. The Three Sisters stand silently looking over the valley, hoping that one day he'll find the bone and turn them back into humans.

Sources: Burge (2013) and Jenkin (2012)

design to contribute to more sustainable living (Ben-Eli 2007). A major concern for tourism in general is the need to improve both the sustainability of tourism operations (Bramwell and Lane 2013; Saarinen 2013) and the ability of tourism to contribute to greater sustainability in general (Pomering et al. 2011; Truong and Hall 2013). The first of these concerns directs us to consider the sustainability of the activities that support tourist experiences. Increasingly tourist businesses and management organisations will be expected by tourists and destination stakeholders to think about reducing the environmental footprints and improving the social impacts of the experiences they offer to tourists. This is particularly applicable to the resources and supplies used to support the experience, the management of waste generated by the experience, and the way in which the staff involved in the experience are selected, trained and paid.

Sustainability issues also apply to the nature of any stories connected to these tourist experiences. There are three dimensions to this aspect of tourist storytelling:

- the need to include stories about the sustainability strategies being used in the experience to encourage tourists to think about the impact of their activities;
- the need to consider stories that explain the significance of the destination's social, cultural and environmental heritage to encourage tourists to support its conservation; and
- the need to assess the extent to which the stories embedded in the experience encourage inappropriate consumption more generally.

This latter dimension presents a serious challenge for those involved in the commercial elements of tourist experiences as much of the existing literature on consumer experiences and the use of stories in marketing is driven by the goal of encouraging increased consumption. This challenge is not unique to tourism and in the wider sustainability literature there are moves towards changing marketing in various ways to support improved business sustainability (Belz and Peattie 2010). Within these moves is a growing interest in social marketing which uses traditional marketing techniques to support changing public behaviours in positive ways (Moscardo 2015). In tourism this means designing experiences so that at least some of the stories told or enacted by tourists are part of strategies that encourage these consumers to behave in more sustainable ways when they return home from their travels.

The widespread adoption of mobile technologies and use of these technologies to access social media is exemplified in the significant increase in travel blogs and the online posting of images and comments about tourist experiences (Pearce and Moscardo 2015). As previously noted, this has further emphasised the importance of stories as a way for tourists to remember and share their experiences. While this trend may have many positive aspects, one potential negative feature is that pressure from social media audiences can encourage inappropriate and/or dangerous behaviours as tourists seek to relive stories already presented in social media and/or to tell more extreme and dramatic stories in order to capture audience attention. Pearce and Moscardo (2015) provide multiple examples where dangerous and inappropriate tourist behaviour can be linked to attempts to recreate images and experiences that have been presented online. For tourist experience designers this suggests that they need to find ways to provide appropriate stories that are likely to meet tourists' social media requirements. It also suggests a need for tourism managers to think about how they interact with and influence social media audiences more generally.

9   The End: Leaving the Door Open for a Sequel or Two

> I wanted a perfect ending. Now I've learned, the hard way, that some poems don't rhyme, and some stories don't have a clear beginning, middle, and end (Gilda Radner cited in Goldberg and Jessup 2007, p. 360).

This chapter has presented the beginnings of a story framework for the design of tourist experiences. The suggested principles are a first attempt to extend what is known about effective and entertaining stories into the realm of tourist experience design. To be developed further the framework needs more than just additional focussed research into stories and tourist experiences. It also needs to address a number of issues that have not yet been considered. These include:

– how to use stories in tourist experiences to enhance social interactions amongst tourists;
– the relative importance of the design principles;
– how to create, manage and maintain the cooperation necessary for stories across locations and for the effective creation of destination stories; and
– how to incorporate the social media audience that many tourists now bring with them into tourist experience settings.

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Destinations and Value Co-creation: Designing Experiences as Processes

Juergen Gnoth

Abstract A destination's competitiveness relies on its ability to successfully signal desirable experiences and deliver on what it offers. Its attractiveness, however, does not depend on its own intrinsic values as much as it depends on the value the tourist perceives. These expectations are always a subjective interpretation of how the destination will meet tourists' individual needs. The destination must therefore be able to form a special relationship with each tourist that fulfils their individual attraction. To decide on relevant service-design options in the face of the potential myriad of individual desires for experiences, the present study discusses the concepts of value, of place, of relationships, and experience. It explains how all experiences can be structured according to a few, idealised categories. These then help understand tourists' predominant value-orientations that is, how the tourist approaches the place, what attitudes drive decision-making and consumption, and how activities are pursued. Discerning processes rather than outcomes, the present discussion enables a manager to better conceive services as transformational experiences that can lead tourists to bond with the destination in a relationship that eventually reveals its own emic values, and tourists' discovery of its uniqueness.

Keywords Experience • Value • Place • Relationship • Transformation • Value-in-use

1   Introduction

When destinations recognise pressures from globalising competition, they are forced to identify their infrastructure, assets and institutions (Schwab 2015), to innovate and hone their services to remain attractive. For sustainable competitiveness, destinations need to build on their own sense of place, and understand how their brand attracts the tourist (Gnoth 2007). Understanding tourists' attraction to a place and how they come to experience it determines how a service can succeed

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most effectively in co-creating the tourist experience so both can draw desired value. This particular view implicates the theories of place, of service, of value and last but not least, the theory of experiencing. The theory of experiencing embraces all of the former theories. As the core activity and outcome of tourism, it is through the experience that the content, meaning and value of places emerge. The amalgam or gestalt the tourist perceives in what the destination offers as its service proposition creates the tourist attraction. The attraction is the emerging place the tourist constructs and visits. Consequently, the theory of service can be linked tightly to the theory of place, because the conception and execution of service always creates relationships (Varey and Ballantyne 2005). In turn, relationships are the key to understanding place (Appadurai 1996). Places are living and ever emerging entities because people's interactions create ever new situations and experiences in time. They are social systems and as such they need to both maintain and to innovate their social, economic and existential functions to thrive (Luhmann 1995). In other words, firms need to continuously practice and refine their processes to create efficiencies. They also need to acquire new skills and knowledge so chosen processes remain effective. Effective and efficient processes that deliver unique experiences are at the heart of competitiveness.

This view thus also proposes that sustainability and innovation are not mutually exclusive but dynamic and interdependent. Social systems need to evolve with their (competitive) environment. In services particularly, however, innovations are often rapidly lost. Especially when they are not backed up and not embedded in routines and habits, or when cycles of innovation become too rapid, the service system can become either unresponsive to evolving needs or it loses its structure because operational processes and outcomes become unpredictable. Any innovation as a response to challenges in the environment will thereby be lost (Ottenbacher and Gnoth 2005).

The incentive to innovate has always been potential increase in value. Recently, the discussion of value in service marketing has received renewed attention because the 'goods-dominant logic' as the outcrop of economic materialism during the nineteenth and twentieth century is finally being dismantled (Grönroos 1990; Gummesson 1999; Vargo and Lusch 2008). In tourism, the discussion has directed the spotlight onto the subjective, phenomenological experience of value-in-use (Edelheim 2007; Lindberg et al. 2014; Matteucci 2014; Gnoth and Matteucci 2014). When destinations offer value propositions, their production and consumption turn experiences into commodities. The tourist experience as a commodity is then subject of value exchange processes between destination and tourist.

Because tourism is a commodity that is consumed where it is produced, the generative forces of exchange can become particularly invasive for community life (e.g., Turner and Ash 1975) and affect the destination brand unless it builds resilience into its processes (Gnoth 2007). Achieving innovations at the destination-level generates collective leverage while the return of innovations at operator level will always be limited as it is tied to the success of the destination. Hence to innovate effectively means to have a deep appreciation of the total value-exchange process. It involves particularly an analysis and appreciation of 'what you

give for what you get' (Zeithaml 1988), and the value-in-use on both sides of the counter (Kozak et al. 2013).

Competitive awareness is expressed in operators' and destinations' sense of urgency for understanding what this value-in-use actually is that tourists aspire. As an experiential, constantly emerging phenomenon its production and experience also allow for new efficiencies and opportunities to be discovered. Far from the traditional opportunism however, that often drives seasonal business, this renewed focus on value must help service organisations generate a sustainable use of resources. A comprehensive focus on value-in-use identifies substantive characteristics in the experience that help build and consolidate uniqueness as a strong foundation for competitiveness. To be sustainable, innovative service design needs to build on the destination's cultural, social and natural capital as its heritage and future to avoid the creation of similarity with other destinations that has come with globalisation (Appadurai 1996).

The following sections will outline the concept of value as it relates to marketing and tourism experiences, before our thoughts turn to the tourist's experience of 'place' itself. The experience of place can be characterised as stratified processes of involvement (Gnoth and Zins 2013) and relationship-formation with a place (Varey and Ballantyne 2005). Both are linked to services as service helps form those relationships between tourist and place and will be discussed subsequently. Understanding value in the context of experiencing opens opportunities for service design.

2 Value-in-Use

The prolific use of the term 'value' in economics and the social sciences (Karababa and Kjeldgaard 2013) is tied to life itself. Choices force us to consider relative and intrinsic worth or value (Plato 1930) of people, objects, situations and actions. Similarly, our own principles and codes by which we consider, judge and make these choices are equally called values. Worth is also expressed when Milton Rokeach (1973) Gert Hofstede (1980) and Shalom Schwartz (1992) establish values as consolidated beliefs that certain types of actions are preferable over others. Actions—implying contexts, functions and purpose, are thus characterised by values. Expanding on this view, Gnoth (1997) further describes how values are expressed in tourists' expectations which are forward-directed attitudes that guide behaviour. Like attitudes, both expectations and values contain affect, cognitions and intentionality but they differ from attitudes in that they are more abstract. They guide classes of behaviour perceived as related, similar or appropriate in one way or another, or justify them retrospectively. These values then help form and direct attitudes in particular situations. They comprise cognitions and feelings by which future or potential experiences of destinations and activities are evaluated. Even spontaneous reactions are value-expressive as their affect characterises how the tourist takes in and lives the situation. The probabilities that desired values then

actually emerge during experiences, say, when a tourist anticipates relaxation, bliss, excitement or fulfilment, are based on approximated previous experiences, word-of-mouth propaganda, and hope. Hope and trust in one's information and decision are what make tourists actually accept the odds and act upon their needs and desires (Bloch 1986). The value tourists perceive in both, the attraction itself and in its instrumentality for achieving desired outcomes and consequences is called value-in-use.

Karl Marx' (1904) analysis of use-value is not unlike Adam Smith's (1965/1776) understanding. Both were economists and sought to conceptualise exchange processes, hence they both sought to estimate the utility of labour and goods produced in order to obtain a measure of exchange-value. Modern materialism can largely be accredited to their influence as their analysis helped further promote positivistic sciences as conceived of by Francis Bacon and Rene Descartes. The latter's focus on methodology, quantities and replicability may well be a reason for why service as value-creating activity did not get appreciated in economic debate until the mid-twentieth century. However, Oscar Wilde's (1854–1900) evaluation of Lord Darlington as a man who 'knows the price of everything but the value of nothing' shows that some people were quite aware of both intrinsic and subjective value, as well as economic value.

Indeed, Edmund Husserl (1859–1938) sought to define subjective value phenomenologically as the experience of it and as the person perceives an interaction (Husserl 1970). Together with economists Husserl therefore appreciated the role of the context in which the experienced interaction occurs. The historic and socio-cultural environment and context thereby impinges on the perceptual process of any value-experience, as much as the individual's knowledge and skills by which s/he becomes aware and able to manipulate this context contributes to it. An experience as a process has value often aligned with normative and socially acquired scripts (Akrich 1992; Latour 1992). Socio-cultural contexts condition individuals to associate objects and situations with certain behaviours. Despite their claim for objectivity, sociology and economics-based approaches to value often misjudge the substance of subjectively felt experiences due to their behaviouristic methodologies when a humanistic methodology would be more appropriate. Husserl sought of going beyond any such approximations of value and utility, however, to understand how value-in-use is subjectively felt.

Phenomenology is more appropriate because it is the subjectively felt experience that is at the heart of precious holiday memories (Tung and Ritchie 2011). The individual tourist's experiences of holiday expectations, encounters and memories are the essential ingredients that determine word-of-mouth, loyalty and repeat visitation (Bigne et al. 2005). Subjectively perceived value-in-use also determines tourists' willingness to pay. Yet, while memories, loyalty, appreciation and respect implicate tourists' involvement with the destination (Gnoth and Zins 2013), we still have little knowledge of how the tourist's 'being' actually affects his/her experience and hence the appreciation of value propositions signalled by destinations (Gnoth and Matteucci 2014). How can the transformative process of holidays be mapped and managed so that both service provider and tourist gain maximum value?

The wider discussion of value-in-use in tourism and the service literature in general (Vargo and Lusch 2008; Groenroos and Voima 2011) still needs to extend its consideration to service experiences and beyond mere notions of service-scape (Bitner 1992) and blueprints (Shostack 1987). It needs to qualify the trajectory of interactive processes qualitatively, and as the tourist's encounter with the attraction evolves. This then affects information search, communication channels, product and brand choices and the evaluation of (service) experiences. Excellent work is being done, no doubt. For example, Hazel Andrew's (2009) ethnographic research on British tourists to Mallorca details a seemingly static experience of indulgence, allowing for some clear insights as to what the actual content of their experiences is comprised of and hence a closer understanding of the value-in-use tourists extract. Similarly, David Crouch's (2010) interest lies with the moment of tourists' reaction to a stimulus, and before that abduction is translated into meaning. He seeks to discover the creativity during what he views as 'flirtatious' interactions between tourist and attraction and as they develop a relationship. To understand the actual subjective experience better, so as to be able to advise service design and place management, tourism experience research needs to indulge in far more detail of experiential processes.

In order to understand what this phenomenological value-in-use actually entails that tourists extract from their holiday experiences, we need to appreciate tourists' mental states they bring to, and physiological processes they experience during holidays. Holiday experiences are meant to transform, satisfy, and please and for which the tourist is willing to pay and often even to give of him/herself in genuine relationships with locals and/or landscape features. As Fig. 1 shows, during value-in-use production, the tourist processes the value proposition offered by the destination into an individually construed attraction. The pull of the attraction combines with the push of tourist's motives (Gnoth 1997) and together with the place and its services they create motivations to experience it. Expectations and experiences
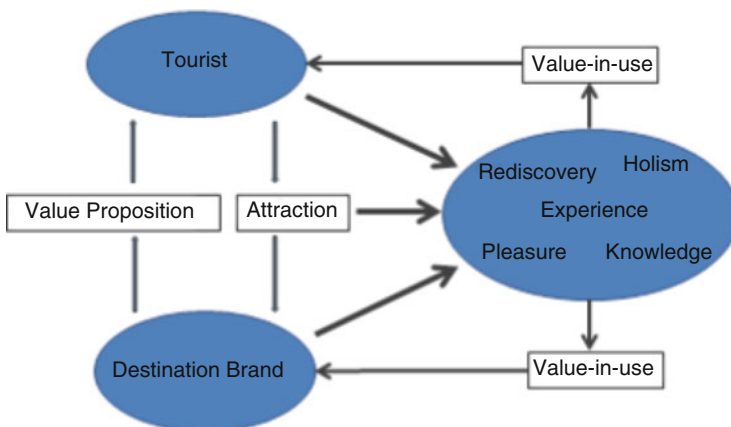

Fig. 1 The production of value-in-use

thereby feed into value exchange and each of the stakeholders extract their own value-in-use. As it turns out, while the latter is entirely subjective we can offer structured observations about what it is and how tourists extract value-in-use. These categorical observations help us better understand interactive processes, value-exchange, and consumption processes.

3 Experiencing Destinations

The tourist experience has been widely discussed (for summaries see e.g. Ryan 2002) but there is still neither agreement on a comprehensive definition nor on a comprehensive model of experience. So far, only Gnoth and Matteucci (2014) have offered a model they claim categorises all tourists' experiences. First, they define tourists' experiencing as "the conflux of, what is sensually perceived, how it is processed, and how it is retained in the resulting experience" (2014: 4). They thereby carefully distinguish between the perceptual steps so as to make clear that an experience is either a memory of the initial reaction and therefore affective, or a memory of the meaning-making process and thus more cognitive. This latter interpretative step converts the experience into a memory of emotions and/or meaning but can also end in understanding as felt insight which includes both meaning and affect. Understanding is also contained in embodied knowledge in terms of behavioural schema and scripts. The importance of this 'disassembly' of the experience process is that it reveals how a sensitive approach by service designers can access tourists' perceptual process and prevent them from experiencing with what Kahneman (2000) calls the remembering self.

Perception comprises three elements, the stimulus, the tourist's reaction to it, and its transformation into meaning. Upon exposure to a toured object or a service, and as tourists make the perceptual step from reaction to meaning, they are often liable to fall back, as it were, onto their existing knowledge. Rather than recognising the uniqueness of the moment in front of them they often rely on what they already know. They often do not see or find it opportune to harvest the benefit of moment-by-moment experiencing. Only moment-by-moment experiencing, however, would make it possible for the destination to feature distinctly and uniquely in the tourist's memory and experience, because only moment-by-moment experiencing is able of becoming aware of what is new in any given situation. Any lack of attention, for example, can often be attributed to a lack of energy which needs to be restored first before the tourist can face the challenge of a new destination. There are thus obviously different ways of experiencing and only some of these allow destinations and service providers to become part of a distinctly remembered feature in the experience. So how do Gnoth and Matteucci (2014) account for all the various ways of perceiving, and how of the multitude of activities tourists engage in?

The Tourism Experience Model (Gnoth and Matteucci 2014) begins with the consideration that the shape and form of an experience depends on how the tourist's

mind views his/her own activity. First, let us focus on the activity. A tourist is always active because s/he is a human and biological being who continuously reconstructs itself as the mind senses, controls, observes and otherwise lives his/her body's activity. With reference to the individual's mind and body, both physical and mental activity can be distinguished as either new, or as known and previously practiced. This reduction of all activities to what is also often referred to as the familiarity-novelty continuum helps us organise what it is the tourist seeks to achieve, and hence how a potential service could be conceived. Familiar activities are all those that the tourist has previously practiced. They have become part of rituals and habits, as well as of known solutions to recurring problems. Such activities thus tend to recreate desirable states known previously. From a leisure perspective, recreation is therefore the repetition of proven activities the tourist knows will re-establish their equilibrium. Conversely, in moment-by-moment experiencing, an activity is exploratory or new to the individual. It therefore extends the tourist's skills, knowledge and/or being.

Second, there is the function of the tourist's mind in what makes up an experience. Gnoth and Matteucci (2014) detail that in order to become aware of something the mind needs to attend to what is, initially, the affective reaction that is created through the tourist sensing a stimulus. It is now of importance to realise that the mind's awareness of this sensual awareness is what we call consciousness. Consciousness is the consequence of previous learning and what tourists have made of it through thinking. Hence we can distinguish two sources of awareness.

The most developed one is often the socially acquired knowledge and its derivative, the social self. We consider ourselves as (socially) authentic if and when we conform to socially created norms and expectations—the perfect politician, the perfect mother, the perfect environmentalist etc. The often less developed self is the existentially authentic self. It is often less developed as we either become aware of it only once we seek to understand our own personality (which is a learned profile acquired through observation), or we experience it in times of struggle and effort, as we realise a gap between our real and our ideal self. These moments of awareness require critical self-reflection if they are to be understood as to what they might mean socially or existentially. As we are conditioned to think with the tools of culturally and socially determined language, norms and expectations, breaking away from a lived experience to an existential experience requires effort and, as it turns out, humility. Humility is a human's capacity of side-stepping one's own ego and appreciating the presence of somebody or something else as intrinsically valuable. The effort it takes to learn something new coupled with humility opens the tourist up to becoming inquisitive for intrinsic value. This results in the tourist changing their perspective as they try to understand the toured 'other' from its or his/her own perspective.

Given these two continua of activity and consciousness, Gnoth and Matteucci (2014) develop four ideal types or modes of tourists' experiencing. The continua are dynamic across cultures, time and space and depend on social and existential ideals. Over the course of a holiday it is likely that tourists change to modes other than just the predominant one. Indeed, unless the tourist already is in an exploratory mode

this is what service providers will need to achieve. To begin with they are the Pleasure Seeker who is predominantly engaged in familiar activities—even at new destinations of which s/he knows what sorts of results they produce. The ensuing behaviour is usually determined by socially acquired and frequently practised rules, norms and expectations and as such, require no effort. Examples of tourism activities here are those related to relaxation, promenading, and gazing but also to indulgence in sensuous experiences whether on the beach, at the bar, wellness centres or theme-parks. However, if and when the tourist engages in effortful activities using familiar schema and scripts the real or existential self comes to the fore. Gnoth and Matteucci (2014) suggest this mode to be the domain in which not the socially acquired norms and expectations are dominating the mind's awareness but the more fundamental issues between the individual and the necessary skills that are required by a task. They involve, for example, Stebbins' serious leisure activities (2007) including sports and pursuits which require the tourist to focus on their selves in a manner that is inward-looking and challenging. As long as the tourist stays within his/her known parameters of control, s/he may achieve the feeling of flow (Csikszentmihalyi 1990). This mode of experiencing in which an activity requires repetitive action, skill and control has been named Rediscovery and the tourist 'the Re-Discoverer' as the s/he aspires to achieve a level of known excellence.

The particular characteristic of the above two modes of experiencing is that they are self-reflective. In other words, the main concern is the tourist him or herself including the control over his/her environment and the activity s/he pursues. It is clear from this brief sketch that the experiences of destinations in these modes afford more detail and quality should services lead to better outcomes and relationships between tourist and destination. The destination thereby becomes subject to critical evaluations according to its ability to allow the tourist to perform. Importantly, however, the tourist seeks to perform on his or her own terms turning the destination into a stage or a means to an end. Recreational tourists (Pleasure Seekers and Re-Discoverers) therefore like a high level of control and familiarity in order to succeed in their desired performances.

Once tourists are willing to explore—and not every tourist is immediately capable of 'going all out' and trying new things for good reasons, such as when in need of recreation. The more tourists immerse themselves in their environment however, the more can they become open to and accepting of local norms and expectations. Such an attitude is at the core of experiencing something new and unique. The mind can then involve itself differently and in at least two ideal ways. The Knowledge Seeker as the third mode of experiencing describes tourists who dare explore, get involved in new activities and acquisition of new skills but they do that with schema acquired in their own socio-cultural environment. Hence, like the Pleasure Seeker, the Knowledge Seeker cherishes 'differences' or the appreciation of contrasts between 'us' and 'them', between 'this art form' and 'that art form', 'this role-behaviour' versus 'that role-behaviour' as they explore the destination's features. The Knowledge Seeker attempts to learn and understand the attraction yet learning has a strong cognitive character. The more experiencing is socially and

role-based in the tourist's culture the harder it is for the tourist, for example, to acquire interactive or artistic skills, or understanding the visited cultures' logics, despite serious attempts.

The Holistic, Existential Tourism mode of experiencing can become a default-experience for the Knowledge Seeker because even if and when the Knowledge Seeker views the visited culture through his/her own cultural or social lens, s/he will often gain insights and understanding. These experiences implicate the Holistic or Existential Tourist whose efforts lie with searching for emotional convergence. Whereas such existential experiences are often serendipitous for Knowledge-Seekers, the Holistic Tourist searches for these by default both immersing themselves as well as by absorbing anything they discover as structurally important to 'belong' and to 'fit in': the Holist seeks the emotional convergence with the visited culture or the new physical environment. Both Knowledge Seeker and Holist are keen on unique experiences. They try to learn albeit their styles of acculturation, relationship formation, use of information channels and their communication etc. differs substantively because an existential exploration will seek emotional convergence, belonging and sharing, whereas Knowledge Seekers thrive on experiencing 'differences' only. Both are thus more likely to be interested in the destination for its own intrinsic values than the other two modes of experiencing (Pleasure Seeker and Re-Discoverer).

The four modes thus outlined highlight that they can shape one and the same destination into different types of attractions altogether. However we experience a static location, such places are also movement (Relph 1976) and open processes involving interactions and meaning creation (Cresswell 2004). Place and service designers therefore realise that each mode of experiencing place has a different requirement in terms of the tourist's control over their activities, the inner or outer-directed needs they seek to satisfy, as well as the amount of sharing and adaptation to local conditions they are prepared to endure. It is also clear that without considering how the tourist's mind views his/her own activity, the degree of active and passive involvement as well as absorption and immersion as proposed by Pine and Gilmore (1999) qualify experiencing rather randomly. The latter can be construed as characteristics of any activity but they do not identify whether the tourist engages in self-reflective or other-directed interactions, nor whether the interest is an experience of 'difference' or of emotional convergence, affecting memorability in very different ways. In any case, the four modes also suggest distinctly different tendencies in how tourists assimilate to locals' place, and develop preferences for products, services and brands as each mode promotes different values-in-use.

4 Experiencing and Service Design

The previous section indicated that different modes of experiencing require very different approaches to service design if tourists are to be introduced to the local experience of place, and form lasting relationships. Not only do these modes help us

understand how we may structure the subjectively felt value-in-use in order to better serve it but also because these modes look for different content, outcomes and consequences in an experience. Above all, they help create a different kind of place in each mode as the relationships that tourists form with the destination will be different in each case. Consequently, the types of measures we might consider for gauging tourists' satisfaction with their experience may also be worthy revisiting as the traditional schema of satisfaction research have been found wanting (e.g., Arnould and Price 1993).

First, satisfaction (Latin for 'having done enough' or 'plenty') is behaviour-centric which implies that tourists' core interests are assumed to lie with the behaviour that generates the sensual part of the experience. This may not always be the case. As stated by Plato (1930) an object or activity can have intrinsic value in and of itself. It can also have instrumental value in the sense that it is a means to an end. In that case it is not the outcome that is important but the consequence of the activity. Both intrinsic value and consequence, however, relate to content and meaning rather than the behaviour that generates it. If a tourist seeks diversion, for example, the activity itself and its outcome may be of less importance than the state of being that the diversionary activity helps create. We therefore need to consider a whole spectrum of values-in-use.

Second, much of satisfaction research implies expectations. Again, these may only exist in some but not all cases of tourist experiences. Particularly when the tourist travels to a new destination as Knowledge Seeker or Holist s/he may have only vague ideas as to what s/he can expect. Here, satisfaction research may miss the point of what actually satisfies the tourist. If it asks for what satisfies rather than how these objects and activities are being experienced, the answer may miss the essence of the underlying motivation. Indeed, this critique highlights the fact that service design needs to consider 'how' the tourist actually experiences. Motives are not predictors of behaviour but a "relatively limited set of cognitive states that people pursue during leisure" (Schreyer et al. 1984: 15) or states of consciousness. To involve the tourists' motivation, their selves and needs in an analysis means generating opportunities for customised solutions rather than just offering generic services. It requires empathy and willingness to be of service.

According to Aristotelian thinking, in order to render a product or service, the first that needs to be conceived is, what should the final shape or form be ('causa finalis', represented by an image or the name of the product or service)? In order to produce this conception, the service creator needs to clearly understand what the shape or form entails so that the synergetic effect of the conception creates the desired outcome during the process of experiencing it. In other words, the process needs to generate desired values. For this to occur the service creator requires an intimate understanding of what it is the tourist seeks to experience, or how s/he might seek to experience it. This then determines both the most appropriate materials and the way they are assembled ('causa materialis', and 'causa formalis'). Lastly, there is the actual service deliverer ('causa efficiens') who knows and has the skills of how to assemble the necessary materials, and who effects the sequence in which the service delivery occurs (Gnoth 1994).

The name of a product or service—a meal, a hotel, an excursion or adventure is thus merely a representation of particular processes that are experienced in an interactive process. That what the service represents, however, is a solution to a problem that has been generated by a creative, innovative mind, which is often forgotten. Service scripts (Shostack 1987) or servicescapes (Bitner 1992) for example represent the respective formal and material explanations for a service. In addition, the 'causa finalis', or solution, however, signals and expresses the benefits that are derived in the experiential process. Vargo and Lusch (2008) distinguish between operant and operand resources and tend to subsume the creative input into the skills and knowledge of operant resources. This pragmatic view tends to favour a 'one-size-fits-all' type of service because all it focuses on are the technical elements of service but fails to account for the logos, the creative conception as part of the technology of service. This leaves it open as to whether the service deliverer is an operand resource (a machine or disempowered worker), or an operant resource (a creative, empowered solution-provider).

In his critique of technology, Heidegger (1962) maintains that modern technology does not clearly distinguish the Greek origins and role of 'techne' and of 'logos'. Instead it is far too focused on the functional character of objects and activities (techne) which renders services as static representations suppressing their genesis, creativity and diversity. Instead, to provide solutions (logos) which address both the provider's autonomy and the tourist's needs, it is the creativity of understanding precisely what the tourist's state of being requires that is at the core of an effective and efficient service. Creative service needs to be empowered and innovative because it seeks to uncover ways of providing solutions. It needs to reveal what is hidden in the particular problem posed by the subjectively experiencing tourist. In other words, it is the tourist's state of being—his/her mental and physiological state that structures the actual demand. The individualised analysis of the tourist's being then enters the process of service creation as a material explanation for what is assembled and how, as much as it is part of the creative process that gives the service its name.

Hence, when Vargo and Lusch (2008) argue that service providers only offer value-propositions, we must add that, in standardised services, value is imbedded in the proposition to the extent that it cannot be changed or customised. The effectiveness of the service is determined by the fact that the final decisions on efficiencies—the assembly and delivery, have already been made. If a hotel, for example, views itself as a creative rather than standardised solution to a tourist's problem for an abode, front-line staff needs to be able to pick up on the tourist's particular state and needs (have empathy), to be able to conceive of a solution (logos), and to be empowered to negotiate and deliver that solution.

As C.S. Peirce emphasised, the experience of a product or service on offer is, in the first instance, an exposure to stimuli. At this stage, awareness is comprised of affective reactions before they are interpreted and consolidated in meanings or feelings. Detailing the process of perception, Peirce points out that a stimulus has, in the first instance and for its own existence little to do with how a tourist reacts to it; the reaction is a creative process. It has to be critically added, however, that the

stimulus is also co-creational in that it not only helps trigger but also modulate the tourist's reaction. If we therefore wish to employ the existing service theory outlined most effectively and efficiently, we require a firm understanding of the tourist's reaction to destination stimuli as a function of his/her need as a mental and physiological state. This helps the service designer choose the right materials and apply these according to their ability to satisfy the demand. How the tourist reacts to, say, the offer of an excursion, then becomes part of the solution expressed in the assembly and delivery of the service. The tourist's motivation (Gnoth 1997) determines the efficiency and effectiveness of the process as a substantive and causal element in service creation. In this moment of value creation, that is, when service provider and tourist meet and interact, relationships are formed. Although studied by many and in diverse disciplines such as geography, and anthropology there is still a lot of work to be accomplished in tourism in which places are offered as commodities and created as consequence of service encounters. The creation of place in tourism spaces has been touched upon in such areas as destination branding (Gnoth 2007; Pike 2005) and in service marketing as relationship formation (e.g., Ballantyne and Varey). However, the need for further research emerges particularly because on one hand, globalisation requires both innovative and sustainable solutions, and because tourists are more and more able and willing to express their diversity. This requires those involved in service design to better understand how the tourist experiences and how that affects their relationships with destinations. As Edelheim (2015) explains, it is the tourist's experiential, phenomenological view that turns a destination into an attraction. The value-in-use the tourist derives is therefore the key to how s/he engages with the destination and the experiential content s/he seeks.

5 Concluding Remarks

This study outlined how considering tourist' experiencing of place can influence service design and may increase competitive advantage. This can be established by gaining a deep understanding of how the tourist constructs his/her individual attraction, in other words, how the tourist views his/her own activities at the destination. Given the increasing globalisation, the competitive pressures require destinations to develop their uniqueness and to form effective relationships that create all the benefits of loyalty, word of mouth propaganda and repeat visits, making best use of destination resources. The true competitiveness evolves from the processes and activities destinations engage in with their tourists and that subsequent experiences become the substance of destination brand equity.

The argument presented here related central elements of service theory, value theory and experience theory to substantiate how different modes of experiencing respond to and evaluate services from very different perspectives. They affect the extent to which tourists desire familiar versus local products, services and brands, and the ways by which tourists need to be introduced to local brand-scapes. The

required didactical skills that help service designers introduce tourists to their brand essence need to be developed in conjunction with the character of the brand and the understanding of how the tourist structures the attraction of the destination brand.

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Social Systems and Tourism Design

Mike Peters

Abstract Tourism destinations represent both social systems and a bundle of products and services that constitute the overall customer experience. However, destination management challenges strongly differ between corporate- and community-model destinations. The latter are guided and marketed by a destination management organization (DMO) which attempts to stimulate tourism development processes through cooperation and collaboration initiatives. Service design is proposed as a major attitude and behavior of stakeholders in the tourism destination. It enables a constant discussion and on-going process of co-development and co-production and is finally labeled as "tourism design". This chapter highlights the need for tourism design thinking in tourism destinations and discusses the stimulus of tourism design activities for cooperative behavior and tourism chain optimization processes. Customer-orientation of all stakeholders in the destination can be increased and will lead to a strong consistent tourism value chain. Future research should gather empirical evidence through action research and or case studies in community-model destinations.

Keywords Service design thinking • Tourism design • Community-model destination • Value chain

1 Introduction

Tourism destinations are complex constructs aiming at creating an ideal tourist experience. According to Flagestad and Hope (2001) such tourism destinations can be characterized either as community- or corporate-model destinations. The community model can be found in Europe, where for political and structural reasons, a local destination management organization (DMO) is trying to promote cooperation between the suppliers and other stakeholders (Flagestad and Hope 2001, p. 452). The corporate model dominates in U.S. American and Canadian resorts,

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where a strong business corporation manages the destination and the role of the DMO is much more customer process oriented.

Much has been written about the management of destinations' complex service and product bundles, which in the tourist's final evaluation are interpreted as a holistic package and experience. On the one hand authors refer to the understanding of a tourism product as a service product (Smith 1994). On the other hand researchers apply Porter's value chain concept (Porter 1990) and transferred it into a tourism value chain highlighting the need for consistency and the challenge of supplier and resource diversity in destinations (Weiermair 2006). European tourism researchers address the problems of the community-model destination: the value chain discussion together with the need to optimize service quality were the beginning of a demand-side oriented tourism design thinking accompanied by new insights into destination governance (Beritelli et al. 2007). All this culminates in today's call for product development and service design activities on a destination level which forces destination stakeholder groups to closely work together (Peters and Siller 2014; Untersteiner 2015). Service design covers "the hand-on activities to describe and detail a service, the service system and the service delivery process." (Gummesson 1994, p. 85). In the context of tourism destinations, "tourism design" is defined as an on-going process of designing and further developing holistic and systematic tourism destination experiences (Zehrer 2009).

Service design thinking on the European destination level is challenged by the fact that various stakeholder groups (co-)produce and consume tourism. Tourism is staged within locals' everyday living environment instead of being produced in a resort or zoned tourism space (Edensor 2001). Despite this reality, tourism research has scarcely looked into the influence of social destination systems on tourism design patterns. Community-model destinations were analyzed to understand governance processes, however, it is still in need of more insights about the formation of social structures and patterns of social behaviors in these tourism destinations. Social systems in community-based destinations are deep-rooted, especially in rural tourism destinations. A social system can be described as the organization or structure of individuals into (stakeholder) groups. A social system is defined by (inter-)actions and/or communication behavior (Talcott 1951). Service design processes are interactive and therefore influence social behavior between destination stakeholders (Stickdorn and Zehrer 2009).

This paper attempts to shed more light upon both the effect of tourism design activities on social interactions between stakeholders in destinations. Furthermore, this paper discusses dynamic processes of tourism design within community-model destinations. The chapter will answer the following research question: "What are interdependencies between tourism design processes and a tourism destination's social system?" The paper is structured as follows: First, the concept of the tourism value chain and its interpretation in the tourism research literature will be presented to highlight the need for cooperative tourism development initiatives in both community-model and corporate-model destinations. Second, the construct of "tourism design" will be introduced as a concept of service design thinking in the context of tourism destination. It will be shown that service design thinking is both

determined by social behavior patterns but also influences the social system of the tourism destination. Third, the paper develops propositions about the relationship between tourism destination systems and tourism design. The latter allows deriving research paths for the future of tourism destination research.

2 Tourism Destination Value Chain and the Need for Cooperation

Tourists have always travelled around destinations and places to long for exceptional experiences. Attractions or events can generate memorable experiences and artificially created experience worlds are a special form of attractions, which according to their relevance can be interpreted as basic elements of the tourism system (Bieger and Beritelli 2013, p. 14). From the perspective of the tourist enterprise as one main element of the tourism system and tourism value chain, it is essential to anticipate customer needs and hence their desire for adventures. Porter's value chain concept was used by a number of tourism researchers to underline the importance of producing one tourism or holiday product instead of producing individual single services and products e.g. in a tourism destination. The tourism value chain supports the analysis of the "various steps of a tourism product including all service providers" (Weiermair 2006, p. 64). A tourism value chain shows the bundle of primary and secondary elements, which finally creates the experiences or values for tourists. The profit margin depends upon the price that tourists are willing to pay for consuming this valuable service and product bundle. Therefore the tourism value chain is quite different from the originally developed value chain of Porter (1990). Especially the definition of tourists as prosumers and the challenges in supporting chain elements ask for a more detailed analysis of this concept.

The full range of activities that are relevant to produce the tourism product can be analyzed with the help of the value chain concept. In tourism research the concept was adapted and introduced at the end of the eighties, mainly to conceptualize and understand the complexity of the tourism product. The Swiss school of tourism research (e.g. Bieger and Beritelli 2013; Kaspar 1994; Krippendorf 1986) discussed tourism systems and tourism destination systems and therefore used Porter's model to understand both the composition and balance of a destination's tourism product bundle and to derive implications for further product development. The latter led to a strong call for cooperation between various stakeholders in the tourism destination. Porter and Millar (1985) describe a company's value chain as a "system of interdependent activities, which are connected by linkages." These linkages also need to be coordinated or managed and can therefore also provide competitive advantages in an industry. For instance, within a company human resource management, they can optimize the overall value chain by coordinating job enrichment or career path models. The value chain is embedded in a value
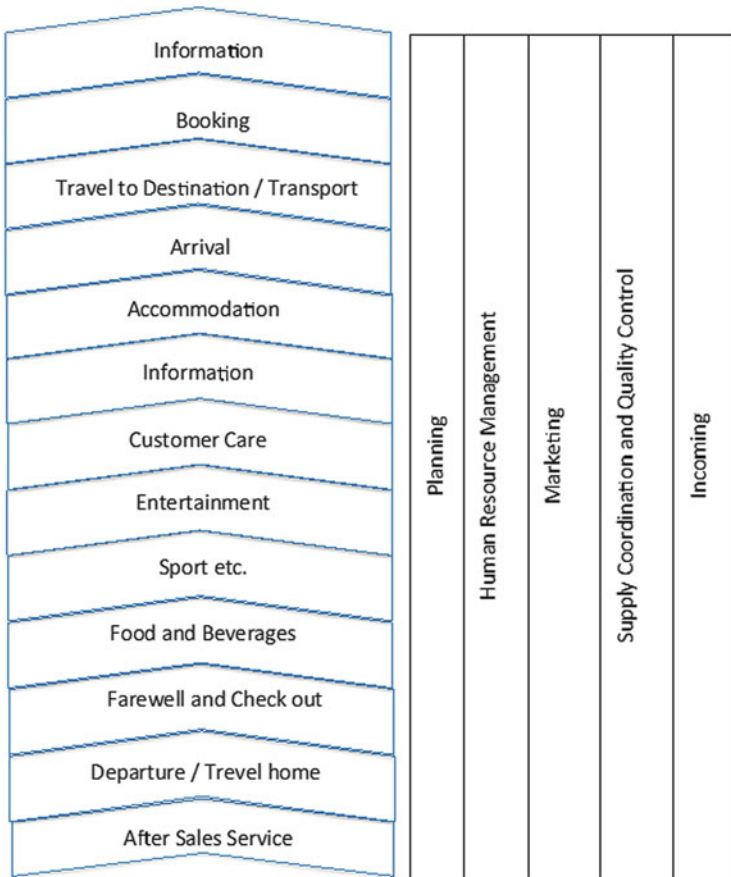
Fig. 1 Service value chain in Alpine tourism (Bieger and Beritelli 2013, p. 59)

system that includes value chains of suppliers and buyers. Porter's value chain concept is therefore just one part in the industry analysis and should be interpreted in the context of his five forces model.

Tourism value chain analysis does not only focus on one company embedded in a value system, for a bundle of companies can also form the tourism destination value chain. From a consumer perspective the primary elements of the tourism value chain start with the decision-making process phase and ends with the so-called after-sales services. Bieger and Beritelli (2013) defined the service value chain in Alpine tourism and added secondary or supporting elements such as planning, human resource management, marketing, supply coordination and quality control or incoming (see Fig. 1).

The tourism value chain in tourism certainly can be provided through one company only: e.g. large hotel resorts are able to provide all the primary elements and implement a type of management which is able to internalize the most valuable

supporting or secondary activities. This holds true for destinations which function as corporations such as the corporate model of Canadian or US American ski resorts. On the contrary, many destinations are operated by a number of diverse enterprises in different industries, with various levels of quality management. Furthermore, in this community destination model, many of these enterprises are only operating in one of the above-presented areas (e.g. accommodation) of the tourism value chain and hardly understand the linkages between the value chain components.

Especially in the recent past, tourism researchers used the tourism value chain as a starting point or framework for their analysis, for instance to understand tourism governance patterns (Adriana 2009; Song et al. 2012) or innovation processes in destinations (Weiermair 2006) or to explore performance measurement in tourism (Yilmaz and Bititci 2006a, b). In the community model, where destination management consists of transactional and personal relationships in networks, the tourism value chain is provided by various independent businesses. The corporate model often performs better than the community one in cultivating customer satisfaction, product development and strategic management (Flagestad and Hope 2001); strategic management is as professionalized as in business organizations. Due to their small-sized value chain structure, community model destinations lack strategy and professionalism (Hjalager 2002; Pikkemaat 2008). As a consequence, the role of the destination management organization (DMO) in these two different models tourism destinations is very different. The DMO is mainly a marketing organization in the corporate model. In the community model it is also an important stakeholder in the governance of tourism destinations and plays an integrative role.

One major imperative of community model destinations is cooperation between actors of all kinds to innovate and develop or maintain value for the visitors (Pikkemaat and Weiermair 2007). Wang and Fesenmaier (2007) point out that "the fragmented nature of the tourism industry requires a substantial degree of coordination and collaboration of different players" (p. 863) in tourism destinations. However, cooperation between small-sized market players, which are often family businesses, is interpreted as a major barrier of tourism development. A major function of the DMO in community model destinations, aside from marketing and branding, is the initiation of cooperation and collaboration between businesses within the destination. Although, the major goal is to enhance destination competitiveness, additional outcomes of collaboration are organization-learning and social capital-oriented. While learning-oriented outcomes describe knowledge transfer and improvement and diffusion of skills, social capital-oriented outcomes are relationship and trust building processes among the stakeholders in the destination (Wang and Fesenmaier 2007, p. 873). In the tourism value chain we find many owner managers and entrepreneurs who often are connected with each other through strong or weak ties (Strobl and Peters 2013). These relationships or ties are determined by the frequency of contact, emotional intensity, trust and reciprocity of a relationship (Granovetter 1983). Strong ties are important for a destination to manage innovations and create a destination network core, however weak ties are

also important as they link different network cores with each other (Jack 2005). Tourism researchers have analyzed networks of entrepreneurs and leaders in tourism destinations worldwide and explored patterns of destination governance (Beritelli et al. 2013; Pechlaner et al. 2014, 2015; Strobl and Peters 2013). In this research stream entrepreneurs and leader personalities as well as DMO representatives have been identified as crucial for competitive tourism development (Pechlaner et al. 2014; Strobl and Peters 2013). However, cooperation can only be initiated through the DMO in a tourism destination when

- they create a cooperation vehicle that consequently defines clear benefits, goals and outcomes: Projects such as local events or festivals, the implementation of a quality control instrument but also clearly structured strategic tourism planning processes initiate collaboration between actors in the destination. A stimulus is needed to motivate individual actors to consider collaboration with others in the destination.
- trust and understanding exists among actors. Cooperative behaviour is interpersonal and therefore the DMO should carefully identify communication patterns between stakeholders in the destination, as intense communication is a characteristic of existing trust and understanding between certain actors (Beritelli 2011).
- they understand relationships, interdependencies and resource allocation among actors: Beritelli (2011) highlights that "cooperation processes require reciprocal sympathy" (p. 624). Interdependencies lead to sympathy, which is a prerequisite for cooperation between actors, especially in community-structure tourism destinations.

Finally, it is obvious that a tourism destination can also be interpreted as a social system or social network in which an individual gains social capital. It is defined as the overall sum of "actual and potential resources embedded within, available through, and derived from a network of relationships possessed by an individual or social unit" (Nahapiet and Ghoshal 1998, p. 243). In tourism social capital theory has been studied to understand small business development (Zhao et al. 2011), tourism community residents behavior (Park et al. 2012), and tourism destination's life cycle (Nordin and Westlund 2009). Again, it can be concluded that the role of the DMO has changed from a purely marketing-oriented association towards a co-producer and initiator of tourism innovation and competitiveness. In doing so, the DMO must understand how actors perceive their resources and how these actors are related to each other. Therefore, the DMO should attempt to manage integration and communication within the destination in order to foster cooperative behavior. The next section elaborates on service design thinking and it will be argued that the DMO can use service design to initiate sustainable cooperative behaviors in the tourism destination.

3   Service Design Thinking

As indicated above the tourism value chain is a systematic tool that helps identify areas of creating and maintaining competitive advantages in the industry. Porter and Millar (1985) already used a process view to present their value chain referring to the supply chain in manufacturing industries. However, the adaptation of the value chain in services has become very popular both because of its process orientation and its focus on customer value creation. This process orientation was also mandatory for understanding the customer experience and early instruments such as the flowchart. Furthermore, service blueprinting helped to systematically structure and understand customer experiences in order to provide the right resources at the right time in the right manner (Shostack 1982). Zeithaml and Bitner (2000) define service blueprint as a visualized picture or map that helps all those involved to understand and handle it objectively. Moments of truth and failures could be identified with these methods which became popular in service quality control but also in new service development processes (Gummesson 1994). Furthermore, blueprinting increases service provision efficiency (e.g. by optimizing information management) and the efficiency of factor combination management (Fließ and Kleinaltenkamp 2004).

Already in 1982, Shostack discussed the term blueprinting in the context of designing a service. This stream of literature uses sequential or process models in certain phases of the new service development process to (pre-)test potential services. Gummesson (1994) defined service design as activities that "describe and detail a service, the service system and the service delivery system" (p. 85). Until today service design is understood as a set of activities which help service providers develop and further improve their product (Stickdorn and Schneider 2012).

Service design describes activities and therefore the starting point for any service design activity is the service concept. Described as the "missing link" (Goldstein et al. 2002) in service design research the service concept is concretely describing the nature of the service. A service concept links the operating strategy with the target market segmentation and is not defined "in terms of products and services but in terms of results produced for customers" (Heskett et al. 1990, p. 20). The service provider has to answer the question: "What are important elements of the service to be provided?" (Heskett et al. 1990, p. 21). The service concept "not only defines the *how* and the *what* of service design, but also ensures integration between the *how* and *what*" (Goldstein et al. 2002) (see Fig. 2).

Figure 2 describes the mismatch between strategic intent and customer needs, but also between the *what* and the *how*! Any service designer needs to clarify these relationships before activities are planned. Once the service concept is clarified, then the following fours steps can be proposed to design service experiences:

- Training and education: a prerequisite for any service design is customer-orientation and the acquisition of skills to design services in cross-functional teams.

Fig. 2 Strategic intent
[*Source*: Goldstein
et al. (2002, p. 124)]
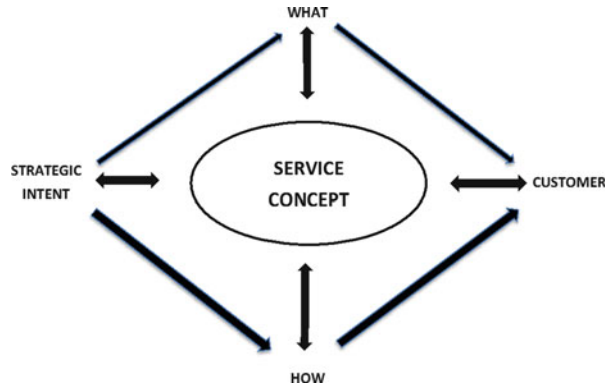
- Relevant data needs to be collected and analyzed both from the supply and the demand side. The focus lies on the perception of customer experiences and their reactions to the overall service experience provided.
- Customer journeys or blueprints need to be developed to understand single phases of the service experience and their relationship to each other both from the customer side and supply side.
- Furthermore, certain "clues", a term defined by Haeckel et al. (2003) as 'perceptions and sensations', need to be categorized into three types: clues "that should have been implemented yesterday, those that can be implemented today, and those that must be held for the future" (Zehrer 2009, p. 339). This is especially important to attract loyal customers and tourists.

Tourism DMO can use these design steps to initiate tourism design in their destination. The term "tourism design" is adapting service design in the context of a tourism destination. Zehrer (2009) argues that small and medium-sized enterprises (SME) in tourism should apply service design in order to overcome (mental) barriers of cooperation and to better understand the holistic and complex tourism product. Service design helps both to place oneself in the "shoes of the customer" and to increase efficiency in tourism service production. The following chapter underlines this and proposes the implementation of the tourism destination triad to improve the value of the tourism product.

4 The Tourism Destination Triad Design, Value and Activities

Three propositions can be derived from the analysis. First of all, the advantages of the value chain analysis should motivate tourism stakeholders to carefully analyze given resources in the overall destination. Certainly, one single company can use the concept, but in a community-model destination it is of importance to gain an overall holistic overview of resources in primary and secondary elements in the
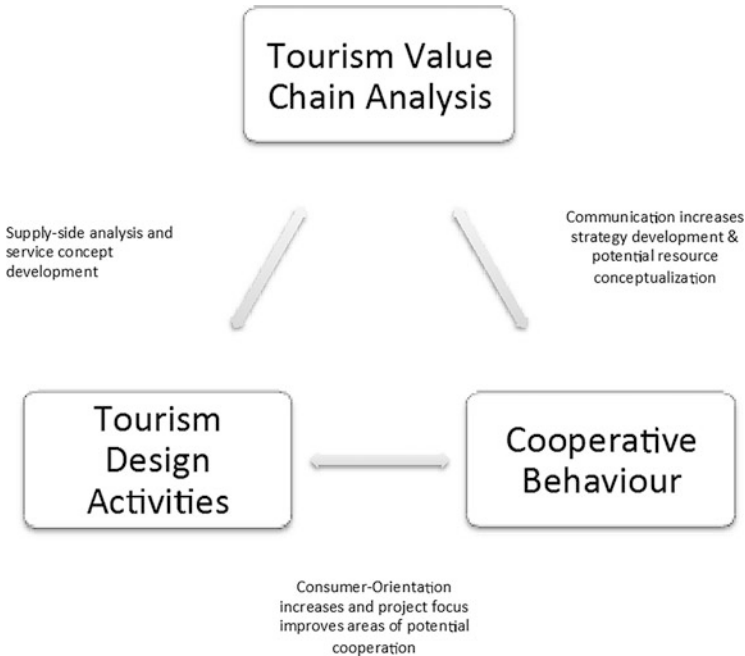
Fig. 3 Tourism design in destinations—a triad (*Source*: own illustration)

tourism value chain. With the help of the tourism value chain analysis, the DMO can initiate strategy development processes, which help formulate the service concept as a prerequisite for further service design initiatives. Figure 3 summarizes the three propositions: although normative, they highlight the relevance of integrative destination management activities in community-model destinations.

P1 Tourism destinations that use tourism value chain analysis effectively optimize their resource bundle; they are able to identify synergies, redundant resources, and cooperation areas in order to improve the destination's competitiveness.

The service concept can be defined as a "driver of design planning" (Goldstein et al. 2002, p. 125). However, tourism destinations need to clearly define the value they want to provide for the target segment. Once stakeholders are able to agree on the destinations strategic goal then tourism design processes make sense. Especially in tourism, service design thinking is a prerequisite for the improvement of customer orientation in the destination. Therefore actions and initiatives need to be implemented by the DMO to integrate as many as possible relevant stakeholders in the tourism destination. Actions lead to a stronger awareness and understanding of customer journeys and help service providers to plan, control and develop their service from a holistic customer perspective.

P2 Tourism design activities increase destination stakeholders' awareness of customer journeys and needs and initiate concrete projects or clues. Joint project

initiatives in a destination mobilize various stakeholders in the destination to work together. Usually these clearly defined initiatives lead to a greater communication between stakeholders and openness towards potential cooperation.

P3 Tourism design projects improve the overall communication and interaction of stakeholders in the tourism destination. As a consequence, cooperation intensity increases in the destination.

5 Closing Remarks

This chapter attempted to highlight the complexity of tourism destinations and showed that certain management tools can help to improve the creation of a common holistic destination product and service bundle. The discussion above postulates strong influences of tourism design thinking and action on destination stakeholder systems. Service design thinking and value chain analysis are two major success factors for service companies. This holds true for community-model tourism destinations, where on the one hand we often miss a sound resource analysis, and on the other hand fail to incorporate cooperative behavior of stakeholders. With the help of the tourism value chain, the DMO can develop the starting point for a resource identification process while service design thinking links this resource analysis with customer experiences. This resource analysis forms the basis for the formulation of the service concept. Stakeholders need to understand the strategic intent and should agree on how they want to use destination resources to attract tourists. Furthermore, being in the "shoes of the customer" and learning from customer journeys are key for the implementation of successful destination marketing strategies. Cooperative behavior can only result from commonly developed and agreed operative and tactical goals which can be derived from these analytical stages. Certainly, it is important that stakeholders anticipate positive benefits when participating in such a process (e.g. they see a option to influence decision-making in the destination) (for a detailed discussion of scope and intensity of collaboration in tourism see for instance Bramwell and Sharman 1999).

Future research needs to underline the above-formulated propositions. As Beritelli (2011) points out, cooperative behavior does not automatically result from an increasing information exchange. It also needs more empirical proof on whether the tourism value chain analysis helps redefine the destinations resource composition in the long run. No empirical evidence underlines that service design activities increase and improve communication in a destination. Aside from meetings, workshops and other occasions it remains unclear whether stakeholders change their communication habits with each other, aside from service design activities (e.g. workshop, meetings).

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Atmospherics and the Touristic Experience

Anna S. Mattila and Lisa (Yixing) Gao

Abstract Given the power of physical the Servicescape on customer experiences, it is not surprising that hotels, restaurants, and tourism attractions invest millions of dollars each year to update and renovate their atmospherics. To gain a deeper understanding of the impact of atmospherics on tourist experiences, we propose that four types of stimuli (visual, aural, olfactory and tactile) jointly influence consumers' emotional reactions to the physical environment, thus influencing their cognitive evaluations and behavioral responses.

Keywords Servicescape • Atmospherics • Visual aural • Olfactory • Tactile

1   Introduction

> This hotel with its mix of fine furnishings, art and staff that is so caring will knock your socks off. The rooms are very modern with privacy glass, lovely sheets and a bathroom that you'll want to take home with you.
>   TripAdvisor Review
>   (posted on 6/28/15)

Consumers often use tangible cues to assess the service before purchase and to evaluate their satisfaction with the experience after consumption. As the above review shows, physical evidence or atmospherics is particularly important for the tourism sector as services such as hotels, theme parks and restaurants are experiential services (Zeithaml et al. 2006). Philip Kotler coined the term "Atmospherics" in 1973 and argued that consumers make their purchase decisions not merely responding to tangible products or services, but to the total package including the place where the product/service is bought or consumed. The conscious design of a place involves aesthetics and atmospherics that produce specific emotional effects that further enhance consumers' buying intentions (Kotler 1973). In the services marketing literature, the term 'Servicescape' (Bitner 1992) is widely used in reference to the physical environment. Given the simultaneous production and

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consumption of services and their intangible nature, services are often delivered within the firm's physical facility. The surrounding environment provides tangible cues of service quality, thus strongly influencing consumer perceptions and satisfaction of the consumption experience (Bitner 1992).

In sum, atmospherics or the servicescape have a tremendous impact on the flow of the tourism experience, the meaning tourists attach to the experience, their emotional bonding with the service provider and their social interactions with other customers. Given the power of physical cues on customer experiences, it is not surprising that hotels, restaurants, and tourism attractions invest millions of dollars each year to update and renovate their atmospherics (Bonn et al. 2007; Wall and Berry 2007). This chapter is organized as followed. We first briefly outlines the atmospherics literature covering both the marketing and hospitality/tourism literature and then propose a conceptual framework of the role of atmospherics in influencing tourist experiences. The chapter concludes with some suggestions for future research.

2 Atmospherics/Servicescape in the Marketing Literature

There is ample evidence in consumer behavior and sensory marketing research to demonstrate the impact of atmospherics on consumer evaluations and behavioral intentions (Krishna 2012). The vast majority of past studies have investigated the effects of specific ambient factors such as lighting, color, décor, temperature, or sound (e.g. Baker and Cameron 1996; Wall and Berry 2007). According to the Mehrabian and Russell's (1974) atmospherics model (M-R Model), which is based on Stimulus–Organism–Response paradigm (S-O-R paradigm), consumers' emotional responses mediate the relationship between environmental stimuli and behavioral intentions (Jang and Namkung 2009). Consumers tend to be more satisfied with the service encounter and service quality if they are happy in the physical environment (Ezeh and Harris 2007; Hutton and Richardson 1995; Liu and Jang 2009; Reimer and Kuehn 2005). In addition, there is some evidence to suggest that environmental cues influence consumers' cognitive processes as well (i.e. perceived value and quality evaluations) (Bitner 1992; Liu and Jang 2009). However, most of the servicescape research (i.e. Chebat and Michon 2003) follows the emotion–cognition theory (Zajonc and Markus 1984) in that emotions can take place without antecedent cognitive processes (Chebat and Michon 2003).

Turley and Milliman (2000) divide the complex atmospheric cues into five categories: the exterior of the store, the general interior, the layout and design variables, the point-of-purchase and decoration variables, and human variables. For simplicity, our model excludes the social factor (i.e., customer-to-customer and customer-to-service provider interactions).

3 Atmospherics/Servicescape in the Tourism/Hospitality Industry

In the tourism and hospitality industry, consumers typically interact with the servicescape prior to experiencing the service exchange (Bonn et al. 2007; Lin 2004). In other words, they are exposed to pictures and virtual tours of the "service factory". Therefore, the role of the atmospheric elements in influencing tourist behaviors and company image is particularly important (Booms and Bitner 1982; Bonn et al. 2007; Han and Ryu 2009; Lin 2004). For instance, dining atmospherics strongly influence customers' emotional responses and value perceptions, which in turn have an impact on their future behavioral intentions (Ha and Jang 2010; Liu and Jang 2009). Ryu and Jang (2008) created a dining-specific atmospheric scale DINESCAPE to evaluate the facility aesthetics, ambience, lighting, service product, layout, and social factors of a restaurant, which guided the design of restaurant servicescapes. Similarly, the hotel's physical environment is among the key attributes considered in the booking decision (Countryman and Jang 2006; Dubé and Renaghan 2000).

Carefully designed atmospherics can create a distinctive image (Aubert-Gamet 1997; Schlosser 1998). One only needs to picture McDonald's iconic golden arches to understand the link between physical cues and brand image. Moreover, store atmosphere become part of the brand personality (Schlosser 1998; Ward et al. 1992). For instance, the Joie de Vivre hotel chains' Phoenix Hotel has a unique brand personality best described as funky, irreverent, adventurous, cool, and young-at-heart (Viget.com).

Our conceptual model for the effects of atmospherics on tourism experiences is shown in Fig. 1. We propose that four types of stimuli jointly influence consumers' emotional reactions to the physical environment, thus influencing their cognitive evaluations and behavioral responses. In the next section, we will discuss Kotler's (1973) four sensory channels.

4 Visual Stimuli

The Servicescape is composed of many parts, but the visual ambient décor and artifacts might be the most significant predictors of consumer perceptions (Han and Ryu 2009). Color and lighting are highly dominant visual cues in any service environment. These visual cues have a profound impact on people's mood states (Spence et al. 2014).

Previous research suggests that color influences feelings of pleasure more strongly than arousal or dominance (Bellizzi et al. 1983; Bellizzi and Hite 1992; Lin 2004). For example, color is the most significant environmental cue influencing consumer impressions of a hotel lobby (Countryman and Jang 2006). In a retail setting, consumers tend to be more attracted to warm-colored backgrounds such as
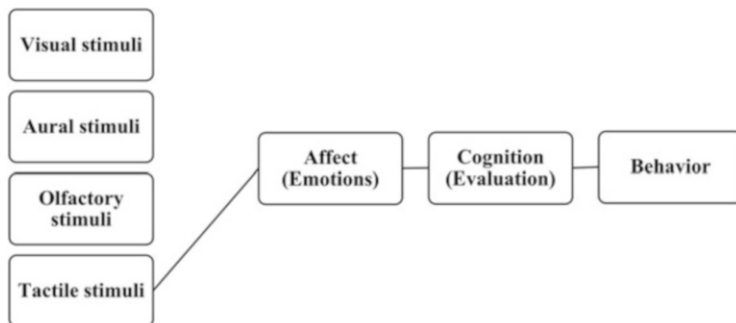
Fig. 1 The effects of atmospheric stimuli on consumer behaviors in tourism and hospitality

red and yellow. However, such warm-color environments are generally perceived as unpleasant. In contrast, a cool color (e.g., blue) induces feelings of confidence, thus easing the purchase of expensive products (Bellizzi et al. 1983; Bellizzi and Hite 1992). Some hotels clearly use color schemes in their hotels as a differentiator. For example, Color Design hotel uses pure and geometrical lines on a white background and each floor has its unique color scheme.

In addition to color, the type of lighting in an environment directly influences consumer perceptions (Baker et al. 2002; Lin 2004). For example, a restaurant with white table clothes and subdued lighting convey an image of full service with relatively high prices, whereas a restaurant with plastic furnishings and bright lightning convey an image of counter service (Bitner 1992). To take advantage of lighting effects, Fairmount Hotels commissioned a special lighting designer when restoring their flagship property in London. The goal of the project was to provide a classical enhancement of the architecture for the exterior of the building while creating a warm, luxurious and intimate feel within Savoy's main public areas.

Moreover, lighting levels influence consumers' consumption patterns. Areni and Kim (1993) and Summers and Hebert (2001) found that a brighter lighting in a store induced shoppers to examine and handle more merchandise, though sales volume and time spent in the store were unaffected. In the context of hospitality, prior research shows that increasing/decreasing the brightness of ambient illumination can influence the amount of coffee consumed. People who like strong coffee may drink more when lighting is bright versus people who prefer weaker forms of java may consume more when lighting is dim (Gal et al. 2007). Starbucks uses bright lighting to bring Starbucks' merchandise to customers' attention, encouraging an impulse buy.

Finally, the well-established Delboeuf illusion (1865) (see Fig. 2) is widely employed in the restaurant industry (Van Ittersum and Wansink 2012). By using different sizes and colors of dinnerware, restaurant managers can manipulate consumers' perceptual biases regarding portion sizes. Figure 2 shows identical portion sizes displayed on two types of plates. Consumers tend to think that the portion size is bigger on the right hand plate due to the smaller edges. Similar perceptual biases have been found with color manipulations (i.e. white plate with

Fig. 2 Delboeuf illusion
(Delboeuf 1865)
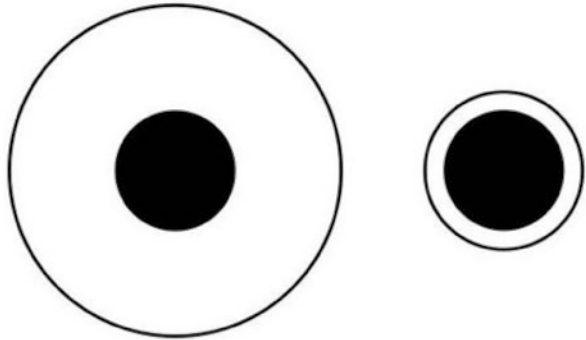
white vs. black tablecloth and white plate with cream white sauce vs. red tomato sauce).

In sum, understanding the effects of visual atmospherics (i.e. color, lighting, and shape) may help hospitality and tourism managers to manage consumers' emotional and cognitive reactions to atmospheric cues.

5 Aural Stimuli

Some environmental attributes such as background music are more readily controllable by managers than others (Milliman 1986). Several studies report positive effects of aural cues on consumer satisfaction and behaviors (Sweeney and Wyber 2002; Yalch and Spangenberg 1990). Specifically, music has a significant impact on consumer moods, time and money spent in the environment and purchase intention (Alpert and Alpert 1990; Areni and Kim 1993; Herrington 1996; Yalch and Spangenberg 2000). For example, classical music induces higher spending levels (Areni and Kim 1993) and background music influences consumers' perceptions of service quality and merchandise quality as well as their feelings of arousal and pleasure (Sweeney and Wyber 2002). Background music also influences consumers' desire to affiliate in buyer-seller interactions (Dubé et al. 1995; Hul et al. 1997). For example, a slow-tempo music makes restaurant patrons stay longer, and to consume more alcoholic beverages (Milliman 1986).

By interviewing 90 hotel, restaurant, and pub managers, Areni (2003) suggests that 'heavy metal music' encourages anti-social behaviors, while 'classic music' placates unruly or aggressive customers. Music tempo and music preferences also tend to influence the amount of time and money spent in a restaurant (Caldwell and Hibbert 2002).

Many restaurants, play different types of music depending on the time of the day. Fun, light tunes might be most suitable for lunchtime to allow for lively conversations while happy hours call for more hip and fun tunes. Given that many attributes of music (i.e. volume level, tempo, musical mode and type) influence consumer

reactions to background music, tourism and hospitality managers must carefully match the music with their customer demographics and firm image.

6 Olfactory Stimuli

An appealing scent is effective in eliciting approach behaviors (Bone and Ellen 1999; Knasko 1995). Bakeries, coffee shops, and popcorn carts have long relied on the scent of their products to draw in the crowds (Spangenberg et al. 1996). However, different from scents that emanate from a specific product, ambient scent is present in the environment and it could affect consumers' holistic perceptions of a store and further affect their behaviors (Gulas and Bloch 1995; Mitchell et al. 1995). Previous research demonstrate that scents influence consumers' emotions (Hirsch 1995; Bone and Ellen 1999), time spent in a store (Knasko 1989), purchase likelihood (Hirsch and Gay 1991), product evaluations and satisfaction (Bone and Ellen 1999; Chebat and Michon 2003; Spangenberg et al. 1996; Teller and Dennis 2012), and brand memory (Morrin and Ratneshwar 2003).

Ambient scents are widely employed in the hospitality industry. By scenting the slot-machine areas in a Las Vegas casino, Hirsch (1995) found that certain odors significantly increased the money gambled. A lavender scent can make a restaurant patron stay longer and spend money compared to a lemon sent (Guéguen and Petr 2006). Given the power of scents, many hotels, restaurants and airlines use signature fragrances as a differentiating strategy (Zemke and Shoemaker 2007). For example, Westin Hotels & Resorts' White Tea fragrance, Delta Airlines' "Calm", United Airlines' "Landing" aroma, and Pizza Hut's "eau de pizza" perfume are examples of such a strategy. In sum, the hospitality and tourism industry is capitalizing on signature scents to cue memories and to conjure up certain emotions, thus turning sensory experiences into a branding opportunity.

7 Tactile Stimuli

Tactile atmospherics are consumers' sensory-discriminative qualities of softness, smoothness, and temperature (Kotler 1973). Or, it could be more easily understood as the sense of 'touch' (Spence et al. 2014). Tactile is well utilized in retailing. Underhill (2009) argues that people live in a tactile-deprived society and almost all unplanned buying is a result of touching, hearing, smelling, or tasting of something in a store. In countries like Morocco, India and Ethiopia, people eat with their hands, not just with utensils. Southeast Asian cooks pound ingredients by hand with a mortar and grinder to make chili pastes inherent in their cuisine. The importance of touch is also evident in the theme park context. For example, the railings in the ride queues in Disney Parks each have a different touch depending on the attraction. Luxury hotels also emphasize the feeling of touch when selecting their towels and

linen. Plush, extra soft bath towels make a mere shower more like a spa experience. Finally, iPads and other tablets enable the customer to control the entire process from menu selection to payment without having to deal with servers. All that is needed is a touch of a button. Yet, there is a danger of "tactile contamination" in many hospitality and tourism contexts. For example, many hotel chains have replaced glassware in the guest rooms with plastic cups as the public tends to believe glasses have merely been wiped to look clean and could easily have been used by previous guests.

8 Closing Remarks

Visual, aural, olfactory and tactile elements of atmospherics can not only direct consumers' affect but can also in turn trigger specific associations in consumers that facilitate their behaviors such as purchase intention and sales (Spence et al. 2014). The color, sounds, scents, and texture associated with tourism and hospitality brands are likely to evoke consumers' emotional reactions and increase their identification with the brand. Innovative tourism and hospitality managers combine sensory elements from all the five senses to create memorable experiences. Restaurants around the globe are now offering multisensory meals that focus on other senses than taste to alter the diner's food perceptions. For example, at Ultraviolet, one of the most famous multisensory restaurants in Shanghai, the goal is to unite food with multi-sensorial technologies to create a unique dining experience. Or as another example of multisensory experiences, spas typically offer a variety of holistic relaxation therapies that incorporate timeless techniques to stimulate and soothe each sense: touch, sound, sight, taste and smell.

With the growing importance of the Internet, virtual atmospherics cues have been shown to influence consumer attitudes, involvement, satisfaction, and purchase intentions (McKinney 2004; Richard 2005; Wu et al. 2008). Background color, color schemes, background music, fonts and even scents are some examples of virtual atmospherics used by retailers on their websites. However, research on online atmospheric cues is scant in the tourism and hospitality research (Bai et al. 2008). Hotel and travel websites should take advantage of visual and audio capabilities of modern computing technology to better meet consumers' needs (Law and Hsu 2005).

Another fruitful avenue for future research is to examine the role of culture in the context of environmental cues. Previous research shows culture has an important influence on customers' responses to store atmospherics (Davis et al. 2008; Aslam 2006; Bellizzi and Hite 1992; Chebat and Morrin 2007). For example, people in China wear red during weddings and stay away from white is used for funerals (Bellizzi and Hite 1992). Tourism and hospitality managers should be cognizant of the differences in color perceptions, sounds, and scents across cultures.

In conclusion, given the power of physical evidence in influencing tourism experiences, it is critical for hospitality and tourism organizations to strategically

manage the servicescape. The physical environment can be used a base for branding, as a facilitator for social interactions and as a differentior from competitors. To be successful, the design of the atmospheric cues needs to be part of the company's marketing plan. We hope that this chapter serves an impetus for future research on atmospherics in the context of tourism experiences.

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Designing Tourism Services in an Era of Information Overload

Vince Magnini

Abstract Modern technologies enable consumers to receive more information than ever before. The access to (and even overload of) information has changed the ways by which desirable customer service ratings are achieved at tourism destinations. This chapter details how information access has diminished the role of tangible or physical aspects of a tourism experience in the formulations of visitors' customer service evaluations. Second, this chapter discusses how modern information overload has increased the importance of inserting script deviations in the tourist's experience in order to achieve top-rate customer service evaluations.

Keywords Information overload • Service evaluations • Satisfaction

1 Introduction

The roles of sociology and human encounters have long been studied areas in the field of tourism (Cohen 1972). Dating back more than a century, the research and writings of George Herbert Mead and Herbert Blumer of the Chicago School of Thought describe how mind and self are represented in social processes and shape human interaction (Prus 1996). As an extension of the Chicago School of Thought, the later Iowa School of Symbolic Interaction extended the line of reasoning and enquiry to study "how two people join their separate lines of behavior together to construct social interaction" (Hintz and Miller 1995, p. 355). In essence, it has long been known that social interactions play a key role in many tourist situations (Noe et al. 2010).

The purpose of this chapter, however, is to illustrate that modern information overload has slightly altered the tourism provider's role in the social exchange. While Pine and Gilmore (1998) introduced the notion that service providers are 'entertainers' creating experiences, this chapter extends this line of logic and contends that tourism service providers must continuously surprise visitors using

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various tactics. The chapter highlights the central role of script deviations, both positive and negative, in shaping a visitor's experience.

2   Information Overload and the Importance of Positive Script Deviations

Consider the following scenario:

> As tourist A moves through the historic city center she receives a text message from her daughter; when she finishes reading the text, she also checks the weather radar on her mobile device; as she is glancing at her mobile device she notices the latest BBC news headlines. . .
>
> Perhaps tourist B is one of the not-so-common people who possesses the discipline to power off her mobile device during the tour of the historic city center, even still, she is flooded with information. Maybe she is thinking about a newspaper article that she had read earlier in the day because one newspaper in a major city contains more news than some would have received in his/her entire lifespan in the 17th century (Bawden 2001). Maybe she is reading the backs of the t-shirts of the others in her tour group because advances in printing technologies in the past two decades has enabled marketing messages to be printed on more items at lower costs (Magnini 2015).

The impetus for providing the above scenario is to briefly illustrate that modern consumers—tourists are no exception—are flooded with information—much more information than their brains can handle. This information overload causes them stress. For example, in one study, two-thirds of respondents attribute information overload to causing problems in their personal relationships, and one-third feel that the overload has harmed their physical health (Bawden and Robinson 2009). Consumers consequently device psychological defense mechanisms to respond to this modern information overload.

One defense mechanism is called satisficing in which consumers take in just enough information to meet a need (Bawden and Robinson 2009). Theoretical anchoring for satisficing can be found in script theory. Script theory posits that individuals rely upon mental scripts of what they expect and only pay full attention when there is a deviation from that script (Abelson 1981; Gioia and Manz 1985). Such script deviations are referred to as surprises by most everyone outside the academic arena. In concert with this reasoning, tourists consuming an experience, both consciously and subconsciously, tune-out most information and only pay full attention to the consumption experience when a script deviation [A.K.A. surprise] occurs.

The findings of a 2011 study by Crotts and Magnini that analyzed travel blog postings aid in illustrating the power of script deviations. The study found something quite interesting: Nearly 100 % of consumers who typed the phrase 'delightful surprise,' 'excellent surprise,' 'pleasant surprise,' or 'positive surprise' in their blog postings indicated in the quantitative portion of the blog site that they would be willing to recommend the given hotel and would also be willing to stay there again.

In the same study, blog postings that used the word 'delightful,' 'excellent,' 'pleasant,' or 'positive,' but did not use the word 'surprise' were also analyzed. Of these consumers, only 3 out of 4 would affirmatively recommend or stay again at the described hotel. Not bad, but from a financial perspective, if 1 out of 4 visitors to a hotel or tourism destination would not recommend it to a friend—could the establishment stay in business?

Next in the same study, blogs that used the phrase 'very satisfied,' but did not mention a surprise were analyzed: in these, 60 % would commit to recommending or repurchasing. This finding is interesting as well: if someone states that s/he is 'very satisfied' wouldn't the retention rate be greater than 60? Not according to these results.

Finally in the same study, it was found that when a consumer used the word 'satisfied' without 'surprise,' there was only a 1/3 likelihood that s/he would be a loyal advocate of the hotel. Again, the person writes in a blog posting that s/he is 'satisfied,' but, despite this 'satisfaction,' two-thirds will not return. The strong correlation between surprise and loyalty/positive word-of-mouth and the weaker than commonly believed link between satisfaction and loyalty/positive word-of-mouth demonstrates the formidable influence that positive script deviations can have on visitors.

3   What Items in A Destination's Design Do and Do Not Prompt Positive Script Deviations

Tangible features of a destination rarely prompt positive script deviations (Magnini et al. 2011). Physical [tangible] features of a destination are important for many reasons, but they rarely trigger positive script deviations because they can be viewed from every angle in advance of a tourist's visit on sites such as Google Image. Any tourism destination around the world can be selected and viewed on Google Image and can also be viewed through consumer-posted YouTube videos. Even most tourism sites that do not permit the use of photography or video equipment can be viewed via the Internet. Therefore, the physical features of a destination typically do not surprise visitors. Consider, for example, a hotel's infinity swimming pool: back in the late 1990s and early 2000s when hotel websites were little more than virtual pamphlets, a high-end swimming pool might surprise a guest. Now, however, advances in website design enable the pool to be clearly viewed [often from every angle] before arrival at the hotel.

A 2011 travel blog analysis study conducted by Magnini, Crotts, and Zehrer confirms the notion that tangibles rarely surprise visitors. Magnini et al. (2011) found that the leading driver of visitor surprise in hospitality and tourism settings is facets of customer service. More specifically, the leading surprises are the small things that happen during face-to-face interactions between the provider and visitor:

telling a child a joke; giving a family an impromptu behind-the-scenes tour. In other words, facets of friendliness unexpected by visitors arouse the emotion of surprise.

4 Creating a Surprise Culture in the Human Component of a Destination's Design

Because someone can usually only be surprised by a given tactic one time (Rust and Oliver 2000) and because surprise ideas can be copied by competitors [cannot be patented], it is essential that a steady stream of surprise ideas be generated at a tourism destination. The following serve as guidelines for creating a surprise culture among frontline staff at a tourism attraction.

4.1 Guideline #1: Recruit Creative Applicants Who Will Possess the Ability to Surprise Visitors

Creative individuals will be attracted to creative job postings. Which of the following postings [both recruiting for the same position] would attract more creative workers? Job Posting #1) Job duties entail giving out paddle boards and working the cash register; or Job Posting #2) Job duties entail meeting and conversing with friendly visitors from around the globe while handling the rental of paddle boarding equipment in the #1 rated coastal beach town in the USA.

The impetus of providing the above example is to accent the logic that fostering a creative environment in which frontline employees will surprise visitors begins with attracting creative job applicants. Once an applicant pool is assembled, particular selection procedures can be utilized to further screen for creativity. Examples of such selection procedures are detailed in Guideline #2.

4.2 Guideline #2: Select Creative Applicants Who Will Possess the Ability to Surprise Visitors

Research indicates that there are a number of ways by which to gauge an applicant's creativity during a job interview. As detailed in Gladwell's (2008) bestselling book, Outliers, a divergence test is a simple assessment of creativity that is free to use, is simple, and can be adopted for use in any tourism-business setting. A divergence test gives applicants the names of two random objects [e.g. a brick and a blanket] and asks applicants to list all of the possible uses for those objects.

Scoring of these tasks is often done using three scales:

1. Fluency—how many meaningful ideas are generated in response to the stimuli?

2. Originality—how rare are the given responses?
3. Elaboration—how much detail is contained in the responses?

These three evaluative criteria relate directly to surprise creativity. The goal is to hire individuals who can derive numerous surprise ideas [fluency]; generate ideas that are rare in a given industry [originality]; and, ideas that can be detailed enough to successfully implement in a dynamic operation [elaboration].

In addition to divergence tests, all tourism businesses, regardless of size, can insert a couple of verbal questions into their interviewing that assess creativity. It is well documented that particular behavioral interviewing questions can help elicit candidates' creative ability; the following are some examples from Victoria Hoevemeyer's (2005) book titled High Impact Interview Questions:

1. A lot of times, we use tried-and-true solutions to solve problems, and it works. Tell me about a time when the tried-and-true solution did not work. Were you able to solve the problem? How?
2. Tell me about a situation in which you have had to come up with several new ideas in a hurry. Were they accepted? Were they successful?
3. Tell me about a time when you created a new process or program that was considered risky.

4.3 Guideline #3: Incorporate Surprise Stories in Daily Shift Meetings

Many hospitality and tourism operations mandate that their employees have brief daily shift meetings to discuss the current day's events, key training points, and any additional materials that need to be communicated our discussed. In order to help foster a culture of visitor surprise, during each of these shift meetings, one employee should be randomly selected and asked to tell the group a story about something that s/her did in the past 48 h to surprise a visitor. Incorporating this practice into the shift meetings will help motivate employees to find and implement creative techniques for surprising visitors (Magnini 2015).

4.4 Guideline #4: Include Surprise as a Business Value

An internet search will reveal that many companies have a list of core values that they claim to embrace and exemplify. Some companies, such as Ritz-Carlton Hotels, that strive to engrain their core values into their everyday corporate culture will discuss the values during daily shift meetings (Michelli 2008). More specifically, each day a different core value will be discussed during the shift meeting until all values have been covered, then the rotation will begin again. The fundamental premise of this practice is the belief that adults learn through repetition. Thus, it is

recommended that all tourism businesses derive a list of core values to be discussed during shift meetings, and one of these core values should be 'visitor surprise.' Including 'visitor surprise' as a core value, and routinely reminding team members that it is a core value, will reinforce its importance in visitor-provider interactions.

4.5   Guideline #5: Host Surprise Clinics

Hospitality and tourism managers should invite a consultant to their venues to conduct a visitor surprise clinic with associates and managers. Facilitated by the consultant, the clinic would span 2 h and would involve associates and managers collectively brainstorming free/inexpensive ways to surprise visitors. Management's participation in the clinic would signal their commitment to the associates. The consultant could repeat the clinic in the AM and PM to maximize associate and manager participation.

A photo elicitation approach would likely work best for the clinic. Photo elicitation can be defined as a research method that uses a picture(s) to guide interviews/focus sessions and to stimulate discussion during those sessions (Klitzing 2004). Photo elicitation interviews can "mine deeper shafts into a different part of the human consciousness than do word- alone interviews (Harper 2002, p. 13)." Thus, during the 2-h surprise clinic, employees should be shown pictures of areas in which they interact with guests, while looking at the pictures, they can derive ideas for surprising the guests in those areas [there is truth in the adage that a picture is worth 1000 words].

4.6   Guideline #6: Have Surprise Contests Facilitated by Blueprints

Service blueprinting involves making a sketch of a physical servicescape in which both visitors and employees flow. There are three areas in particular that should be sketched: (1) the area where customers can flow; (2) the area where customers cannot go, but can see; and (3) the back-of-the-house restricted to employees. The lines dividing these areas should be labeled line of interaction, line of visibility, and line of internal interaction (Bitner et al. 2008).

While the notion of blueprinting a service area has been present in the academic literature for nearly two decades, it has failed to gain a critical mass in practice (Magnini 2013). A service blueprint is a visual depiction of a service process or a kind of social system model. Depending on the level of detail sketched, it can outline each sub-process (or step) in the service system, linking the various steps in the sequence in which they appear. A service blueprint is essentially a detailed map or flowchart of the service process.

Within the context of visitor surprise, what is recommended is that the tourist attraction owner or manager blueprint the customer flow areas and then hang those blueprints in back-of-the-house areas where employees tend to congregate. A contest should be initiated in which the employees who can derive the best visitor surprise tactic by studying the blueprint are awarded prizes. A different winner can be announced each week. It is prudent to note that the service blueprints can be computer-generated or sketched by hand.

4.7   Guideline #7: Create a Surprise Mirror

A well-documented and bidirectional relationship between employee satisfaction and customer satisfaction is termed the satisfaction mirror (Heskett et al. 1997). Emotional contagion prompts this strong positive correlation between employee and customer satisfaction. Like the satisfaction mirror, a surprise mirror can also exist in a hospitality or tourism venue. According to the surprise mirror, the more management positively surprises employees, the more employees will positively surprise visitors (Magnini 2015). Due to this mirroring effect, management teams should brainstorm ways by which to prompt positive script deviations among their teams. Employee surprise tactics can come in many forms and need not cost much money. A birthday card from the employer may have surprised an employee in the 1990s, but likely would not trigger a positive script deviation after the tactic has been so widely utilized for the past two decades... but... a call from the boss on one's birthday may trigger a surprise.

4.8   Guideline #8: Monitor Travel Blogs

All tourism operators should text mine consumer blog postings to identify what facets of their offerings surprise visitors. Consumer blog narratives are publicly available for analysis and can provide insights about the same customer who refuses to complete satisfaction surveys. Blog text mining can readily identify useful and non-obvious patterns regarding visitors' needs, wants, and behaviors (Ye et al. 2009). Blogs posted by competitors' visitors can also be analyzed to gain insights into how competitors are serving and delighting their visitors (Crotts et al. 2009)—as previously noted, surprise tactics founded upon interpersonal interactions cannot be patented.

4.9 Guideline #9: Implement A 'Novel Idea Rule' for Managers/Supervisors

In his book, **The Little Big Things**, bestselling author Tom Peters suggests that all firms should mandate that each key manager be required to bring a novel idea to the table for consideration at least once per week (Peters 2010). Novel in this context refers to an idea that has never been implemented at a particular venue. Therefore, those operating tourism destinations should constantly scan for and bring novel surprise ideas to the table. A surprise arsenal of tactics should be derived by scanning for ideas and tactics from within and outside of the tourism industry. Success in the experience economy hinges upon this surprise arsenal: Surprise is vital in spawning script deviations to gain visitors' attention, and an arsenal is critical in suggesting that tactics should be stored and used based upon context and situation.

4.10 Guideline #10: Implement a Top-Rate Failure Recovery Program

The significance of this 10th guideline is explained in the next section of this chapter.

5 Negative Script Deviations Are Just as Powerful as Positive Script Deviations

Interestingly, when a tourist is engaged in a consumption experience and something goes wrong [A.K.A a failure] then s/he is paying full attention because the failure services as a script deviation—not a positive one, but rather a negative one. As previously referenced, script theory contends that knowledge and expectations regarding situations are stored in one's mind as a coherent description of events expected to occur (Bateson 2002a, p. 110). According to script theory, information and expectations about the impending transaction is stored in the consumer's brain as a sequence of actions/events that will transpire in a particular order, and this knowledge is called a script (Bateson 2002b; Gan 1991; Smith and Houston 1983, 1985). Thus, when a failure occurs there is heightened consumer awareness due to the deviation from the anticipated transactional script (Magnini et al. 2007).

When negative script deviations (A.K.A failures) surface, the same heightened level of tourist customer attention can occur as when s/he experiences a positive script deviation. In fact, it is script theory that serves as a theoretical anchoring for the recovery paradox (Magnini et al. 2007). The term recovery paradox is believed to be first used by McCollough and Bharadwaj (1992) to refer to situations in which

a customer's post-failure satisfaction exceeds pre-failure satisfaction. A number of conditions need to be in place for a recovery paradox to occur. For example, the recovery demonstrated by the service provider must truly be excellent (McCollough and Bharadwaj 1992); the failure cannot be overly severe (McCollough et al. 2000); and, it cannot be the customer's second failure with the firm (Magnini et al. 2007; Maxham and Netemeyer 2002). In summary, however, under the appropriate conditions, recovery from a negative script deviation can heighten a tourist's satisfaction because the negative script deviation commands the tourist's full attention.

A recovery paradox is particularly prone to transpire when a hospitality or tourism provider offers comfort or relief for a failure not caused by the provider. For instance, the occurrence of a severe rainstorm is evidently outside the control of provider, but still serves as a negative script deviation at an outdoor tourism attraction. Thus, gestures of comfort such as alternate indoor activity programming, free umbrellas, or free rain ponchos communicate care to the visitor when s/he is paying full attention. Again, the key lies in capitalizing on both positive and negative script deviations because both garner the consumers' full attention—which is difficult to come by in this age of information overload.

6   Concluding Remarks

One study estimates that more information was created in the most recent 3–4 decades than in the previous 5000 years combined (Bawden and Robinson 2009). The moral is that all consumers—tourists included—are overloaded with information. Sometimes design changes are necessary. For example, largely due to modern information overload, television sitcoms are designed differently now than in the past (Magnini 2015). For those of us old enough to remember, a sitcom episode in the 1970s, and even in the 1980s, had a beginning, a middle, and an end: an entire story was told during the episode. Now, most TV sitcoms are designed with episodes that are composed of story lines that weave and intertwine with no beginning or end within the episode. This redesign is driven by the fact that television directors know that consumer's brains have been trained to only pay fragmented attention to a stimulus—it is rarely possible to win a viewer's full attention. As such, the design of tourism services should also be altered to accommodate for the fragmented attention and satisficing that tourists knowingly and unknowingly partake in during their experiences. First, frontline tourism providers should be trained to prompt a constant stream of positive script deviations. Second, tourism providers should realize that when a negative script deviation occurs, then the tourist is pay full attention and they should capitalize on the opportunity to impress. Particularly useful is offering relief or comfort in response to failures that were out of control of the provider.

Research tells us that emotions play a key role in tourism consumption experiences (Bigne and Andreu 2004; Kim et al. 2010; Kim and Fesenmaier 2015).

Surprise, however, is one of the strongest of human emotions. To test the power of surprise, Berns et al. connected subjects to MRI machines and squirted a pattern of drinks into their mouths: water–juice–water–juice. When the pattern was broken with water–water or juice–juice, their brains 'lit up like Christmas trees' on the MRI machines. Due to the flurry of brain activity caused by a surprise (Meyer 1997) it is actually an accurate statement when someone states that s/he feels surprised (Reisenzein 2000).

As demonstrated by Kim and Fesenmaier (2015), emerging research is advancing methods for measuring and analyzing tourists' emotions in real time through the use of electrodermal technologies. Because surprise is one of the strongest of human emotions (Meyer 1997; Plutchik 1980; Reisenzein 2000), applying these recent research method advances specifically to the context of surprise could prove fruitful for both academics and practitioners. There is still relatively little known about the role of visitor surprise in the tourism sector. Questions ripe for inquiry include:

- How to surprise a repeat visitor?
- How prevent surprises from morphing into expected amenities in future visits?
- How have the roles of blogs, Google Image, and YouTube changed how visitors can be surprised?
- How can tourism venues be designed/redesigned to incorporate more opportunities to surprise?
- Can/should tourism venues be designed so that surprise tactics that are not human-dependent be rotated into the experiences?

Perhaps the role of this book chapter is to stimulate thought and provide more questions than answers. The effects of positive and negative script deviations in this age of information overload are germane to many audiences.

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Technology and Behavioral Design in Tourism

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Abstract As information and communication technologies (ICTs) become an integral part of the tourism environments, tourism technologies are designed to generate impacts on tourists' behavior and transform tourism experiences. Drawing from behaviorism, philosophy of computing, design science and persuasive technology, this chapter provides a theoretical reflection for technology and tourism design by theorizing behavioral design and technological mediation in tourism experiences. It also provides guiding principles to bridge the theories into design practices in for tourism destinations to solve design problems by facilitating behavior change through ICTs. The ultimate goal is for tourism destinations to offer meaningful and memorable tourism experiences for tourists that are advantageous for all stakeholders.

Keywords Information technology • Persuasion • Memorable experience

1 Introduction

In an increasingly competitive travel and tourism industry, destinations around the globe are continuously challenged to develop and manage their offerings in order to deliver quality tourism experiences for their visitors. The approaches and practices of design thinking (Brown 2008, 2009; Dorst 2011; Lockwood 2009; Martin 2009; Rowe 1987) and design doing (Fraser 2006) are considered powerful to achieve and maintain competitive advantages for tourism destinations (Tussyadiah 2014a; Zehrer 2009). Design thinking is conceptualized as "applying a designer's sensibility and methods to problem solving" (Lockwood 2009, p. xi), "a methodology that imbues a full spectrum of innovation activities with a human-centered design ethos" (Brown 2008, p. 1). This entails an integrative, human-centered process that involves empathic research approaches (i.e., a thorough understanding of end users' needs through direct observation and real world experiments), engaging partners in collaboration (i.e., co-design, co-creation), fast learning, and rapid prototyping that

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result in product, service, and/or experience innovation (Brown 2008; Liedtka et al. 2013; Lockwood 2009). Design thinking is considered an exciting new paradigm for problem solving for organizations facing increasingly complex and open-ended challenges, often referred to as wicked problems (e.g., Buchanan 1992; Cross and Roozenburg 1992). Therefore, design thinking helps organizations to be "more innovative, better differentiate their brands, and bring their products and services to market faster" (Brown and Wyatt 2010). Fraser (2006) suggests the importance of turning design thinking into design doing, emphasizing the actions that bridge design approaches with the process of innovation. In tourism management, design thinking (and design doing) is increasingly applied in areas of new product development (i.e., innovation) and management of operations (e.g., service design) (Hjalager 2010; Zehrer 2009). For example, Hallenga-Brink and Brezet (2005) utilize sustainable innovation design diamond, a brainstorming tool to facilitate joint idea generation for product development among small tourism enterprises. Similarly, Stickdorn and Zehrer (2009) illustrate how service design methods can be applied to improve services in tourism destinations.

As a design context, tourism offers distinct characteristics of wicked problems for which design methods could provide effective solutions. First of all, human experiences are at the core of tourism offerings. Since tourism destination is an amalgam of a wide variety of products and services (Cooper 2005), successful tourism innovation and management requires an orchestration of the various elements and coordination of different stakeholders in order to provide seamless experiences for tourists (Ritchie and Crouch 2003; Zach et al. 2008). Furthermore, there is a great extent of subjectivity in tourism experiences, in that they depend on the ways tourists interact with tourism attractions/products/services (i.e., involving sensory, cognition, affect, etc.) and make sense of (derive meanings from) these interactions. Therefore, developing new (or improving existing) tourism products and services necessitates a full consideration of how tourists would experience these products and services in various motivational and situational contexts. To that end, Tussyadiah (2014a) suggests the relevance of experience design approach in tourism and proposes three approaches to tourism experience design: human-centered design (i.e., designing based on an extensive attention to the needs, wants, expectations and limitations of end users), iterative designing process (i.e., designing as a cyclical process that includes several iterations of prototyping, testing, analyzing, and refining the designed systems), and holistic experience concept (i.e., conceptualizing tourism experience as a complex interaction between design attributes and contextual details). Consistent with previous studies on design thinking (e.g., Brown 2008; Liedtka et al. 2013; Lockwood 2009), these approaches imply four fundamentals for tourism experience design: integrative design research, naturalistic inquiry (i.e., real world experiments and observation), participatory design (i.e., engaging all stakeholders), and multidisciplinarity (Tussyadiah 2014a).

In an information age marked with advances in ICTs and the transformation of information-based economy, it is ever more difficult to separate tourism experiences (and, consequently, the designing of tourism experiences) from ICTs. ICTs become an integral part of tourism experiences as tourists use technological devices

as the primary tools to plan their trip, experience tourism destinations, and reflect on their travels (e.g., Tussyadiah and Fesenmaier 2009; Wang et al. 2012, 2014). Similarly, tourism destinations progressively make use of advanced technological systems to provide tourists with necessary services at every stage of tourism experience (i.e., pre-trip, experiential, and post-trip) as well as manage an efficient coordination among various tourism stakeholders. Therefore, it is crucial to integrate ICTs in the application of tourism experience design.

In essence, the roles of ICTs in tourism experience design can be differentiated into: (1) ICTs as tools or methods of designing, (2) ICTs as artifacts or end products of designing, and (3) ICTs as triggers for desired tourist behavior. As design tools, technological systems such as interactive online platforms for participatory activities, templates for storyboarding and blueprinting, devices and software to gather and assess users' experiences, etc., are used to facilitate design research and designing activities. Hotel reservation systems and airport check-in kiosks as well as consumer devices are considered design artifacts—outcomes of designing process. In this case, designing ICTs is about building good, usable systems, devices that work well and people like to use (Wendel 2014). Consequently, it concerns with designing for user experience with (using) technology. Finally, anchored in human-centeredness, technological systems and devices are designed specifically to provide stimuli that prompt desired behavioral outcomes of their users (i.e., behavioral design), beyond user experience. An example is activity-tracking devices designed to promote active, healthy lifestyle. With the transformation of tourist behavior as the ultimate target, designing ICTs for tourism experience is about building systems that are both good and behaviorally effective (Fogg 2009; Wendel 2014).

This chapter focuses on the third role of ICTs in tourism experience design by emphasizing the foundation and approaches to designing technological systems with a consideration of transforming tourist behavior, including design intervention practices (e.g., Tromp et al. 2011). As the core area of human-computer interaction (HCI), Verbeek (2015) argues that because technology-in-use helps shape the interactions between humans and their environment, designing interactions is about designing relations between humans and the world (Verbeek 2015). This signifies the phenomenological concept of technological mediation in human experiences (Ihde 1990; Verbeek 2007, 2008, 2015) and its application in tourism context (Tussyadiah and Fesenmaier 2009; Wang et al. 2012). Additionally, behavioral design is often associated with providing technological solutions to persistent behavioral problems (Datta and Mullainathan 2012; Wendel 2014), such as lack of self-control, lack of attention (e.g., mindlessness), and/or lack of cognitive ability. In these cases, a better understanding on why people behave in a certain way or make certain decisions (i.e., theories in behaviorism) helps guide behavioral manipulation process from defining and diagnosing the behavioral problems to designing, testing, and refining solutions for these problems. Purposively, this chapter provides approaches to behavioral design facilitated by ICTs based on Tussyadiah's (2014a) fundamentals to tourism experience design (i.e., design doing) with key insights from HCI, philosophy of computing, and psychology.

2   Theorizing Behavioral Design in Tourism

Behavioral design is an active attempt to deliberately and effectively affect human behavior. Research in psychology, behavioral economics, and persuasive technology provides an explanation on how the environment plays a role in influencing a wide range of human behaviors and provides contexts in which these behaviors occur (e.g., Maslow and Mintz 1956). Beckman and Barry (2007) suggest that contexts (including immediate physical and situational surroundings, culture, history, etc.) provide a basis for the meaning and significance attached to roles and behavior. In essence, Thompson (1986) argues that natural behavioral design is associated with two arrays and a correlation: an array of behaviors, an array of circumstances, and a correlation between the two arrays such that a certain behavior is deployed in a particular circumstance. Design is, thus, about matching a form of behavior to the circumstance in which the target behavior is typically employed.

Indeed, design science applies principles of behaviorism that attach human behavior with the environment, such as operant conditioning (Skinner 1938, 1953) and social learning theory (Bandura 1977). The basic tenet of operant conditioning states that behavior that is reinforced (rewarded) tends to be strengthened or repeated, while behavior that is not reinforced (ignored or punished) tends to be weakened or extinguished. It contributes to behavior shaping and modification by providing the guiding principles to design the conditions for behavior reinforcement. For example, in order to shape extremely complex behavior, Skinner (1953) suggests moving the conditions required to receive rewards a step closer to the target behavior (i.e., successive approximation). Social learning theory (Bandura 1977), on the other hand, states that behavior is learned from the environment through observation of the behavior of others (i.e., models). Human beings are considered active information processors who think about the relationship between their behavior and its consequences. Designing with behaviorism in mind, it is suggested that treatments (i.e., rewards or punishments) delivered based on actual performance are proving most powerful in producing behavioral change (Bandura 1977; Bandura et al. 1977).

In the early practices of tourism design (i.e., originated from the field of regional planning, urban design, and architecture), designing for tourism experiences involves altering the physical environment (e.g., tourist sites, built environments), manipulating the design elements (i.e., forms, layouts) in ways that condition tourists to deploy or restraint from deploying certain behaviors. For example, Gunn (1988) provides guidelines and principles to design the vacationscape, various tourism attractions, both natural and commercial, that enhance visitor experience and maintain the natural integrity of the environment. The guidelines suggest different building layouts and configurations of tourism resort sites that result in different behavioral outcomes among visitors (e.g., Gunn 1988, 2002; Mills 1983). Grouping buildings together around a communal space will encourage visitors to engage in social activities, while placing them apart from each other will curb social activities and help accentuate the feelings of seclusion and exclusivity.

Additionally, the marking of hiking trails (e.g., with signage, fences, railings) is a design manifestation to regulate the flow of tourist movements and restrict trampling of protected areas. Similarly, the terms servicescape (Bitner 1992) and atmospherics (e.g., Hoffman and Turley 2002) are suggested to denote the (often consciously designed) settings in which certain consumption behavior takes place. Bitner (1992) proposes three dimensions of servicescape: (1) ambient conditions, (2) spatial layout and functionality, and (3) signs, symbols, and artifacts. Rosenbaum and Massiah (2011) extend these environmental dimensions to include physical, social, socially symbolic, and natural dimensions. Designing for desired consumption behavior (e.g., buy more, stay longer), thus, involves tinkering with these servicescape dimensions, creating the circumstance, the context, to which consumers respond with an action (Wakefield and Blodgett 1996).

Based on these practices, behavioral design in tourism is about priming tourists to perform target behavior through environmental cues and reinforcement. However, other factors such as motivation and personal characteristics influence how tourists respond to various environmental stimuli. To that end, Fogg (2009) proposes a behavioral model, called Fogg Behavioral Model (FBM), which consists of three factors: motivation, ability (i.e., simplicity), and triggers (i.e., a cue to act now). All of these factors must be present at the same moment for an intentional action (behavior) to occur (i.e., [B = MAT]). He further suggests the diminishing marginal returns that happen with increasing motivation and ability, suggesting that motivation and ability are trade-offs of some sorts. That is, increasing motivation (e.g., by providing rewards) is not always the solution to increase behavior performance, increasing ability (e.g., by simplifying tasks) often is. Finally, when the combination of motivation and ability positions a person above the behavior activation threshold, a trigger (e.g., a sounding alarm, a growling stomach, a text message) will cause her to perform the target behavior. Building upon FBM, Wendel (2014) proposes a model called Create Action Funnel, which includes five stages (i.e., mental events) through which a potential action needs to pass in order for it to be performed/undertaken: cue (i.e., external and internal triggers that make a person thinks about an action), reaction (i.e., intuitive processing, automated response to the idea), evaluation (i.e., the action rises to conscious awareness with a considerations of its costs and benefits), ability (i.e., feasibility of taking action) and timing (i.e., when to take action). It is suggested that the target behavior can fall out of the funnel at any stage (Wendel 2014) as people fail to recognize cues, inhibit negative response, fail to recognize value, unable to act, or perceive no sense of urgency (i.e., procrastination).

These behavioral models provide design consequences for tourism experience design in order to discourage undesired behavior and encourage desired behavior (Fogg 2009; Tromp et al. 2011). Indeed, the three factors in FBM are the focal area for designing persuasive technology (Fogg 2009; Fogg and Hreha 2010). That is, aiming at behavioral outcomes entails designing for motivation, designing for ability, and designing for triggers/cues. To increase motivation, Fogg (2009) suggests applying three elements: pleasure/pain, hope/fear, and social acceptance/ rejection, consistent with reinforcements and punishments in operant conditioning

(Skinner 1953). In terms of designing for ability (i.e., simplicity), consistent with negative reinforcements in operant conditioning (Skinner 1953), Fogg (2009) suggests that ICTs should reduce or eliminate these six elements associated with performing target actions: time, money, physical effort, brain cycles (i.e., deep thinking), social deviance, and non-routine. Indeed, performing a routine requires intuitive response with less cognitive effort to almost no thinking (i.e., as in fast thinking Kahneman 2013 and the habit loop Duhigg 2012), while unfamiliar behavior typically involves intensive thinking with conscious cost-benefit calculations (Wendel 2014). Lastly, in terms of providing cues (triggers), technological systems can be designed as sparks (targeting low motivation), facilitators (targeting low ability), and signals (targeting high motivation and high ability). In tourism context, various context-aware smartphone apps can be considered triggers as they alert travelers to head to the airport in anticipation of their flight (a signal), remind them to finish a hike or a tour (a spark), and make it easier to share travel pictures with friends (a facilitator).

Siegel and Beck (2014) bring to attention the temporality aspect of behavioral design, arguing for technological systems that are designed to facilitate attitudinal and behavioral transformation over time (i.e., slow change) as opposed to immediate or quick change. Slow change behavioral design is typically associated with behavior that is difficult to initiate and requires sustained user engagement over time (Karapanos 2015), such as recovering from addiction or bad habits, increasing environmental responsibility, and general self-improvements. In tourism, shaping socially responsible behaviors (e.g., appreciation of cultural heritage and conservation ethics) can be considered slow change, while targeting on-site actions through influencing tourists in decision making processes is fast change behavioral design. An example to designing for immediate experience is the use of context-aware systems combined with gameplay and social networks (e.g., Tussyadiah 2012; Bulencea and Egger 2015) to persuade tourists to visit particular tourism attractions and establishments by instantly rewarding their performance (e.g., with points, badges, positions in leaderboards, coupons, etc.).

Finally, Tromp et al. (2011) consider a wider implication of behavioral design involving technology, in that target behavior should realize desired social implications. They propose a framework positioning behavior in between human-technology interactions at a lower level (representing ways of influencing) and social implications at a higher level (representing reasons for influencing). While human-technology interactions address individual concerns, social implications denote collective concerns (i.e., concerns people have as a family, an organization, a society). In that, the target behavior should be perceived as a means to achieve individual goals as well as desired social implications. In many cases, individual and collective concerns do not coincide. For example, there are often conflicts between own comfort (individual concern) and the importance of preserving the environment for future generations (collective concern) corresponding to sustainable tourism behavior. Hence, they argue that the power of design lies in bridging between these concerns.

3 Theorizing Technological Mediation in Tourism

In order to design technological systems that transform tourist behavior, it is important to situate the roles technology plays in tourism experiences, specifically in terms of mediation. The modernist approach to technological mediation assumes that technology is neutral; technological products (i.e., machines) function as tools people use to interact with the world (Verbeek 2005). However, recent literature in philosophy of computing suggests non-neutrality of technology in mediated experiences (e.g., Ihde 1990; Verbeek 2005, 2007, 2008, 2015). Rather than thinking of technology as functional, post-modernist and post-humanist perspectives recognize the mediating role of technology as transforming human experiences (Verbeek 2005, 2015). These perspectives signify the crucial role of ICTs in behavioral design. In its simplest form, the creation of mechanical clocks makes temporal coordination and comparison possible and, consequently, directs people to orchestrate practices and processes more efficiently (Simpson 1995). In this case, technological systems change human behavior across space and time and transform social life (Wise 1997). Comparably, it can be observed in the designing of schedules, itineraries, and opening hours of tourism attractions to shape tourist behavior and experience, influencing duration, pace, and intensity of interactions during a visitation. More recently, the advancement in artificial intelligence enables technology to track (and model) tourist behavior, use it to predict future states, and proactively recommend actions to tourists (see Tussyadiah and Wang 2014). For these experiences, what is being designed is not the thing (technological artifacts), but the human–world relation in which experiences take shape (Verbeek 2015). Therefore, Verbeek (2015) asserts that designing technology is, essentially, designing human beings.

The theory of mediation suggested by Ihde (1990) is useful to elucidate the roles of ICTs in tourism experience. Using a post-phenomenological approach, he analyzes and proposes four types of relations between human being, technology, and the world (i.e., schematically: [Human—Technology—World]) in mediated experiences: embodiment, hermeneutic, alterity, and background relations (see Table 1 for schematic representations of these relations). Embodiment relation denotes a symbiosis between humans and technology, a unity that is directed at the world (i.e., schematically:). An example of this mediation is the experience of seeing through Google Glass (Tussyadiah 2014b), where wearable technology becomes an extension of human bodies, allowing for visual perception to take place. Hermeneutic relation explains the roles of technology to represent the world through symbols/values that need to be read/interpreted in order to understand the world. An example is tourists using a weather app on a smartphone; while the device does not provide direct experiences of rain or sun (cold or hot), tourists read the symbols (or numbers) to interpret the condition of a tourism destination. Alterity relation illustrates how humans interact with technology as an agent, with the world at the background of this interaction. In this relation, technology is considered an agent, a social actor (Tussyadiah 2014c), thus, the terminus of experience. An example is

Table 1 Schematic representation of technological mediation

Initial mediation relations	Extended mediation relations
Embodiment relation: [(Human—Technology) → World]	Cyborg relation: [Human/Technology → World)]
Hermeneutic relation: [Human → (Technology—World)]	Immersion relation: [Human ↔ Technology/World)]
Alterity relation: [Human → Technology (World)]	Augmentation relation: [(Human—Technology) → World + Human → (Technology—World)]
Background relation: [Human (Technology/World)]	
Source: Ihde (1990)	*Source*: Verbeek (2015)

tourists making use of check-in kiosks at an airport or ticket machines at a train station. Finally, background relation indicates that technology serves as the context (at the background) of human actions, such as the warmth from a heating installation.

In light of recent technological advancement, Verbeek (2008, 2015) suggests additional relations that are not captured in Ihde's four categories: cyborg, immersion, and augmentation. The term cyborg relation is used to explain the hybridity between humans and technology, where devices are not worn on (external to), but integrated (implanted) into human bodies. Therefore, this relation is more intimate than embodiment as humans and technology become a hybrid being. Immersion relation describes human interactions with smart environments, ambient intelligence (i.e., technology merges with the world), or persuasive technology (Fogg 2003), where technology serves as the interactive context (not just a background) for human actions (Verbeek 2008). In tourism, interactive exhibits in museums (e.g., Warpas 2014) and the development of smart destination supported by the internet-of-things demonstrate this relation. Lastly, Verbeek (2015) added augmentation relation to explain the use of face-mounted wearable technology that is equipped with information overlay. In essence, this is a combination of embodiment and hermeneutic relations, whereby technology is embodied (as in seeing through Google Glass) and, in return, it provides a representation of the world that needs to be read. The use of wearable augmented reality in tourism attractions (e.g., Leue et al. 2015; tom Dieck and Jung 2015) is an example of augmentation relation. Importantly, these relations demonstrate that technology helps shape human experiences, assisting human beings in gaining knowledge about the world and making important (in some cases, moral and ethical) choices. To this end, Verbeek (2015) argues that technological mediation is part of the human condition and, therefore, should take "a central place in the conceptual framework that implicitly and explicitly guides design activities" (p. 31).

In addition to the aforementioned types of mediation relations, how technology influences humans in mediated experiences is an important design consideration for
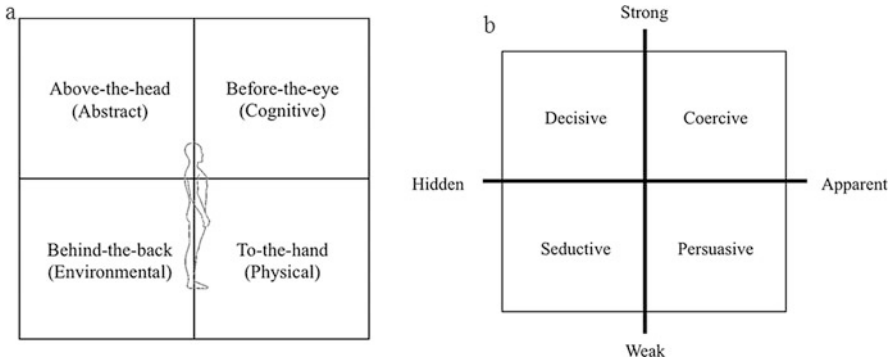
Fig. 1 Influences of technology on human experiences. (**a**) Points of contact *Source*: Dorrestijn et al. (2014) (**b**) Types of influence *Source*: Tromp et al. (2011)

tourism. Using the human body as a reference, Dorrestijn et al. (2014) explain four dimensions of human–technology arrangements or points of contact through which technology influences human experiences (see Fig. 1a): (1) before-the-eye/cognitive (i.e., technology aids in decision-making processes through guidance and persuasion), (2) to-the-hand/physical (i.e., technology influences bodily actions, such as through coercion and mediated gestures), (3) behind-the-back/environmental (i.e., technology indirectly influences behavior through technical determinism and environmental conditioning), and (4) above-the-head/abstract (i.e., the role technology plays in our thinking, such as having utopian or dystopian views of the impacts of technology in society at a general level). The first two points of contact represent direct influences, while the rest indirect, with technology serving as contexts of experiences. In the designing processes, these points of contact guide the assessment of how technology should impacts user behavior (e.g., coercion, guidance, persuasion) and how these may provoke reactions from different users (Dorrestijn et al. 2014; Verbeek 2015). From a slightly different angle, using the dimensions of salience/visibility (i.e., apparent versus hidden) and force (i.e., weak versus strong), Tromp et al. (2011) classify technology influence on human experiences into four types: coercive (apparent, strong), persuasive (apparent, weak), seductive (hidden, weak), and decisive (hidden, strong) influence (see Fig. 1b). Examples of the four influence types in tourism design are the "no entry beyond this point" signs in an attraction, similar to a pop-up warning on a website (coercive, discouraging access), recommendations to visit nearby points of interests on smartphones (persuasive, encouraging visitation), the impacts of using first-person view cameras on the types of activities participated in the destinations (seductive, encouraging actions/performance), and online travel community providing password-protected resources for members only (decisive, encouraging subscription). Tromp et al. (2011) suggest that design strategies corresponding to different influence types should be applied accordingly to generate meaningful experiences.

4   Guiding Principles for Technology and Behavioral Design in Tourism

Based on the aforementioned theories and conceptual models, a set of guiding principles for tourism experience design involving ICTs is proposed in the following section. First and foremost, it is imperative for tourism destinations to identify design problems, the target behavior that will be effective as a means to achieve the overall goal of creating meaningful tourism experiences for tourists. In order to do this, designing starts with selecting the right target outcomes from both sides: the tourists (at the individual and social levels) and the destination. Target behavior should then be identified from a range of possible actions that tourists could undertake in order to arrive at these outcomes in the most efficient way. A deep understanding of the tourists and their behavior will guide the conceptual design, whether designing should aim at a behavioral reinforcement (i.e., facilitation) or behavioral intervention (i.e., changing patterns of actions), whether the target behavior would require slow change (e.g., long-term travel planning behavior) or immediate actions (e.g., on-site decisions), etc. Gauging tourist motivation and ability as well as reactions to various stimuli in relation to target behavior will also provide insights on the structure of detailed actions and how to prepare the environments (i.e., contexts) to condition for these actions. Considerations of the roles of ICTs, whether to serve as the context of experience or to sense the right environment in order to provide triggers, and the types of influence they infer on the tourists, are integral in the conceptual design.

5   Design Approaches

Tussyadiah (2014a) lays a theoretical foundation for tourism experience design with the considerations for human-centeredness, iterative process, and holistic experience concept. The key to behavioral design through ICTs is placing the humanness of tourists at the center of designing process. The theories of mediation inform that tourism experience design involving ICTs is about designing technological systems that are both effortless (simple) and enjoyable (motivating) for tourists and effective in instilling target behavior. In interaction systems design, human-centeredness is codified in the ISO standard of human-centered design for interaction systems (ISO 9241–210 2010), which includes six basic principles: (1) the design is based upon an explicit understanding of users, tasks, and environments, (2) users are involved throughout the design and development, (3) the design is driven and refined by user-centered evaluation, (4) the process is iterative, (5) the design addresses the whole user experience, and (6) the design team includes multidisciplinary skills and perspectives. At the lowest level, designing process should include tourists in usability testing of technological systems (e.g., focus

groups to gain tourist feedback on design prototypes). However, in order to generate relevant and effective systems, it is important that the entire designing process is informed by a thorough understanding of what influence certain tourist experience. In line with Sleeswijk et al. (2005), tourists are experts of their experience. Therefore, they need to be integrated early in the process and participate in all designing activities. As argued by Sanders and Stappers (2014), design practices move from designing for people, to designing with people (i.e., co-design) and by people.

Design methods are characterized with experimentation aimed at iterating toward a "better" answer (Liedtka and Ogilvie 2011). The design cycle is typically consisting of the following components: analysis, design, prototype, and test (Ladner 2015) or understand, discover, design, and refine (Wendel 2014), indicating activities of problem finding, problem selection, solution finding, and solution selection (Beckman and Barry 2007). The key is that design cycle is never a clean and linear pass-through process (Fraser 2006), it requires repeating the design cycle again and again until satisfactory design is obtained. Design practices are characterized with fast learning (through human-centered discovery) and rapid prototyping, suggesting the unique role of research in designing. Sanders and Stappers (2014) illustrate the many relationships between design and research: (1) overlapping collaboration between design and research, (2) research as important ingredients in design, (3) design as part of research, and (4) design and research as separate practices. In light of these different relations, Tussyadiah (2014a) suggests that in tourism experience design, design research is distinct from but integral to designing, which is Sanders and Stappers's second relation. Drawing from Evenson and Dubberly (2010), integrative design research approaches consisting of explorative, generative, and evaluative research, each corresponding to different activities in the design cycle, are suggested as parts of the iteration.

Lastly, behavioral design should be targeted toward achieving the goals that are inclusive of all aspects of an experience. Even though behavioral interventions tend to be incremental (e.g., tiny habit-forming activities), it is based on a consideration that these activities are supportive of a holistic experience. Therefore, designing behavioral intervention for on-site activities cannot be done in isolation from pre-trip and post-trip experience. It is an integral part of what tourists will enjoy, reflect, and derive meaning from. Also, changing one behavior (or conditioning any one aspect of an experience) most likely casts an influence on subsequent actions and, eventually, transforms the overall experience. Further, it is also important to position tourism experience in its role within the life of a tourist, in that tourism and everyday experiences are intertwined and shape one another.

6 Design Tools

As an experience, tourism is temporary in nature (i.e., confined within the duration of a trip). As a result, many design issues in practice concern with on-site behavioral design problems that require immediate actions (as opposed to slow change). However, extending the temporal dimension of tourism experience to include pre-trip and post-trip experiences and integrating technology use behavior into the equation, slow change behavioral design can be relevant to tourism. In the interest of bridging the theories into practice, relevant on-site behavioral intervention scenarios are illustrated in the following. Tourism destinations may face the problems of extreme overcrowding in some areas and underutilization in others (i.e., activity dispersion problems), resulting in economic, social, and environmental challenges for the region and concerns over low tourist satisfaction. Diverging tourist movement, which requires intervening tourists to avoid certain attractions during a period of time, can achieve the goal of dispersing tourism activities in a destination. Additionally, tourism attractions may identify problems of low visitor engagement, which limits the cognitive and affective experiences, thus the potential to develop a deeper emotional attachment. Enhancing artifacts through digital means may spark imagination and interest among visitors, leading to a higher level of engagement (e.g., Leue et al. 2015; tom Dieck and Jung 2015; Warpas 2014).

The prevalent use of smartphones for everyday experiences indicate that people are familiar with technological applications that explicitly or implicitly suggest actions, proactively or on demand: a navigation app telling them to turn right, a photography app reminding them to take a selfie, a digital assistant app suggesting a popular place for lunch nearby, a weather alert, etc. A navigation app (such as Google Map) can go further to alert users of traffic congestions (e.g., marking the routes in red) or notify users that the destination will be closed by the time they reach it. Falling under the category of persuasive technology (Fogg 2003), these systems are designed to deliver tiny behavioral interventions, sending apparent influences (e.g., through rewards and punishments) to shape user behavior on behalf of marketers, managers, teachers, doctors, etc. Furthermore, intelligent personal devices (e.g., smartphones, smart watches, etc.) are able to track and "model" the behavior of (and give feedback to) their users, the capacity that will improve as uses intensify. From tourism design point of view, tapping into tourists' personal technology for behavioral intervention (i.e., leading tourists to undertake certain actions in order to solve design problems) is a worthwhile technological solution. Using personal devices also allows behavioral design approaches to address experiences with a high level of granularity, making it possible for tourism destinations to target behavior deeper into the micro-moments in situated tourism experiences.

Presented in Table 2 is an array of design tools corresponding to four stages/ activities in the design cycle provided for tourism destinations engaging in behavioral design with ICTs. In the aforementioned design problems, the first step to

Table 2 Tool kit for technology and behavioral design in tourism

Activities	Approaches	Tools	Use scenarios
Observe—Understand	*Explorative design research*. Human-centered discovery of subjective experiences. *Naturalistic inquiries*. Gathering information and user behavior in natural experience settings and real use situations.	*Participant observation* (e.g., User Shadowing*)*. Observers participate in on-going activities (tourism) and record observation (e.g., notes, pictures, videos, etc.).	Shadowing tourists to observe their actual behavior in the natural (unaltered) environment; decision-making strategies, triggers of behavior, attitudes, habits, states of mindfulness/mindlessness, etc.
		Autoethnography (e.g., mobile ethnography, user diaries, user stories). Ask tourists to develop self-reflective narrative of subjective (tourism) experiences (e.g., in forms of writings, video diaries, etc.).	Tourists are asked to record and report their experiences in different media. This can also be achieved by exploring first-person narratives from secondary sources, such as travel blogs (i.e., through netnography).
		In-depth interview (alt. focus group discussion). Direct questioning to gauge tourist opinions, attitudes, etc.	Tourists (as individuals or groups) are formally or informally asked to articulate their opinions, attitudes, and feelings regarding their behavior and experiences.
Analyze—Reflect	*Generative design research—projective approach*. Focusing on expressive exercises to facilitate users in articulating their thoughts, feelings, and desires that are usually hard to communicate verbally. *Holistic experience concept*. Inclusive of all elements that make up the structure of tourism experience.	*Projective interview*. Using objects and/or metaphors to gauge reflections on experience or phenomena.	Personifying objects onto which tourists can project their attitudes and feelings more easily. This is particularly useful in gauging tourist attitude toward technological systems (i.e., machines) in a mediating role that cast an influence on human behavior.
		Experience mapping (alt. consumer journey mapping). Developing a visual representation of user engagement with the system throughout the entire journey. *Storyboarding*. Creating visual sequence of events to capture interactions with the system.	A tourism experience map is a holistic visual representation of tourist journey from pre-trip to post-trip stages, which details the different activities undertaken and touch points where tourists interact with different stakeholders. Included are tourist emotional states as they

Table 2 (continued)

Activities	Approaches	Tools	Use scenarios
			go through the different stages and touch points, magic moments (positive experiences) and pain points (negative experiences) along the experience. Identify opportune moments (e.g., critical events in the journey) where an intervention will be most effective. Similarly, a storyboard will capture sequential activities, which can accommodate scenarios of likely events in addition to actual experiences.
Make—Design	*Generative design research—constructive approach*. Focusing on creating and testing experience concepts, which involve some concrete parameters *Participatory designing—co-creation*. Active engagement of users at every stage of the designing process. *Holistic experience concept*. Inclusive of all elements that make up the structure of tourism experience.	*Brainstorming* (alt. brainwriting, bodystorming). Generating ideas/solutions from participants.	Involving relevant stakeholders (e.g., through open discussions or in writing) to generate an array of ideas (all possible solutions) to solve design problems, including sets of behavior to target (types, structure, granularity, etc.), sets of strategies to influence the behavior, configuration of ICT infrastructure, etc.
		Flexible modeling. Allowing participants to configure a system from a set of predetermined elements.	Creating the necessary parts (elements) of an intelligent system and then asking tourists and other stakeholders to configure a system (e.g., using clay, collages, cards). Different stakeholders might have different considerations in mind when developing the model.
		Paper Prototyping (co-creative sketching, public prototyping). Creating rough drawings or	Relevant stakeholders working together to sketch conceptual design (e.g., hand-written on

Table 2 (continued)

Activities	Approaches	Tools	Use scenarios
		mockups of the system and using them to gather feedback.	paper) or build mockups (e.g., using cardboard boxes), or enact design scenarios in order to facilitate an early evaluation on its usability and experience, as well as gather initial feedback.
Test—Refine	*Evaluative design research*. Iterative testing and feedback on experience concepts; monitoring the quality of the designed socio-technical systems and the holistic experiences they allow for. *Naturalistic (contextual) inquiries*. Gathering information and user behavior in natural experience settings and real use situations.	*Heuristic evaluation* (usability testing). Evaluating the system; documenting flaws and areas of improvement.	Introducing the system to tourists (e.g., describing how it works, showing the interface, etc.) and asking them to evaluate and report any flaws in the system for further refinement.
		Field experiment (A/B testing). Experimentally examine an intervention in the real world settings.	Implementing the system in real tourism settings (with real tourists as participants) and assess the effectiveness of the system in producing desired tourist behavior. Design experiments with varying: – Types of influence (e.g., coercive, persuasive, seductive, decisive) – Types of motivation (e.g., external or internal rewards, punishments) – Timing for rewards to be given – Conflicts of interests, etc.

addressing tourist dispersion and engagement issues is to take a closer look at the physical, cognitive, emotional, and social aspects of tourist behavior relevant to the design problems; how tourists make decisions on-site (i.e., in cases of planned vs. spontaneous activities), how they deal with disruptions to planned behavior (e.g., changes in the environment/condition, limited ability), what sparks their motivation (i.e., both externally and internally), how they compromise individual and collective concerns, etc. Importantly, these patterns should also be observed as emerging from (in the context of) personal technology use to elucidate the perceived roles and influences of technology on tourist behavior and the ways these influences are perceived and responded. For example, explorative and generative

research could be targeted to understand how tourists react to notifications, recommendations (persuasion), or warning (coercion) from a technology (i.e., for consideration of types of influence, mediation relations), if different ways of facilitating perception (i.e., tourists ← world), such as augmentation and mediated gestures, result in desired actions (i.e., tourists → world), fear and angst toward the role of technology in the society at a general level, etc.

Guided by these insights, involving tourists and all stakeholders in a series of constructive research and participatory design techniques will shape the conceptual design and prototype of the technological systems. From the technology development perspective, it is also about configuring the infrastructure to enable real-time machine-to-machine interactions (e.g., sensors, cloud, network). Therefore, generative research activities should produce action (behavior) scenario, ICT system scenario, and interaction scenario. The next step is to involve tourists in testing the prototypes, which could by setting up a field experiment with different intervention strategies (e.g., types of influence, types of interaction) and varying environmental conditions (e.g., timing, reward systems). Iterations of these activities will lead to the system design (e.g., interface, infrastructure) that is ready for implementation.

7   Concluding Remarks

ICTs have tremendous potentials to shape and transform tourist behavior. Specifically, the advancement in intelligent personal technologies (i.e., small, easy to carry technological devices designed for personal use) allows for digital devices to track and model user behavior and to provide feedback on user performances, making it possible to influence user experience by suggesting relevant decisions and actions in opportune moments. Therefore, it is imperative for tourism destinations to take advantage of ICTs to design tourism experiences. In order to influence tourist behavior through design, tourism destinations can make use of behavioral design principles derived from theories in psychology, especially behaviorism, in order to better understand human behavior in given contexts, philosophy of computing (and persuasive technology) to follow the different roles of technology in human experiences, and design science to master the guiding principles and approaches to designing process. Designing technology for behavior modification, whether it requires slow change of immediate actions, is about developing technological systems that are effective in producing desired user actions. Therefore, it requires a deeper understanding of tourist behavior as a basis of designing. Because tourists are experts of their own subjective experiences, they should be integrated in the entire activities within the design cycles, emphasizing the shift from design for tourists to design with tourists (and by tourists).

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Part III
Managing the Dynamics of the Tourism System

The Dynamics of Destinations and Tourism Development

Pietro Beritelli and Christian Laesser

All tourism takes place on land; and yet how little attention is paid to how that land is protected, planned, developed, and managed for tourism—that land through which all visitors flow. (Gunn 1997, p. IX)

Abstract In the last decades, tourist destinations have been conceived as a geographic area in which tourism takes place and which is supposed to be organized, coordinated, be made competitive. Experiences from mature destinations such as in Switzerland show that the territorial concept of the destination fails in practice, limiting the actors in a self-made mental corset. Our lately applied approach that sees the destination as a space in which several dynamic visitor flows, each one in a different maturity stage, take place, allows a more relaxed view on the complex situation of the destination's context. The corresponding techniques help entrepreneurs, tourist organizations, and public authorities to jointly (1) understand the past development and the current state of the destination, (2) articulate challenges and identify possible solutions, and (3) prioritize on feasible and useful projects and initiatives, including investments. In the first part of the article we explain the different perspectives and how the alternative viewpoint helps identify better the needs of the demand and consequently the requirements for (re-)designing infrastructure and services. The second part builds on experiences made in the tourist region of Heidiland, Switzerland. With the help of the new techniques: (1) actors focused specifically and unmistakably on the relevant areas of intervention, (2) rapidly agreed upon key projects in the region, and (3) found how these projects contributed to current and new visitor flows in the destination. The case presents four different projects in different maturity stages and highlights the linkages between market needs, supply-sided collaboration, and the role of the organizations. In the end, the approach argues for a shift away from 'one (rather stable) functional space' to 'spaces with multiple dynamic functions'. Consequently, and relating to investments, we build a case to move from a land-related towards a flow-based approach.

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Keywords Tourism organizations • Visitor flows • Dynamic models

1 Introduction

What Clare A. Gunn stated in his seminal book "Vacationscape" is an insight that too often remains uncared in destination management initiatives. Planning, developing, and managing tourist destinations implies understanding the local and regional context of the place as well as the dynamics of tourism demand (i.e. the flows), under which it is exposed to. In a recently developed approach called the St. Gallen Model for Destination Management (SGDM), we have proposed a six step heuristic that allows for a better understanding, planning, and for a more effective management of tourist destinations (Beritelli et al. 2015). Its practical application has changed our way of conceiving destination marketing and management. In the past 4 years, we have recognized that even for a country like Switzerland, one of the cradles of modern tourism in Europe, there is still much left to learn.

In fact, with regard to land use planning and development, the case of Switzerland presents a very tight, fine-meshed and strictly pursued regulatory environment. Federal, state (i.e. cantonal), and municipal legislation provides the cornerstones for structure and land-use plans, all being coordinated with water, landscape, and nature protection, with homeland preservation, and several other domains that have to be considered in such a small, diverse, and densely populated country. Finally, the power of veto against development plans, allows not only adjacent neighbors but also associations of different kinds to block, delay, and even prevent rezoning or new constructions (e.g. buildings, leisure areas, attractions).

In sharp contrast to the above, tourism demand in Switzerland faces a high dynamism and dramatic change. The predominantly domestic visitors that fueled until the 1990s the engine of rural and mountain tourism, particularly in the alpine areas, has shifted in terms of generations, motives for leisure travel, activities, and mobility (for an overview see Laesser and Riegler 2012). What—in terms of tourist attractions, bed capacities, ski areas, and the like—has been developed and built in the post-war decades (i.e. 1960–1980s) must be replaced or renewed according to new needs and standards of the markets. However, relatively high investment and supply provision costs (e.g. materials, food, salaries) compared to neighboring countries further aggravate the turmoil of change. In the end, potential investors may consider different, more attractive alternatives, because

- the regulatory environment is complex, appears lengthy and tedious, and suggests uncertain outcomes,
- the market risks are considerable (e.g. dynamic demand, seasonality, site-related context, local and regional history and prospects),
- other investments yield a higher profitability.

In short, Switzerland is a country with mature or declining tourism forms that faces a difficult, historically grown planning framework. Just as Gunn stated: "…Working with less land and greater restriction of sprawl, European designers

and planners have had to use sites over and over again" (Gunn 1997, p. 111). We believe that other regions of the world are increasingly facing this occurrence. Hence, and for effective planning and development, the following exemplary questions are key not only today but especially in the future:

- How can new tourist sites and attractions be planned and developed in a complex, regulated, and dynamic environment?
- How can ideas and visions be shared and collaboratively realized, in coordination with existing resources, with a given history of a place, fitting to or even matching with an incumbent constellation of organizations, businesses, and actors?

The abovementioned heuristic of the SGDM (Beritelli et al. 2015) has helped in answering these and more questions derived from the needs of tourist place development and management.

In this chapter we present some guiding principles that were helpful in applying the model, and a focus on one case (Heidiland). In so doing, we aim to explain that

1. developing and designing tourism places and destinations requires a detailed understanding of the mechanisms driving tourist flows,
2. achieving consensus about plans, projects, initiatives is founded on an objective and specific way of analyzing and evaluating the current world and future options,
3. realizing the above builds on shared but also divided, temporally staggered responsibility of the actors in a tourist destination.

Some guiding principles

Gunn proposed in his book eleven design principles/topics (Gunn 1997, p. 106 ff):

1. functional design (considering structural, physical, and cultural/aesthetic functionalism)
2. sites, buildings, and spaces (integrating building and landscape architecture, engineering, interior design, etc.)
3. clustering (grouping of attractions, facilities, and services)
4. suitability (taking care of visitor's and local's interests)
5. exposed functionality (supporting the peculiarity of the experience)
6. efficiency in the experience (balancing the travel effort and costs with the received value of experience)
7. sequence and satiety (requiring variety and dramaturgies)
8. order and relativity (causing cooperation among stakeholders)
9. reuse (granting more durability and resilience of the investments)
10. wholeness of human use (leading visitors to meaningful, pleasurable experiences)
11. innovation and creativity (allowing "the fresh, the sparkling, the new" (Gunn 1997, p. 112).
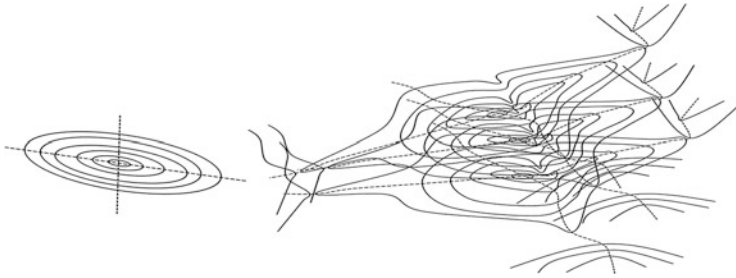
Fig. 1 Clean, new, static, controllable (*left*) versus exploited, complex, dynamic, fluid (*right*) environment. *Source*: own illustration

These design principles particularly fit in with the development and the creation of a new site or of a new attraction, possibly a new tourist resort or village. They perfectly serve planners when they consider the main aspects relating to the specifications of tourism. Since new sites and resorts may be embedded in a macro environment of an existing society, a culture with its own history and a given economic mix of several different activities, actors, and organizations, we add three precursory ideas pertaining to the latter condition:

1. coincident demand and supply (tourist production)
2. polyvalence and variable geometry
3. flow-based planning and management

It is with the help of these three additional principles that we have gained, together with different institutions and organizations, a better understanding of the tourist destination and how it can be further developed. Figure 1 illustrates our argument. On the left, a planner faces a pure, clean space on which an attraction with services is supposed to be developed. Applying the 11 principles presented in "Vacationscape" (Gunn 1997) is a matter of technical performance in accordance to legislation, local stakeholders' expectations and, of course, the current and prospected visitor needs. The complexity of the local and regional environment, the dynamics of demand, the history of the community, and many more 'disturbing' variables such as gravitational effects from other sites, attractions, and destinations produce a situation that looks more like the one on the right side of the figure: varied, multiple, volatile and hence blurred, fuzzy, chaotic.

The following paragraphs present the three principles, supported by various practical cases.

2   Coincident Demand and Supply: Tourist Production

Demand and supply form together a productive process that results in tourist experiences. The first conceptual approaches on this claim were presented 40 years ago (e.g. Gunn 1972; Leiper 1979; Miossec 1977; Pearce 1979). Later,
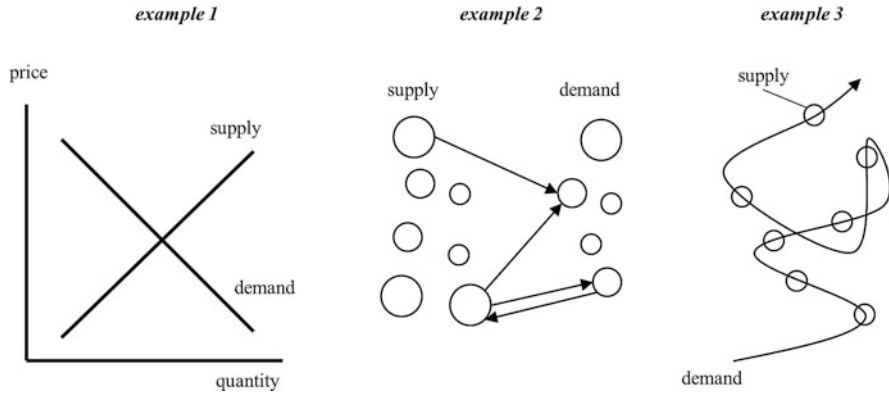
Fig. 2 Three different pictures, three different mental models, three different worlds of implications. *Source*: own illustration

related thoughts hypothesized a tourist as a producer (Smith 1994), the conditional presence of the visitor that generates tourism (Kaspar 1995), or the incorporation of the tourist factor in (tourist)-economic production (Maggi 2014). Yet, what today in practice and research is commonly understood as tourist co-production does not seem to be consequently applied. We think that prevalent mental models (Gentner and Stevens 1983), thus forms of presenting and visualizing how demand and supply meet or how tourist production occurs, do not really get to the heart of the matter and lead to problematic interpretations. Figure 2 illustrates three different examples of mental models.

– The first one originates from micro-economics and serves as an explanation of quantitative demand and supply side properties, eventually producing a point of encounter with a specific price. The underlying aspects of demand preferences and the utility (value) provided by the supply remain a generic, undifferentiated domain.
– The second one reflects a marketer-based view. Here, products or services are created, assembled, or formed in advance. The supplier then seeks finding a matching market or segment; ideally at a profit generating price, through an effective distribution, and with a convincing communication strategy. Obviously, matching works both ways, i.e. when a supplier recognizes a need from potential customers and then develops a new product or service responding to those needs. Anyway, in this conception, supply and demand constitute two parts of the market, two sides of the coin.

We think that these mental models suggest two false implications; namely, (1) that supply and demand could be seen separately and (2) that matching supply with demand is a matter of best-fitting management and marketing on the supply side.

Yet, tourism experiences only occur when the visitor is at his destination, generating 'his product' and when consumption takes place, causing transactions and other side effects such as social and environmental impacts. The foundation of when and where consumption takes place lies essentially in individual spatial behavior (Hyde and Laesser 2009). Tourist co-production requires a representation that directly visualizes the coincidence between supply and demand, and—since travel experiences assemble a fragmented service and value chain—on an inter-organizational scale. The example at the right side of Fig. 2 fits better to what really happens in tourism. Visitors activate a chain of services and experiences, causing flows (Reinhold et al. 2015) that connect networks of traveler activities, for instance, with sales and distribution (economic transactions), partnership and coordination (local supply), and marketing and promotion (communication) networks (Stienmetz and Fesenmaier 2015). Figure 2 illustrates three different mental models that lead to three completely different ways of understanding how supply and demand are supposed to relate to each other.

Particularly, the example at the right side differs fundamentally, because it implies in a dynamic and complex environment that:

– Demand is the source of production—Supply responds accordingly and ideally as a perfect stage for production.
– Demand (repeatedly) configures supply chains—Supply chains are the result of effective and efficient collaboration in response to the visitors.
– Demand and supply cannot really be seen as given, fixed constructs. Neither can they be intentionally matched with each other. In contrast, supply flourishes as demand evolves and stabilizes for a particular time (Cohen 1972; Plog 1973)—Visitor flows are temporary in nature.
– Supply survives and generates profit thanks to the flows of demand—The more numerous and diverse are the flows, the broader is the income generation portfolio (segments) for the suppliers.
– Demand can be influenced by supply only indirectly—Flows and destinations are difficult to manage (Pearce and Schänzel 2013). It is more appropriate to speak of creating, shaping, and adjusting experience stages and of stimulating demand.

Recent empirical research supports this view by localizing visitor flows and experiences on maps (Espelt and Benito 2006; Leask 2010; Shoval and Raveh 2004; Van der Ark and Richards 2006). GPS-tracking aided research in tourism allows further analyses of visitor profiles and activities (Shoval and Isaacson 2007, 2010). Every visitor flow is to a certain degree homogeneous, in the sense that it describes activities and profiles of visitors (Hwang et al. 2006; Shih 2006) for a given time, in a particular space (Bowden 2003; Wu and Carson 2008). Figure 3 illustrates how different kinds of visitor flows (left side) constitute the lion's share of tourism across the world. Tourists visit places and attractions; they activate services and spend their time and money in (more or less) tourist places; and they do this in significant numbers, otherwise suppliers would not have the opportunity to accordingly plan their capacities, to collaborate with other partners along the supply
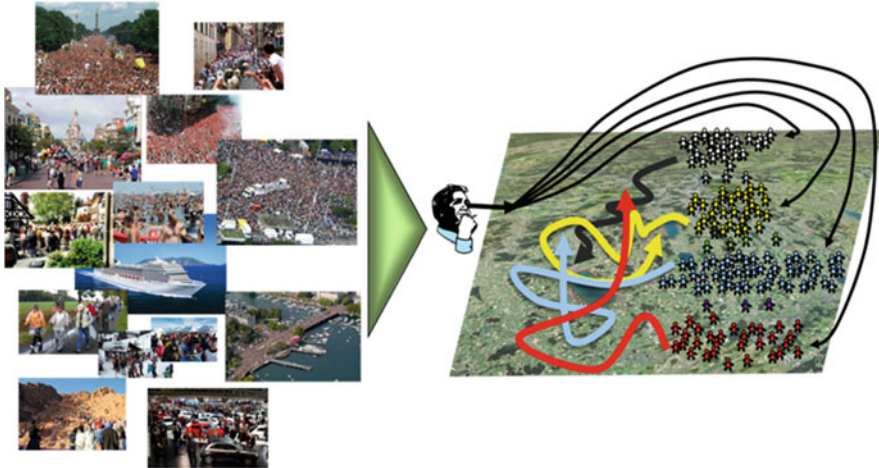
Fig. 3 Significant, repetitive, and hence strategic visitor flows (SVF). *Source*: Beritelli et al. (2013), 2013 Kanton Solothurn; Cnes/Spot Image; GeoContent; Google

chain, and to foresee seasonal and segment-related demand requirements. As long as numerous and different flows of tourists comprising a significant number of individuals visit a place, an attraction, a resort, or else, the suppliers can plan, develop, adapt, (re-)create, or retreat. Hence, putting oneself in the visitor's shoes and understanding the underlying social forces of visitor flows, is the first and foremost task to do, in order to understand the current situation (actual visitor flows) and to envision a realistic future (new visitor flows). While the resulting picture may look chaotic and uncontrollable (right side), it allows a more specific understanding of each flow and of how it forms, multiplies, and eventually will die.

The SGDM heuristic asks five questions with the aim of distinguishing visitor flows and thus tourism forms in a particular space and time so that purposeful actions by the actors and organizations can be derived.

– Who? Which visitors?
– Why? What motivates them? What stimulates them?
– What? What do they do?
– Where? Where do they come from? Where do they stay? Where do they continue to?
– When? When does the flow occur? How does it distribute, e.g. in a year?

A further relevant aspect is the stage of development of each flow. In fact, every flow has its own dynamics of development and an own life-span. For instance, in one place there may be tourists (even together with locals) who walk the same hiking route or have visited the same festival for decades while in the same time of the year there may be a niche of sport adventure tourists (e.g. bungee jumping, canyoning) who appeared recently and seems to have quickly reached its maturity stage in terms of visitor numbers and expenditures. Figure 4 presents some
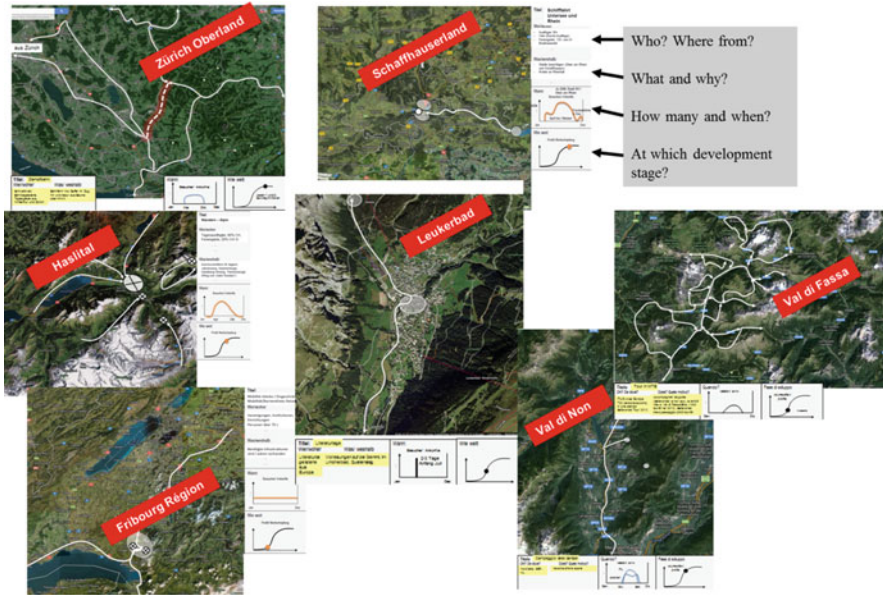
Fig. 4 Examples of strategic visitor flows (SVF). *Source*: own illustrations; graphics ©2013, 2014 TerraMetrics, maps ©2013, 2014 Google

examples of reconstructed and validated flows by local informants (i.e. front-line employees in tourist enterprises and other organizations who intuitively know about the visitors). The flows visualize movements and tourist spaces, in some cases with highlighted attractions or trails. The legends describe the flows' profiles. Starting from this tool, actors can (1) discuss and evaluate the different forms of tourism objectively and specifically, (2) derive implications for specific actions thanks to a fine-grained analysis, and (3) identify mechanisms that influence the demand flows. This last aspect is further detailed in Chap. 4.

3   Polyvalence and Variable Geometry

Often, visitor flows occur simultaneously and (sometimes partly, sometimes fully) in the same places. "A simple activity such as camping has myriad offshoots, including wilderness camping, backpack camping, boat camping, tent camping, and RV camping" (Gunn 1997, p. 45). Other scholars have made similar observations quite early (Dredge 1999; Miossec 1977; Tremblay 1998). Visualizing simultaneity, co-occurrence, and overlaps poses, more than a technical problem, a challenge for the reader and his interpreting and envisioning capacity. Or in other words, actors, including planners and developers, must be receptive to multiplicity, diversity, and a great amount of variability for any given project. This somehow

contradicts a traditional planning philosophy that prefers to work in a clearly delimited and static framework. Constructing the variable geometry (i.e. overlapping some purposefully selected or even all the flows for a given place or destination) and using it as a further tool for strategic discussions, has proven to be helpful (Beritelli et al. 2014). It allows

– highlighting polyvalent areas and spaces (e.g. attractions that serve different flows with different means),
– recognizing strategically less tourist areas (i.e. where no significant flows appear),
– connecting the examined area with adjacent areas and destinations and therefore taking into consideration the conditions of a wider environment.

Producing variable geometries and strategizing is the second step in the SGDM-heuristic. Figure 5 presents two examples of variable geometry with rather numerous visitor flows on the same map in a more top-down approach, Fig. 6 builds on one new project connecting two major attractions and affecting the flows of those attractions (bottom-up approach). Points 1–4 in Fig. 5 present selected topics discussed by the stakeholders in two Swiss destinations. In the mountain destination of Leukerbad, for instance, the variable geometry of the current flows in the village pointed to an inconvenient routing of flows around the village center caused by a scant utilization of the land areas and a slow depletion of the shopping zone in the village center (see dotted line, point 1). Another challenge is presented by point 2, where the quick access to the base terminal of the cable car was not possible, due to a missing elevator from the parking lots to the base terminal. Instead, many skiers used other routes to reach the terminal, including the one around the village. In the city center of St. Gallen, the medieval town presents a multitude of flows and permanent and temporary attractions (major polyvalent area, southwest of point 4).
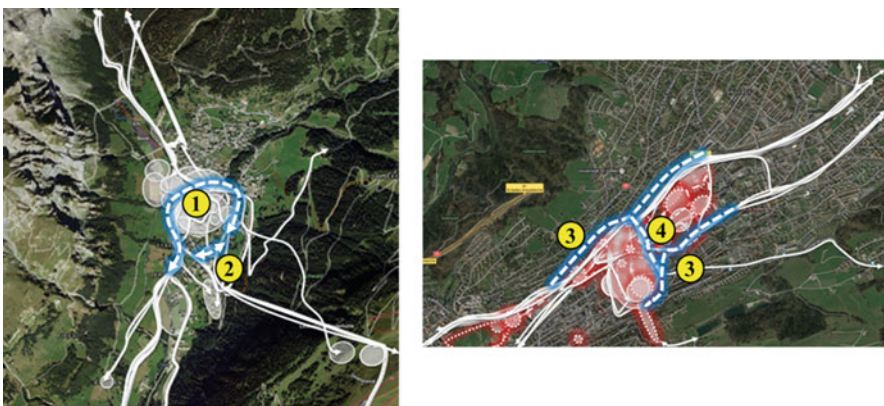
Fig. 5 Two examples of comprehensive variable geometry, Leukerbad village (*left*), St. Gallen city center (*right*). *Source*: own illustrations; graphics ©2014, 2015 TerraMetrics, maps ©2014, 2015 Google
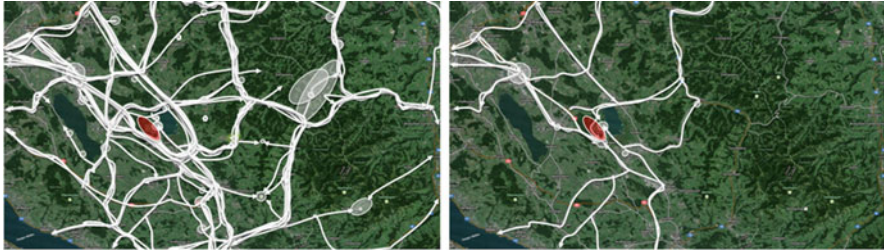
Fig. 6 Comparison between comprehensive (*left*) and selected variable geometry (*right*), mountain railway connection between Juckerfarm and Dino Museum Aathal with affected visitor flows (Region Zürich Oberland, CH). *Source*: own illustrations; graphics ©2014 TerraMetrics, maps ©2014 Google

The variable geometry with current flows of various forms of culture tourism points to a strict separation between the medieval town and the museum district (see area around point 4), due to a major road with frequent traffic. Also, the two areas are even more contained because two major routes with heavy traffic cut the center with the northern and with the southern hill areas (upper and lower dotted lines, points 3). The necessary land use and intervention measures, the development of sites and possible new attractions, purposeful information and visitor guidance, are specific implications drawn from analyzing the variable geometry and consulting the single maps with the visitor flows.

To understand better the place-related contingencies affecting projects and development plans, analyzing existing visitor flows and their synergies is a useful task. Figure 6 illustrates on the left side a more comprehensive view of current visitor flows and how a hypothesized cable-car connection between the Dinosaur Museum Aathal (www.sauriermuseum.ch) and Juckerfarm (www.juckerfarm.ch). Selecting only the flows that concern either one or both attractions and producing the variable geometry (right side), highlights the connections, roads, and further sites and attractions, and consequently the value chains, that could indirectly profit or be affected from the project.

While the discussions and decisions arising from working with the variable geometry often point to well-known problems and issues, stakeholders have (1) an objective and more precisely appraisable tool, and (2) a picture that includes the local and regional context. Particularly thanks to the latter aspect, planners and developers lean on a more realistic embedding of the projects at hand. Finally, polyvalent areas and zones intuitively point to nuclei for further development. In fact, it is easier from these areas to derive or deduce diversifications of new visitor flows, since it is more likely to create something new from something existing than something completely new out of nothing.

4   Flow-Based Planning and Management

Visualizing and describing visitor flows reveals only little information on how the flows function (i.e. the inherent demand and supply mechanisms) and on which organization and actor holds which roles and tasks to make those flows happen (steps three and four in the SGDM-heuristic). Figure 7 presents a scheme that lists per strategic visitor flow (SVF) the mechanisms of influence on the supply side (identifying system heads) and on the demand side (identifying market mavens). System heads are the main attractors for the flows. Other attractions, sites, service providers depend on the system head. Market mavens (Clark and Goldsmith 2005) influence and—in some cases—'possess' a great number of the individuals constituting the visitor flows. They can vary considerably and could range from tour operators, travel agents, and influential media to opinion leaders, influential role models in communities or neighborhoods. The right side of the table (see processes) relates to aspects pertaining to the marketing and management processes (analysis, product development and cultivation, information and communication, distribution and sales, system minder). Stakeholders are required (1) to complete the lists with their partial knowledge, (2) pose questions and address challenges, and (3) suggest solutions, projects, actions. In order to do so, they read the table horizontally (see arrow 1), i.e. along the single flow and vertically (see arrow 2), i.e. across the flows. Challenges/problems and actions/initiatives/projects are seen from two different viewpoints: a specific, flow-based view (horizontal) and a development and planning perspective on a higher, superordinate level (vertical).

The practical applications to date have produced the following insights:

– Actors and organizations easily spot their area of interest and focus first on what is in their direct domain of influence. Individual projects and actions are

Fig. 7 Structure table with networks and interdependencies and marketing and management processes per visitor flow. *Source*: own illustration, adapted from Beritelli et al. (2015, p. 54)

established quickly. What was unknown or uncertain becomes now clearly visible and readable.

– Joint projects and collective actions, for instance, between private firms and public institutions but also between several private firms are the second working area. The actors pick the relevant flows, return to the maps, work with specific variable geometries and discuss conditions and implications of major initiatives, regarding infrastructure, attractions, events, services, etc.

– Particularly for joint actions and projects the actors further evaluate who or which organization is capable of leading the initiative and—if costs will arise— how it could be funded.

In the end, the process allows integrating different stakeholder logics (Beritelli 2011a; Tkaczynski et al. 2009) under one intuitive and universally understandable meta-framework that transcends explicit formal restrictions, local peculiarities, or implicit norms and rules (Beritelli 2011b). This produces a (1) local, not central, (2) distributed, not shared, and (3) time-staggered, not simultaneous leadership (Beritelli and Bieger 2014).

5 Case Heidiland

Heidiland is a tourist region, comprising a major area of nineteen municipalities, located in two state territories (cantons of St. Gallen and Graubünden). The region is represented by a destination marketing and management organization (DMO) (www.heidiland.com). While there are tourist spots and attractions with communities depending on tourism (e.g. Bad Ragaz, Flumserberg), many other areas of the destination's territory are characterized by agriculture (e.g. vineyards in the area of Bündner Herrschaft) or various manufacturing industries. In 2013 the DMO started a process based on the SGDM-heuristic, in order to identify the future areas of priorities and actions, for the organization and for the stakeholders in the region. The process has initiated several new initiatives, single and joint actions, new partnerships and arrangements, and is still supporting various actors and organizations. What is presented in the following paragraphs is one selected aspect.

5.1 Understanding the Situation

Through a series of workshops with informants and decision-makers more than 35 strategic visitor flows were identified. In Fig. 8, we see at a first glance the difference between a more static and delimited territory (left side) and the variable geometry of selected existing SVFs (right side). Even though the method was previously based on rather large circles and ellipses, pointing more generally to tourist zones, the picture allows identifying four major polyvalent areas (with according attractions):
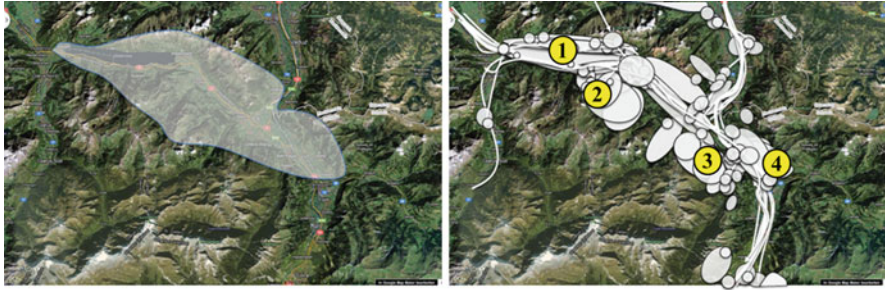
Fig. 8 Territorial boundaries (*left*) versus variable geometry (*right*). *Source*: own illustration. Maps © 2013 GeoBasis-De/BKG, Google

1. Walensee (Lake Walen), including picturesque villages like Quinten and Weesen, served by a lake navigation company,
2. Flumserberg, a winter and summer mountain destination, accessed by two feeder cable-cars, one of them directly from the Swiss Federal Railway station at Unterterzen (connecting with the metropolitan area of Zürich, via urban mass transit trains), at the lakeside of Walensee,
3. Pizol area, hosting a second mountain accessed by other two feeder cable-cars; the heart of Pizol area is constituted by the village of Bad Ragaz, a thermal spa destination close to the historic Tamina Gorge; Bad Ragaz is also home of the largest 5* resort structure in Switzerland, the Grand Resort Bad Ragaz, including three major hotels, two golf courses, a medical health center with clinic, an own spa, and one casino,
4. Bündner Herrschaft, comprising four rural communities located in the canton of Graubünden; one of them is the little city of Maienfeld, according to the novel, the setting of the story of Heidi.

While the region is marketed under the umbrella brand of Heidiland, the stakeholders are as varied as the tourism flows are. In fact, locals and overnight tourists from various establishments (from campsites to 5* hotels) enjoy skiing in the ski areas, hiking and biking at different altitudes and with different means. Tourists visit the region's historic sites, enjoy wine tasting in the Bündner Herrschaft, or undertake excursions to neighboring regions. Planning and developing tourism in such an environment is particularly challenging because

- the region is cut by two important freeway and railway routes (north to south, along the Rhine Valley and north-west to south forming the Linth plain-Walensee-Sarganserland-Chur axis),
- tourism spots alternate with agricultural and industrial zones,
- day tourism and short trips increase because intermodal transport and visitor mobility improve.

As a consequence, the region's stakeholders are investing in visitor management and information strategies so that quick and convenient access to the various

tourism activities and attractions is granted. A second strategy derived from this situation is to focus on some selected areas that are already visited by tourists and to improve their value by investing in infrastructure and site development so that flows further diversify.

5.2   *Focusing on Priority Areas*

By the beginning of 2014, the stakeholders have identified, among others, four major areas of joint intervention with strategic importance. Table 1 summarizes them and how the underlying dynamics resulting from the supportive process described beforehand led the stakeholders to recognizing the relevant challenges and eventually deciding upon the actions and initiatives (Figure 9 locates the initiatives/interventions on the map).

6   Shifting Perspectives and Changing Procedures

The initiatives presented in the previous paragraph are at different stages of implementation. While the first two ones are being currently implemented and will take 2 more years to complete, the concept around Flumserberg has just started its first realization stage (i.e. re-zoning, trails, alp cottages), and the master plan supposed to re-launch Heididorf is still in its conception phase. They all have benefitted from the SGDM heuristic because the main stakeholders and actors could gain an objective and easily understandable view of the current situation and of future scenarios. Yet, more than this, actors have shifted their perspectives

- from an organizational/institutional and therefore supply-sided to a demand-driven, flow-based reality
- from tourism as a generable/homogenizable (because too chaotic) situation to a co-existence of various, diverse tourism flows,
- from the contained view of overnight tourists to a more relaxed approach that includes day tourists and visitors from the region as well as locals,
- from assuming that tourism as known would persist for decades (tourism as a stable, enduring industry) to realizing the dynamics of visitor flows that reflect the changes in society (tourism as a social phenomenon).

The shift of perspectives has led the actors to adapt their way of planning. On one side they have revised the sequence of how to proceed in development plans. In fact, the traditional approach often offers a perimeter or a parcel of land that may be well-located and therefore potentially interesting for various forms of development and use (including tourism). Then, ideally after a necessary re-zoning, the land-owner looks for an interesting investor who proposes a concept, suitable enough for the region and the stakeholders in the area. Yet, the project will be successful only if

Table 1 Dynamics causing challenges legitimizing initiatives carried by stakeholders. *Source*: own illustration

Underlying dynamics	Challenges	Initiatives (1–4)[a]	Main stakeholders
• Increase of various flows of biking and hiking in the region • Numerous developing visitor flows including families with children	• Lake Walen is not easily accessible at every place/village • Railway and freeway keep (physically and mentally) the visitors away from the south lakeside	Restructuring lakeside paths and trails with the aim of creating a continuous trail of leisure activities for all generations (including playgrounds) around the Walensee (viability concept for pedestrians, strollers, wheelchairs, bikes)	• Municipality of Quarten, in accordance with neighboring municipalities around the lake
• Increase of various flows of biking in the region • Increasing number of up- and downhill bikers around Flumserberg (specific requests for a network of routes, particularly between peak and lake)	• Flumserberg is already a popular day-trip destination for up-/downhill biking but well-prepared and specific routes are missing	Developing a bike route network for Flumserberg (5 tracks on slopes, one on mountain top, one at lakeside) separate from hiking trails, connecting the network to the main transportation (cable-car, railway, lake navigation) and further services (hotels, restaurants)	• Cable-car company Flumserberg • Municipalities of Flumserberg and Quarten and various land owners
• Increase of various flows of biking and hiking in the region • Decrease of traditional stationary (overnight) visitors for skiing and winter sports • First successful travel packages for groups combining overnight, traditional mountain experience, trips around the lake, etc.	• The alps around Flumserberg and the mountain top areas developed in the past decades have been developed piecemeal • Old but still neat alp cottages are scattered • Buildings and services in more densely built zones (e.g. Tannenheim and Tannenboden) lack in an overall picture an inviting atmosphere and hospitality	Launching a tourist development plan, considering revival of alp cottages, rural/agricultural alp experiences, new hiking trails and signalizations, dismantling restructuring, or expanding existing buildings, rezoning for a major holiday resort (hotel and wellness) on either one of the main zones, identifying and developing points of encounters, building the main point of encounter at Tannenboden, revising road and traffic concept	• Canton of St. Gallen (departments of economics and of constructions/cantonal works) • Municipalities of Flumserberg and Quarten and various land owners • Cable-car company Flumserberg • Heidiland Tourismus (DMO)

(continued)

Table 1 (continued)

Underlying dynamics	Challenges	Initiatives (1–4)[a]	Main stakeholders
• Increase of visitor flows to Heididorf (Heidi village, www.heididorf.ch) from day visitors (tour operators by bus) and overnight visitors, mainly from Bad Ragaz • Increase of flows hikers and motorized visitors combining culinary experiences and/or wine tasting with a visit to Heididorf	• Heididorf offers only few attractions and experiences for only a short stay • Access to Heididorf is problematic (lack of parking spaces) • To live the full experience, visitors must take more time particularly to hike up the hill (Heidialp)	Extending the Heidi village with additional stations and historic buildings (still keeping the experience true to the novel), developing an access for greater number of visitors, in respect with the given transit conditions through or around the little city of Maienfeld, general rezoning of the perimeter of and around Heididorf	• Heididorf AG (Heididorf Inc.) • canton of Graubünden (departments of economics and of constructions/cantonal works)

Source: own illustration
[a]Read 1–4 top down, correspond to 1–4 in Fig. 9
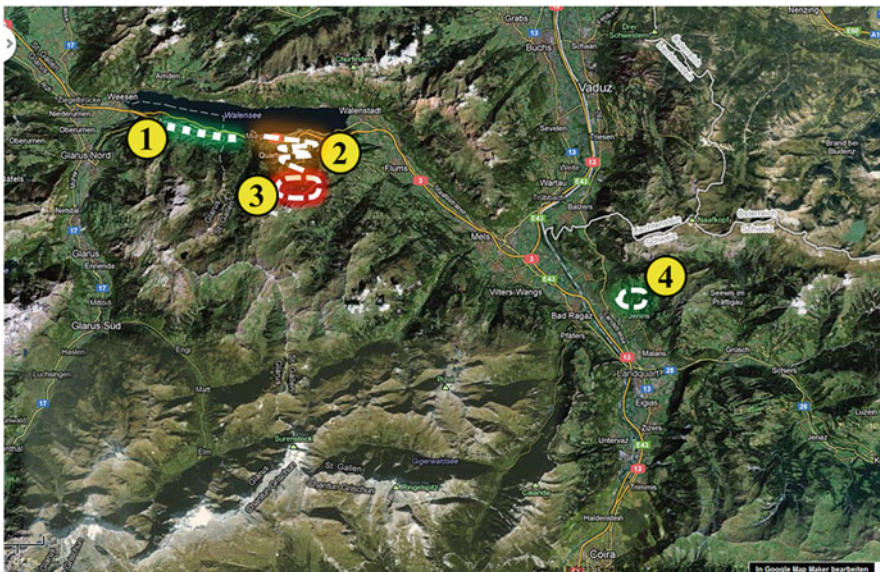
Fig. 9 Selected initiatives/interventions in the Heidiland region. *Source*: own illustration, maps © 2013 GeoBasis-De/BKG, Google

there is a demand (i.e. tourist flows) that appreciates and values the new site/attraction/resort. Working with the SGDM-heuristic requires first to understand the existing visitor flows and their evolution and to derive consequences for new visitor flows. A development plan based on this precursor is embedded in the

land-related approach

identifying (re-zoned) land → finding investor/ developer → implementing concept/ plan

market success/ failure?

identifying visitor flows → simulating new visitor flows → embedding concept/ plan → implementing concept/ plan

flow-based approach
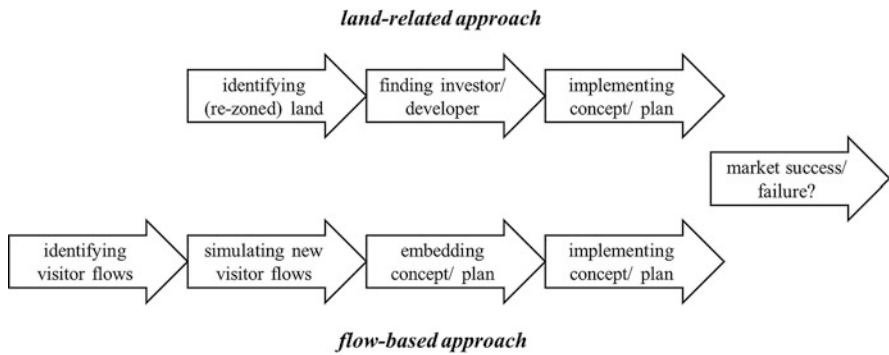
Fig. 10 Land-related versus flow-based approach. *Source*: own illustration

existing portfolio of demand and hence of the specific regional resources and capacities. This is likely to yield a higher probability of success. Figure 10 illustrates the more land-related (above) against the flow-based (below) planning and development approach.

Obviously, there are many new attractions and resorts created out of the green, even in isolated areas and with no relation or connection to existing visitor flows. However, the underlying entrepreneurial risk and the number of unknown factors and uncertainties are actually greater. Also, in environments like the ones of Heidiland, of Switzerland, and of many other places and regions across the world, developing tourist sites and attractions out of the green becomes an increasingly difficult task because of environmental, social, regulatory, and finally and foremost economic reasons. We think that evolutionary flow-based tourism development must at least be a valid option. In the end, it builds on a historically grown tourism portfolio with an according context, contingencies, and local culture (cf. Polanyi 1957). Figure 11 schematically illustrates two alternative historical paths with six timeframes. The paths (above and below) represent the development and direction of one or a group of related visitor flows, the dots major changes, for instance a creation or extension of a site or an attraction. The evolutionary development (above) builds on existing flows and continuously diversifies into similar, related areas. Some flows eventually cease to exist, some other are successfully renewed/lead into a next generation of visitors. The revolutionary development (below) faces a similar path until t3. Yet, from then, for instance due to a lack of earlier diversification of visitor flows, it performs a leap, creating in t4 a completely new branch (i.e. set of visitor flows). While in the end, this path may be a viable option for a region, it is associated with more dramatic changes, turmoil, and conflicts. Often this scenario occurs when a region has built for decades on the success of existing visitor flows without considering changes in the demand side and without proactively adapting its portfolio of attractions, infrastructure, and services.
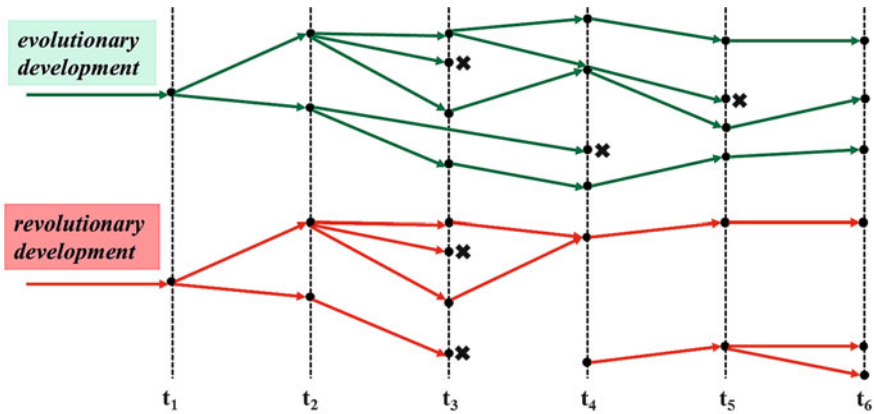
Fig. 11 Evolutionary versus revolutionary development. *Source*: own illustration

7   Concluding Remarks

The aim of this chapter was to explain that tourism is not only a generic, rather stable construct but a multi-faceted, highly dynamic social phenomenon. If planners want to deal with such a reality, they must consider that what they build today is not only exposed to future changes but to great variability of what it means today, depending on who is visiting the place. This requires them to look at tourism not only as one function in space. In fact, in the past decades we have primarily looked at the conditions of the functional space—for instance, Gunn speaks of 'resource factors' or 'foundation factors' (1997, p. 59), such as transportation, water, wildlife, city—and we have added tourism as one more function. However, tourism is diverse and dynamic, so that we must consider multiple tourism functions in the same given space. Also, planners are well advised to recognize that most cases of today's tourism development are less an exercise of isolated conception and implementation, but resemble more systemic intervention. In fact, we must understand tourism planning and development as a form of intervention in complex and dynamic systems: the conditions and the framework are complex and dynamic, so are the implications and consequences. While complexity is easy to visualize (variable geometry), the dynamics are considered in the SGDM-heuristic but they still need a more realistic technique of representation (e.g. video-supported 3D simulations). As computer aided planning and design are quickly progressing, we trust that soon there will be method and means to carry out such processes even with a greater number of actors in a more precise and realistic stage. Finally, turning away from the land-related approach (normally preferred from an investor/developer perspective) towards a flow-based approach will result in a more considerate evaluation of investment and thus decrease the risks associated to such a type of development. Moreover, the herein presented alternative planning process forces all involved parties to explicitly account for the most important foundation for any

such projects, which is to source from an existing or create a durable, sufficient flow of demand.

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Experiences Through Design and Innovation Along Touch Points

Florian J. Zach and Dejan Krizaj

Abstract There is increased interest both by practitioners and academics in the design aspect when developing new tourism services. In particular the design of travel experiences has attracted widespread research interest over the past few years. This chapter reviews popular innovation types and experience design aspects such as design thinking and blue printing. The goal of this chapter is to merge the competing approaches towards tourism innovation; technological and administrative innovation applied to increase efficiencies and reduce cost versus customer-centric design thinking. The proposed EDIT (Experiences through Design, Innovation and Touch points) model provides a structured approach to new service development. Most importantly the model can be approached from design thinking and a traditional innovation adoption process and is flexible to accommodate different firm types and new service development skills. This chapter also discusses future theoretical and empirical studies.

Keywords Innovation • Design thinking • Experience design

1 Introduction

In Schumpeter's (1947) view innovation, defined as "[...] the doing of new things or the doing of things that are already being done in a new way [...]" (p. 151), creates something new, while destroying something old. This process of *creative destruction* is at the heart of economic development and challenges entrepreneurs, governments and the public alike. Within the context of tourism decision makers are continuously developing their destination to retain current and attract new visitors. Doing so requires a continuous adaptation to trends and changes that shape the travel experience. Over the past decade practitioners and academics

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alike identified the need to incorporate experience design aspects into the destination development process to create offerings that by themselves or in conjunction with others create memorable positive experiences (Dong and Siu 2013; Tussyadiah 2014).

Leonard and Rayport (1997) argue that innovations thoughtful of design are sought after by consumers. In service literature, where consumers play an integral part in service production, it was found that including consumers in the development process is beneficial to create new (Cruickshank 2010) and to improve existing services (Bate and Robert 2006). Tourism research focused on travel experiences that cater to the needs and wants of travelers and create long-lasting positive memories and excitement about the trip. Initial travel motivation studies identified tourism specific push and pull factors to provide an early understanding for the development of new tourism and hospitality services (Lambert and Watson 1984). More recently design thinking was applied to better understand emotional and sensory experiences at catered events (Pullman and Gross 2004), visits to theme parks (Dong and Siu 2013), and effect of technology, for example persuasiveness of websites (Kim and Fesenmaier 2008), and value added of navigational tools (Tussyadiah and Zach 2012). This suggests that tourism innovation benefits from design thinking to create meaningful experiences.

To better understand tourism innovation from an experience design perspective this chapter reviews popular tourism innovation typologies. Typologies enable us to provide a framework to bridge the lack of adequate theoretical and empirical analyses (Hipp and Grupp 2005). Common innovation types are evaluated using design thinking to identify opportunities to create experiences for travelers. This bisection of innovation and design is an experience driven understanding of tourism innovation and provides a template to develop innovations that contribute to business performance through customer centric experiences rather than administrative or technological innovation that put organizational aspects first. The goal of this chapter is to develop a model that integrates the compartmentalized view on innovation with experience design thinking to develop new or contribute to existing products and services to increase visitor experiences. However, it is beyond the scope of this chapter to develop performance indicators that measure the magnitude of an innovation or its newness. Rather, the goal of this chapter is to understand and map contributions of innovation to experiences. However, future studies to quantify the effect are encouraged. Specifically, we discuss innovation in tourism (Sect. 2) and popular types of tourism innovation (Sect. 3) followed by experience design aspects of tourism innovation (Sect. 4). Next we apply design elements to innovation types (Sect. 5) and provide conclusions and suggestion for future research.

2 Innovation Development and Adoption in Tourism

The travel experience consists of a wide range of services offered by multiple providers tourists interact with from the planning phase to onsite visits and post-visitation reviews. In response to changes in consumer and travel behavior

providers are required to adapt and to stay relevant in the market place. The demand-driven nature of tourism forces providers to innovate by adding and improving tourism offerings at the destination (Brooker and Joppe 2014; Hjalager 2002) and at the firm level (Pikkemaat and Peters 2005). The importance of this innovation activity is generally recognized and viewed as a critical success factor. Defining innovation, however, is a challenge. Following Hjalager (2010) this chapter adopts Schumpeter's (1947) definition of innovation as "[...] new things or the doing of things that are already being done in a new way [...]" (p. 151). Schumpeter's distinction between the entrepreneur who implements and adopts an innovation and "[...] gets things done [...]" (p. 152) versus the inventor who produces ideas suggests that innovation is new to the entrepreneur, but not necessarily new to the market. Innovation, thus, can be something new regardless of originating from within or outside the firm (Woodman et al. 1993). Indeed, it is rare that tourism organizations are inventors of breakthrough innovations; they are rather adopters of innovations from other areas (Hjalager 2002; Volo 2005). As such, this chapter defines innovation as something new to an organization or an organization's new way of doing something already existing. This definition steers clear of the discussion on the degree of newness or novelty, thus allowing to focus on new products and services that challenge organization resources and competencies (Menor et al. 2002).

While originating in manufacturing the Schumpeterian perspective of innovation has been widely adopted in service (e.g. Barras 1986; Drejer 2004) and tourism research (Hjalager 2010; Jacob et al. 2003; Peters and Pikkemaat 2005; Volo 2005). Innovation and its importance for tourism development have been studied to define tourism innovation (Hjalager 1997, 2010), to develop policies that support innovative and forward looking tourism development (Dredge 2006), to measure tourism innovation itself and its outcomes (Krizaj et al. 2014; Peters and Pikkemaat 2005; Volo 2006), to understand the effect of information technology (Zach et al. 2010), to highlight the role of innovation for sustainable development (Moscardo 2008) and to understand the role of collaboration (e.g. Nordin 2003; Zach 2012). More importantly this increased attention on innovation in tourism and the rise of the service economy drew attention from supranational organizations to measure service innovation (OECD Eurostat 2005) and to include the term innovation in the official thesaurus of tourism and leisure activities (UNTWO 2001).

Innovation is an ongoing process that spans from the initial idea or the identification of an invention to its successful implementation (Alam and Perry 2002). This process typically encompasses a series of programmed and consecutive necessary steps also known as new service development (Edvardsson and Olsson 1996). It enables organizations to develop or adopt tourism service innovations that best fit the service delivery process and the resulting design of the new service in a timely manner (Ottenbacher et al. 2005; Tajeddini 2011). Recent tourism studies pay particular attention to the design of new services in an effort to create quality experiences which are seen as the core of travel (Dong and Siu 2013; Tussyadiah 2014). The importance of providing meaningful services that create value for consumers has been identified in Pine and Gilmore's (1998) experience

economy. To emphasize the attention on experiences Sundbo and Hagedorn-Rasmussen (2008) refer to tourism as an experience production system. Consumers expect tourism services to be aligned with each other and to contribute to the overall destination experience. Therefore the design of new services becomes a critical aspect in a development process aiming at experience-centric services. Evaluating tourism and hospitality offerings from an experience design perspective provides an opportunity to identify where and how value is created for visitors (e.g. Pullman and Gross 2004; Zomerdijk and Voss 2010). Tourism innovation, thus, needs to incorporate an experience design view to provide new or add to existing tourism services and products that create value for travelers. The increased interest by practitioners and academics in the development of new tourism services powered by experience-design warrants an evaluation of popular innovation types as a guide for future innovation development.

3 Types of Tourism Innovation

To better understand innovation tourism and hospitality research identified several types. Hjalager (1997) developed a set of five innovation types and refined them in a later paper (Hjalager 2010). Her types were successfully applied to understand internationalization in tourism (Williams and Shaw 2011) and to measure innovation (Camisón and Monfort-Mir 2011). Hjalager's (1997) initial paper evaluates innovation and tourism development through the lens of agents in tourism and leisure (i.e. tourism service providers and other stakeholders) that seek to improve their economic situation. In particular changes regarding sustainable tourism and resulting tourism innovations were evaluated and arranged in five innovation types. Extending the scope beyond sustainability to evaluate innovations in various areas of tourism and hospitality Hjalager (2010) build upon the 1997 paper to update and better ground the five innovation types. The studies employ a technological view of innovation as put forward by Dosi (1982) and a traditional Schumpeterian definition of innovation that distinguishes between inventions and innovation in that the latter is the adoption of the former with the goal to result in commercial success. For tourism Hjalager argues that inventions stem from suppliers and other fields and are adopted by the agents.

This chapter uses tourism innovation types as defined by Hjalager (2010) and Jacob et al. (2003) to provide a comprehensive list of innovation types that can contribute to customer experiences. Hjalager's (2010) paper is our starting point: first, product or service innovations include innovations consumers can immediately observe and identify as new such as hotel concepts (e.g. true budget or design hotels), heritage driven experiences and manmade attractions as well as a new, creative bundling of tourism products and services to respond to consumer interests (e.g. medical tourism). While tangible artifacts are critical to the production of tourism services it is useful to treat them as two separate types; as products

(e.g. hotel's exterior gardens) and as services (e.g. check-in). It is argued that products often contribute to the tourism infrastructure upon which services are built. As such, services are activities that tourists co-create utilizing products and staff. Second, process innovations contribute to operational success through lower cost, higher efficiency or effectiveness. These are possible through the adoption of technology (e.g. food processing, low flow water filters) whereby information technology plays a key role for tourism (e.g. destination website). Importantly, Hjalager (2010) points out that technology is often used to increase efficiency, but has little consideration for customer experiences. Third, managerial innovations are mostly internal to retain staff (e.g. incentive pay, training, career planning) and achieve buy-in from volunteers, but also includes onsets of customer co-creation. Fourth, management innovations refer to outcomes of marketing concepts resulting in new ways of communication and establishing relationships for example through loyalty programs or online travel agencies. Furthermore, Hjalager (2010) refers to these changes as marketing innovations suggesting a focus on production, organizational structure and administrative processes as suggested by Han et al. (1998). However, a more appropriate interpretation of marketing innovations is that they lead to new communications and relationships as they create value by bundling new and current products, services and delivery. Information technology development such as the internet and resulting changes in consumer behavior and cobranding opportunities, as mentioned by Hjalager, too are such value creating marketing innovations. Last, institutional innovations are changes to environmental structures such as business networks and resulting new relationships or power changes within existing ones (e.g. booking websites) as well as legal frameworks (e.g. franchising regulation or labels/certificates).

Jacob et al. (2003), while not explicitly building upon Hjalager rely on mostly the same categories and similar definitions. However, there are two substantial differences between Hjalager (2010) and Jacob et al. (2003). First, the latter does not include institutional changes. However, from a tourism perspective, and as argued by Hjalager (2010), changes and developments in habits and traditions, both by individuals and organization, can be leveraged by tourism organizations in their pursuit of organizational success. Second, Jacob et al. (2003) include market innovation as a type of innovation that refers to organizations expanding market segments or entering a new market space. Following the above definition of innovation as a new thing as perceived by the introducing organization, market innovation is relevant from the point of few of an organization entering a new geographical area, pursuing a new market segment. For tourism destinations, this also includes the entrance of new business types (e.g. peer-to-peer accommodation) which add value to the destination, whereas an existing business views such an entrant as additional competition. Table 1 provides an overview on discussed innovation types and types used in this chapter.

Table 1 Tourism innovation types and definition

Hjalager (2010)	Jacob et al. (2003)	Current chapter	Definition
Product or service innovation	Product innovation	Product innovation	Tangible artifacts consumers can immediately observe and identify as new.
		Service innovation	Intangible artifacts consumers can immediately observe identify as new.
Classical process innovation	Process innovation	Process innovation	Internal operational procedures (mostly) aimed at efficiency and effectiveness.
Managerial innovation	Organizational innovation (internal and external)	Management innovation	Mechanisms to recruit, manage and retain human resources (paid and volunteer).
Marketing innovation	Innovation in commercialization and provision	Marketing innovation	Ways to communicate and build relationships with customers.
n/a	Market innovation	Market innovation	Entering new markets (geography and segments) and at the destination level entrance of new business types.
Institutional innovation	n/a	Institutional innovation	Changes to organizational structure, habits and traditions in the market place.

4 Experience Design-Driven Tourism Innovation

Creating memorable experiences is a cornerstone of tourism since the first grand-tours in the seventeenth century. Much of the key elements of travel have not changed and are still prevalent today as tourists plan, travel, remember and share their travels. Experiences are uniquely created from sensory and psychological experiences. Indeed, Helkkula et al. (2012) argue that service experiences are ongoing, circular, iterative and individual to each customer. Tourism firms increasingly manage the travel experience at various stages; for example when searching for information online (Kim and Fesenmaier 2008) or visiting a man-made destination like a theme parks (Zomerdijk and Voss 2010). This requires service systems to contain functional, mechanical and human cues (Berry et al. 2006).

Travel experiences are a collection of multiple interactions with service providers that are evaluated holistically by tourists (Dong and Siu 2013). As such the romance of travel happens on the backdrop of commercial business decisions to generate a profit. Business considerations often focus on the effective and efficient delivery of services for business success (e.g. move the tourists from point A to point B) without much consideration for tourists' experiences. Somewhere along the tourism businesses' evolution it appears that decision makers were not able to see the proverbial experience trees in the tourism forest anymore. For example, Prentice et al. (1998) emphasized the need to shift from an activity-based management focus back to experience-based management. This chapter follows this argument and builds on tourism research that supports design thinking and design

philosophy to holistically understand travel experiences. Design philosophy goes beyond technical considerations and includes tourists' desire of higher aesthetic and cognitive experiences of the world around them, orchestrated as much as possible with straightforwardness and comfort (Helkkula et al. 2012; Tussyadiah 2014).

4.1 Innovation Along Touch Points

A successful approach to implement experience design, especially in the tourism industry is to follow a roadmap, the so called *customer journey*, to evaluate the travel experience holistically. Understanding customers' steps to achieve a desired outcome enables providers to fully understand individual interactions (touch points) and their contribution to the overall travel experience (Tax et al. 2013; Zomerdijk and Voss 2010). This makes each touch point essential to the development and design process. Evaluating touch points in chronological order makes the tourist the center of the analysis as a resource integrator, rather than an individual service provider (Lusch and Vargo 2006; Tax et al. 2013). Tourism providers can play three different roles (Tax et al. 2013): they can be an isolated part of the overall service delivery network, they may be subcontractors for a coordinator of such a network, or they can take the initiative in all or most of the touch points as the coordinators of the overall travel experience (which usually stretches over the borders of more than one tourism service provider on a tourist destination).

The critical role of front-line employees in providing travel experiences resulted in the development of the employee journey by Gruber et al. (2015). Satisfactory experiences are not possible if the employees do not know, practice and send signals of quality to travelers (Ottenbacher and Gnoth 2005). From a design thinking perspective the customer journey is an experience-based advancement of activity-based management while the employee journey adds employee satisfaction and self-development to process workflow management (Prentice et al. 1998; Gruber et al. 2015). The importance of design elements as part of the travel experience suggests that researchers and practitioners need to implement them in the development of travel experiences. It is argued that design elements contributing directly and indirectly (through employees and physical aspects) should be considered in the tourism innovation process.

At the example of a customer journey for a core tourism service, the lodging experience, we are analyzing connections between design-driven experiences and tourism innovation. Some or all relevant touch points in the customer journey were useful stepping stones in studies applying design analysis (Teixeira et al. 2012) and road maps (Johnston and Kong 2011). Focusing only on the lodging experience reduces the complexity of the overall travel experience in a destination and increases the clarity of the connections. However, since the customer journey is consumer-centric it does not go beyond front-office interactions to back-office operations. Indeed, Bitner et al. (2008) suggested the service blueprint as a vehicle to identify customer relationships with the organization, but also organizational

elements such as physical elements and operational stages visible and invisible to the customer. As the customer moves along her journey each touch point adding to the overall experience is affected by one or more processes, tangible and intangible artifacts. Key touch points in a lodging guests' journey are pre-arrival activities (e.g. search, booking), arrival, stay, departure and post-departure (e.g. review and word of mouth). Table 2 shows the above identified innovation types to lodging touch points. Brief descriptions linking operational understanding of innovation and design thinking are provided. It is important to note that not every innovation will contribute to each stage in the customer journey.

For each touch point service providers need to evaluate if an innovation contributes to organizational success either directly (e.g. through cost reductions) or indirectly (e.g. through customer satisfaction that results in re-visitation or recommendation). Johnston and Kong (2011) argue that value is created if design elements contribute to tourists' experiences, reduce cost, increase efficiency gains and result in staff satisfaction. The inclusion of experience design in the tourism innovation process enables the development and adoption of offerings that contribute to all or some of these values.

4.2 Innovation and Design Thinking

In designing and managing services providers need to consider the physical context of the new thing such an atmosphere with cues that promote service quality (Berry et al. 2006) and the relational context like the interaction with service staff and other guests (Bitner et al. 2008; Gruber et al. 2015). Pullman and Gross (2004) evaluated hospitality services in a VIP tent and argue that design experiences need to be considered to create value for the organization; specifically meaningful emotional responses (direct value) and loyalty (indirect value). According to Zomerdijk and Voss (2010) value creation takes place along six contextual areas with these design elements:

1. *Series of cues* are signposts reflected by products, services and the environment, which lead tourist on the road between the distinct touch points. With their help the tourist service is performed effortlessly, seemingly spontaneous and hassle free.
2. *Sensory design* focuses on tourist's perception of tourism services past its five basic senses. Clever communication through all five channels can result in more intensive and immersive travel experience.
3. *Front-line engagement* stresses the importance of staff in direct contact with tourists and staffs' professional convergence with tourists that may affect desired responses and experience.
4. *Dramatic structure of events* is a continuation of the logic of series of cues usage. In the latter, the travel experience is influenced through carefully designed cues

Table 2 Examples for innovation types by touch points for lodging guests

Touch points → Innovation types (examples) ↓	Pre-arrival	Arrival	Stay	Departure	Post-departure
Product (Lobby)		Catering equipment to promote local finger food; decorative local elements.	Local street food experience offered at the entrance to lobby.	Charity kiosk for clothes guests want to donate or don't want to use any more after the holidays.	
Service (Concierge)	Concierge online service offered to guest right after the booking.	Concierge explains "lobby-offered" local finger food specifics to interested guests and makes the first contact.	Concierge available also as a guide to hotels' back-office visits.	Provide tourists with information on events they participated in, maybe even pictures or press clipping.	
Process (Online booking system)	Adding concierge online functionality to booking application.	Optional mobile app that informs staff when tourist is in the vicinity and enables personalized express check-in.	Mobile booking add-on for ordering additional products and services with delivery to any spot in the 5 km radius from the hotel.	Optional mobile app that informs staff when soon-to-be checked-out tourist is in the vicinity and enables personalized express check-out.	Booking system add-on to order hotel's products to tourist's home address.
Managerial (Organizational restructuring)		Improved and faster service delivery.	Improved and faster service delivery.	Improved and faster service delivery.	
Marketing (Customer relationship management)	Personalized advertising and promotions.	Fast check-in process and promotional welcome.	Offering services (e.g. tours) that match the customer profile.	Personalized good-bye.	Send invitation to evaluate and give feedback.
Market (Entering new geographical market)	Guests can choose a new location and stay with "their" brand.				

Table 2 (continued)

Touch points → Innovation types (examples) ↓	Pre-arrival	Arrival	Stay	Departure	Post-departure
Institutional (Voluntary certificate)	Adaptation of promotional narratives to include certificate values.	Display of certificate and certificate driven artifacts.	Display of certificate and certificate driven artifacts.	Display of certificate and certificate driven artifacts.	

lead. In the former, the influencing role is achieved through symbolic meanings composed in a solid and compelling story, and its appropriate dramatic structure.

5. The *presence of fellow customers*, apart from cues and front-line personnel, represent the third group of people who co-experience the observed tourist's service and may affect the experiences of each other. Therefore, it is necessary to focus on other tourists that come before and after the current tourist and which together form a group of individuals that interact with each other with their emotions and responses.

6. *Back/front-stage coupling* is focusing on staff, which is chiefly responsible for increased efficiency and productivity. However, as the theater backstage workers also co-create the show, this also applies to tourism where back-stage staff have to be in constant connection with the developments on the tourism stage, so they too can contribute to the overall tourist's experience.

The above examples for innovation types are evaluated through the lens of these design elements. Table 3 provides possible aspects design thinking can contribute to the innovation development process. As such, the operational understanding of innovation is broken down by design aspects that can affect multiple touch points, rather than by a procedural (chronological) view, to contribute to tourism experiences. This provides a holistic evaluation of tourism experiences using multiple design elements that can be included in the innovation process to create new or improved travel experiences.

4.3   EDIT: Experiences Through Design, Innovation and Touch Points

To fully understand the potential of innovation to add to travel experiences it is argued that a three dimensional new service development space enables decision makers and researchers to focus on the nature of each touch point and how to improve experiences at each touch point with design elements. As such, this three

Table 3 Examples for the effect of design thinking (by design element) on guest experiences for identified innovation types

Service elements → Innovation types (examples) ↓	Series of cues	Sensory design	Front line engagement	Dramatic structure of events	Presence of fellow customers	Back/Front-stage coupling
Product (Lobby)	Ease of navigation during arrival with the help of decorated and informative signs.	Pleasant music, fragrances, reduction of mechanical sounds, furniture cushioning, carpet materials.	Staff attitude that encourages respectful communication.	Narratives used at arrival to communicate hotel's mission and its placement in local environment and history.	Layout and processes that guarantee guest privacy at check-in; handling flow during peak hours; opportunities to mingle.	Prompt and solution oriented addressing of guests needs between check in, concierge and other departments.
Service (Concierge)	Dedicated desk in the lobby; display of area information (whiteboard, touchscreen computer); concierge uniform.	Brochures, pictures, videos, music or fragrances to showcase and represent local attractions and services.	Staff attitude that encourages guests to creatively explore and book additional activities.	Presentation of the concierge service as the key intermediary between guests' stay in the hotel and in-depth exploring of the surrounding area.	Waiting line to provide privacy and opportunities to mingle to exchange information with other guests while waiting table.	Prompt and solution oriented addressing of guests needs between concierge and providers of outdoor activities.
Process (Online booking system)	Booking system presented as one-stop and hassle free entrance to the best accommodation in the destination. Indicating "best price guarantee" at company owned system.	Application of technical user -experience (UX) elements to guarantee most straightforward system use (e.g. 360-views, videos, maps of the area).	Prompt and resourceful feedback through online chat and phone support.	Attractive entrance to the hotel's story and mission from the moment of reading hotel and room descriptions.	Absolute privacy when booking, but opportunity to share experiences after the stay.	Immediate and resourceful communication between online chat/phone support and developers of the application.

(continued)

Table 3 (continued)

Service elements → / Innovation types (examples) ↓	Series of cues	Sensory design	Front line engagement	Dramatic structure of events	Presence of fellow customers	Back/Front-stage coupling
Managerial (Organizational restructuring)	Ubiquitous use of brand values, certificates, employee credentials and titles, especially form back-of-the-house, in customer directed communication.	Inter-departmental design task force consisting of front-line employees.	Empower touch point employees to go break through organizational structure to find satisfactory and yet effective solutions; use solutions as guide for future innovations.	Develop a guest story line that runs through all departments and arrange tasks around it.	Enable all employees to interact with customers privately or in groups, depending on guests' desire, not department structure (e.g. small meeting rooms for sensitive topics).	Develop inter-departmental collaboration and knowledge data-bases (e.g. through team building exercises, joint task forces).
Marketing (Customer relationship management)	Design non-invasive, always available hidden treasure challenge through-out hotel complex that emphasizes brand value and quality.	Small gifts that resemble local food, wine and music that returning guests can find randomly in their rooms and at dining table.	Adoption of CRM functions that help front line employees to remember the habits of returning guests.	Reading evenings of local legends and stories.	Promoting the creative loyalty gifts scheme all over hotel.	Informative back office facilities trips for returning guests.

dimensional experience space consists along the axes of design, innovation and touch points and represents the relationship between these three basic elements of travel experiences. The EDIT model disrupts a static operational approach to innovation along touch points and provides a guide to improve experiences by aligning multiple moving parts. As such, the model provides a holistic, 360° view into all possible areas of tourism supply innovation. Most importantly, the new service development process creates experiences regardless of the initial dimension considered by the organization as long as the other dimensions are integrated as well.

For instance, lodging properties planning changes to their hotel lobby (product innovation) need to consider six design elements that span three touch points. In other words, these are 18 ways of looking at guest experiences in the lobby (following Tables 2 and 3). At this point decision makers can focus on a design element that enhances the lobby across all three touch points. Alternatively, if a property seeks to improve the arrival experience it is provided with six design elements across six types of innovation (all but market innovation), resulting in 36 possibilities to improve the guest experience (following Tables 2 and 3). Focusing on one touch point (e.g. arrival) decision makers can incorporate multiple design elements in the lobby. Last, decision makers could seek to improve the management of fellow guests at all touch points and across all types of innovation (42 possibilities; following Tables 2 and 3). Focusing on the lobby area, all possible innovation types that can contribute need to be considered. Solutions to increase guest experiences in the lobby by better managing the presence of fellow guests at departure can include a designated drop off spot for luggage storage, a lounge to wait for the a shuttle bus or a designated taxi line (cordoned off). On the other hand, front-line staff can provide fast and accurate assistance in the booking process via chat when a loyal customer is logged into the booking system website. The proposed EDIT model, thus, enables decision makers to edit resources and assets along any of the three dimensions to contribute to guest experiences (Fig. 1).

In addition to the flexibility of the point of entry to the new service development process, the EDIT model can also be adapted to specific needs of any tourism service provider. Indeed, the granularity of the three dimensions is variable. First, tourism product and service offerings drive the number of touch points. The number varies between organizations based on experience and strategic approach. Touch points can be added, removed or split further to even smaller building blocks. Next, the proposed basic innovation types can be additionally refined or merged to properly reflect the organization type. Last, design elements can be expanded depending as a result of current organizational settings and future market opportunities. In this chapter we argue that these elements explain in detail how tourists' experiences are affected. However, design elements could also be used to explain experiences created for other stakeholders. For example, while Zomerdijk and Voss (2010) focus on key areas for design of new customer experiences, Gruber et al. (2015) aim for the six design elements for the new workplace staff experience. Throughout the tourism system, in addition to tourists and staff, there are also local residents and organizations, business partners, the natural environment. All of

Fig. 1 The EDIT model
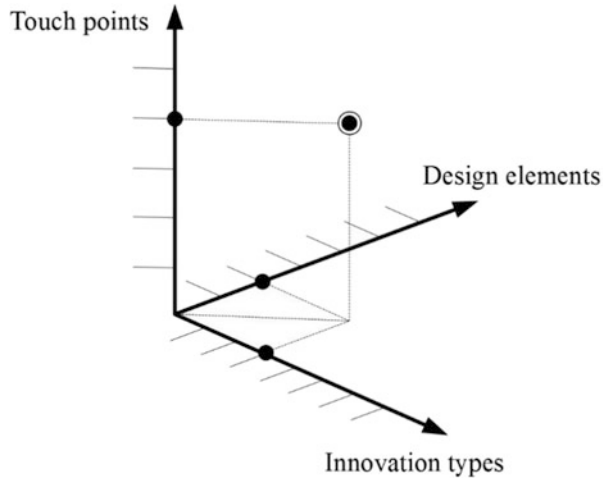
which could also be analyzed through their experience design elements affecting and being affected by the customer journey perspective. As such, the EDIT model is both sturdy and versatile. It can be adapted for the needs of the organization and be refined to the organization's level of innovation experience and capacity in new service development to guide a holistic new service development process for sustainable success.

5   Concluding Remarks

This chapter explores and establishes connections between tourism innovation and design thinking. While these two concepts are closely related their respective approaches to the development of new services are to some extent incompatible. Innovation is typically seen as technical or administrative advances that are integrated in current or result in new services, often driven through research and development by suppliers to tourism service providers. Hence, the invention comes first, market research identifies possible uses in the market place and new services are developed (Hjalager 1997). Design thinking, on the other hand puts the customer experiences first and seeks solutions that enhance experiences or address changes in the market place (Tussyadiah 2014). The goal was to develop a model that combines these schools of thought to provide a framework for future studies and as a guideline for practitioners.

The proposed EDIT model provides two substantial contributions to tourism research. First, it integrates traditional innovation approaches through various innovation types, follows tourists' path through their experience along touch points, thus centering service provision on the consumer rather than the provider, and emphasizes this consumer-centric perspective through design elements. This

provides a holistic approach to new or improved tourism services regardless of the starting point. Second, while the model identified key characteristics for each of the three model dimensions it is also flexible enough to be applied for various types of organizations in various stages of their development and with varying degrees of new service development capabilities. This allows tourism researchers to refine the model and to identify the optimal degree of granularity for each dimension based on study context. Third, this chapter answers calls to better understand design thinking for tourism development (Dong and Siu 2013; Dredge 1999; Tussyadiah 2014). Furthermore, this model is also useful for practitioners. Tourism service providers can use this model as a guide to the development of new tourism offerings. By thinking along all three dimensions at onces elements critical to memorable travel experiences should become obvious and can as such be integrated in to the development process. This enables practitioners to develop experiences along a certain (edited) storyline.

There are, however, limitations that should be addressed in future research. The model was applied to the lodging experience. As such, a model reflecting experiences sought after by other or multiple stakeholders at once could bridge the gap between experience design thinking and operational and technical processes even more. This model also bypassed the discussion of measuring innovation in favor of the contribution innovation can have for an organization. While innovation count models exist (e.g. Pikkemaat and Peters 2005) this model can be a starting point to understand the value design innovation can create for an organization. As such, this chapter provides a vital first step for design-driven innovation, but it is necessary to understand value creation from the point of view of various stakeholders.

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When Design Goes Wrong? Diagnostic Tools for Detecting and Overcoming Failures in Service Experience

Astrid Dickinger and Daniel Leung

Abstract Service recovery is one of the most researched areas in the disciplines of business, marketing, tourism and information systems due to the inevitability of service failures. Despite its increasing attention from scholars and practitioners, the efficacy of relying on recovery strategies for managing customer service experience has long been a great concern. Given that service recovery can only partially compensate the detrimental impact of service failures, this chapter argues that operators should "proactively" detect and redress failures in the current service design as opposed to "reactively" defend service failures and manage service recovery. Following this notion, this chapter aims at introducing five diagnostic tools for deconstructing the structure of an experience and thereby detecting and overcoming failures in service experience. The five tools are service flowcharts, service blueprints, service maps, service failure proofing and the fishbone diagram. In addition to the introduction, this chapter includes the empirical demonstration of applying service maps for service failure detection. Harnessing consumer reviews on TripAdvisor.com of three luxury hotels in Vienna as the data source, the empirical demonstration exhibits the major areas of improvement in each corresponding property. Being one of the first attempts that integrate analysis of online reviews with diagnostic tools for service experience enhancement, this chapter does not only complement service design literature with a demonstration prototype but also provide operators in the service industry with useful tools and examples of how diagnostic tools can assist in detecting service failures and then advising solutions for service design advancement.

Keywords Service experience • Recovery • Service failure

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1 Introduction

Considering the increasing customer pressure in demanding service excellence, businesses strive to deliver flawless service in order to improve customer satisfaction and guarantee their financial well-being. Though businesses are diligent, the inseparability of customers from service production processes makes it impossible to guarantee that every service encounter will conform to an ideal standard. Given the variation of individual expectations as well as the presence of many uncontrollable external factors (e.g., weather and employee illness), "zero-defect" service is virtually an unattainable goal (Schweikhart et al. 1993). In the tourism context where multiple parties and human interaction are involved in the service production, human errors are also found to be unavoidable and thereby service failures arise (Mattila and Patterson 2004; Schoefer and Ennew 2004). Devising effective service recovery strategy has become a matter of prime interest by scholars and practitioners since adequate recovery strategies can ameliorate customer discontent (Bitner et al. 1990; Tax et al. 1998), secure customer likelihood of continued loyalty (Blodgett et al. 1997; Wirtz and Mattila 2004) and deflect negative word-of-mouth (Lin et al. 2011; Ok et al. 2006). Smith et al. (1999) note that customers are often more disappointed with a company not capable of recovering the service failure than the failure itself. As the significance of service recovery to customers' overall experience and firms' quality standard is increasingly recognized, a growing body of literature pertinent to service recovery emerges in recent years (Aguilar-Rojas et al. 2015; Fu et al. 2015; Kwon and Jang 2012; Wen and Chi 2013).

Despite the significant theoretical and managerial implications derived from prior studies on service recovery, the efficacy of relying on service recovery for managing customer service experience has long been a great concern by academic researchers. Boshoff (1997, p. 126) concludes his seminal study by suggesting that service recovery "cannot compensate for poor service delivery" but only "help limit its harmful impact on the business". Indeed, contrary to the notion of "service recovery paradox" by McCollough and Bharadwaj (1992), many empirical evidence corroborate that any type of service recovery measure (when a service failure occurs) will still lead to a better result than if the failure had not occurred (Lin et al. 2011; Maxham and Netemeyer 2002). Namkung and Jang (2010) suggest that the systematic management of service failures includes a thorough detection and resolution of service failures as well as well-executed recoveries. Hoffman and Chung (1999) also argue that service recovery ends when the corresponding service defections are well resolved by service providers, but not when dissatisfied customers become re-satisfied. Since service recovery can partially compensate the detrimental impact of service failures, operators should "proactively" prevent the occurrence of service failures as opposed to "reactively" defend service failures and manage service recovery. In other words, more scholarly attention should be paid to the ways of detecting and redressing service failures.

Edvardsson and Olsson (1996) as well as Stuart (2006) argue that instances of service quality and service recovery problems are often attributed to poor service

design. Since poor service design is the origin of service failure and service recovery, the most effective solution to overcome service failures is to deconstruct the design of service experience, identify all service encounters or interactions, and rectify all potential problems throughout the service delivery process. In the past, tourism suppliers could only rely on comment cards or paper-based surveys to identify service failures in their businesses. It is even more difficult for them to understand customers' entire service experience unless customers are willing and able to explicate all service encounters thoroughly. But thanks to the emergence of Internet technology in general and social media in particular, customers now have more avenues to air their experience about a given service or experience (Bronner and de Hoog 2011). TripAdvisor.com announces that their portal documents more than 225 million reviews across over four million accommodations, restaurants and attractions (TripAdvisor 2015). Yelp.com (2015) also includes over 77 million reviews on multiple types of businesses. This information is not only available for potential customers and may impact their booking decisions, but also for tourism suppliers to learn from and respond to such documentation of service failure. Since contributors of these reviews generally provided detailed description of their service experience as well as their opinions drawing on their individual expectation (Xiang et al. 2015), a systematic analysis on these reviews is expected to provide operators with a more comprehensive overview of and insights on the improvement of service design.

Well-designed experiences are considered integral part of the tourists' journey and therefore tourism is considered an important producer of experiences (Binkhorst and den Dekker 2009). Accordingly, designing excellent experiences is important in this domain (Stickdorn and Zehrer 2009; Strannegard and Strannegard 2012). Tussyadiah (2014) contends that designing for tourism experience should acknowledge a holistic experience concept, be human centered and be iterative in process. While Tussyadiah's (2014) study offers a detailed explication of how tourism experience design should be conducted, the researcher encourages future researchers to incorporate tools and methods from other disciplines to tourism experience design in her concluding remarks. Considering the call for research endeavor by Tussyadiah (2014) as well as this chapter primarily focuses on the ways of detecting and redressing service failures, five diagnostic tools for deconstructing the structure of an experience and thereby detecting and overcoming failures in service experience will be introduced. The empirical demonstration of applying a service map, one of the five tools presented, will be exhibited after the introduction. Though tourism is a multi-sector discipline where businesses in various sectors work closely to make travelers' experiences seamless, the empirical part of this chapter focuses on the accommodation sector, one of the elements in the tourists' journey.

2 Literature Review

2.1 *Service Failure in Tourism and Hospitality*

Service failure refers to any service-related mishap (which can be actual or perceived) that occurs during a customer's experience with a service firm (Palmer et al. 2000). Applying the expectancy disconfirmation theory, a service failure occurs when an individual's perception of service delivery does not meet his or her expectation of adequate service (Kelley et al. 1993; Zeithaml et al. 1993). No business in the service industry, including those world-class service giants like Starbucks and Marriott, can prevent service failure.

One of the two main research streams on this topic focuses on identifying and classifying common service failures (Bitner et al. 1990; Hoffman and Chung 1999; Hoffman et al. 1995; Kelley et al. 1993; Schweikhart et al. 1993). Most studies were conducted in the restaurant context, and critical incident technique is always used to identify common service failures. Hoffman et al. (1995) solicit 373 critical incidents from restaurant customers and classify service failures into three broad categories: (1) employee response to service delivery system failures (e.g., slow or unavailable service); (2) employee response to implicit/explicit customer requests (e.g., failing to cook food as requested); and (3) unprompted and unsolicited employee actions (e.g., wrong order or mischarging). In the same study, the researchers also investigate the severity of various failures and reveal that customers perceived seating problems (e.g., seating smokers in non-smoking section) as a serious service failure while delivering the wrong dish as a minor failure. Mack et al. (2000) replicate Hoffman et al.'s (1995) approach and identify 14 service failure incidents which often happened in the restaurant setting. Among these failure incidents, kitchen error (e.g., hair in food), wait staff error (e.g., wrong orders mixed) and unreasonably slow service (e.g., long waits for seating) are the most frequently reported ones. In a recent study with 802 restaurant patrons, Susskind and Viccari (2011) suggest that food-related complaints or the combination of food- and service-related complaints appear to be the most difficult ones to recover and customers rate the severity level of these two categories the highest.

Service failures in the hotel and attraction contexts have also been explored in previous literature. Lewis and colleagues conduct multiple studies in various tourism settings. In a study of theme parks in the United Kingdom, Lewis and Clacher (2001) reveal that a sizable proportion of failure incidents are attributed to other problematic customers (e.g., uncooperative customers). In another study of a four-star hotel in the United States, Lewis and McCann (2004) show that most service failures are stated as "room not ready," "slow service," "slow check-in/out," "incorrect bill," and "missing reservation". Some studies employ alternative approaches to identify failures. Harnessing the text mining technique to analyze textual comments from hotel staying guests, Lee et al. (2011) identify eight types of service failure in mid-scale to luxury hotels in Hong Kong. These include "guest arrival and departure," "room amenities," "food services," "variety of choices in

service provision," "service personnel," "banquet service," "general food and beverage services," and "information and communication services."

Another stream of research on service failure focuses on the outcome of service failures. Generally speaking, service failure leads to a negative evaluation of service quality and results in customer dissatisfaction. Smith and Bolton (1998) posit that customers revise and update their satisfaction and behavioral intention according to prior experience and new information. If customers experience service failures, their post-failure satisfaction will be lower than previous overall satisfaction. Kelley et al. (1993) share the same thought and supplement that service failures not only result in disgruntled customers but also lead to discontinuing patronage because repurchase intention by customers who experience service failures are generally lower than those by customers who did not experience service failure. Zeithaml and Bitner (2000) categorize customers into four categories according to their behavioral responses towards service failures. "Passives" represent those who do not take any action since they do not believe in positive outcomes. "Activists" are those who complain and believe in a positive outcome of their complaint. "Voicers" refer to people who actively complain and want service providers to improve their offers. "Irates" are those who complain to one of their peers and do not stay with the service provider. In general, irritated customers may tell 10–12 people about their unsatisfactory experience (Zemke 1999).

In theory, service failure appears to be an undesirable outcome to businesses. Yet, in reality, the presence of service failures can benefit operators via offering them an opportunity to gain insights into how well their operations perform and what problems they need to rectify. Boshoff (1997) as well as Tyrrell and Woods (2004) commonly agree that companies can gain much from complaints because complaints usually provide valuable information in terms of what can be done to improve customer satisfaction. A number of researchers also advise that customers are not encouraged to be "Passives" because the unwillingness to air complaints has a number of serious consequences including a declining market share, more expensive defensive marketing strategies and the inability to correct faulty service systems (Bearden and Teel 1983; Fornell and Wernerfelt 1987).

Besides the above two research streams, the influence of other contextual factors on customer attitudinal and behavioral response to service failures has also been examined in prior studies. Namkung and Jang (2010) report that restaurant diners rate consecutive service failures as significantly more unsatisfactory than a single service failure. Findings in their study also report that the impact of service failure on behavioral intention (including willingness to revisit, and willingness to recommend the restaurant to others) varies by service stage and restaurant type. Casual restaurant diners are found to be least likely to revisit and recommend the restaurant if they experience a service failure during consumption. To fine dining restaurant customers, service failure in payment and exiting was the most critical leading to the reduction in their inclinations to revisit and recommend the restaurant to others.

3   Service Recovery in Tourism and Hospitality

With the formal definition of all actions designed and implemented for returning aggrieved customers to a state of satisfaction with the company after a service has failed to live up to expectations (Zemke and Bell 1990), most researchers acknowledge that service recovery is an integral part of a firm's total quality management program. Since the 1980s, more than hundreds of service recovery themed studies have been published in business, marketing, tourism and information system journals. The sustainable scholarly attention towards service recovery is partly attributed to the financial benefits of customer loyalty, given that the cost of attracting a new customer is five times more than that of retaining an existing one (Shea et al. 2004; Tax and Brown 1998). Indeed, though service failure may initially appear to be a casualty, adequate service recovery strategies can raise the customer's dissatisfaction to satisfaction and turn frustrated customers into loyal ones (Westbrook 1987). McCollough and Bharadwaj (1992) claim that customer's satisfaction level could even exceed pre-disconfirmation level if effective service recovery is enacted. Though many researchers advocate the conception of this "service recovery paradox" (Hart et al. 1990; Zemke and Bell 1990), empirical findings echoing with this conception were scarce (Boshoff 1997; Lin et al. 2011; Ok et al. 2006).

Earlier studies on this topic primarily focus on the inevitability and implication of providing adequate service recovery (Menon and Dubé 2007; Schoefer and Ennew 2004). As noted by Bitner et al. (1990), service providers can opt to ignore service failure and make no attempt to recover them. This reaction however might magnify a customer's negative evaluation to a double deviation from that customer's service expectation. Numerous researchers note the negative outcomes resulted from the absence and the provision of inadequate responses to service failures. Mack et al. (2000) suggest that the firm would lose both the business of dissatisfied customers as well as their associates who may now be recipients of negative word-of-mouth. Other negative outcomes include, but are not limited to, the decline in customer confidence, customer loss, negative word-of-mouth and negative publicity (Berry and Parasuraman 1992; Hoffman and Kelley 2000; Mattila and Mount 2003).

Profiling the service recovery strategies harnessed by industries practitioners is another stream among earlier studies. Hoffman and Chung (1999) analyze 382 incidents recalled by hotel guests and successfully identify 11 recovery strategies commonly used by hotel and restaurant operations. In addition, the researchers of this work report that providing discounts and free meals is the preferred recovery tactic in the restaurant setting, while room upgrades are preferred over other recovery strategies in the hotel setting. In another two studies of restaurant guests' complaints about service experiences, a set of recovery actions is defined according to the degree of correction offered by the service provider (Hoffman et al. 1995; Susskind 2005). In brief, actions such as offering free food, discounts, coupons, or managerial interventions are presented as corrections involving a high degree of

effort. Actions such as making adjustments, offering apologies, or doing nothing to correct the problem are presented as low correction actions. Some scholars attempt to introduce alternative approaches for recovering service failures. For instance, Hart et al. (1990) propose a roadmap for recovery which moves from measuring the costs of lost customers, getting customers to complain, anticipating needs for recovery, acting fast, training and empowering employees, and closing the loop via informing customers about the improvement.

Given the importance of implementing appropriate recovery strategies, a considerable amount of research has been devoted to provide anecdotal support for what constitutes effective compensation (Grewal et al. 2008; Kwon and Jang 2012) and how different service recovery strategies impact customer post-recovery evaluations like recovery satisfaction, perceived fairness, overall satisfaction and word-of-mouth intention (Mattila and Cranage 2005; Susskind and Viccari 2011). Justice theory has often been applied in examining how customers respond to providers' recovery efforts. Adapted from the discipline of social psychology, justice theory proposes that customers evaluate recovery efforts, form satisfaction judgments and behavioral intentions based on the level of perceived justice (Ha and Jang 2009; Mattila and Cranage 2005; Smith et al. 1999). Justice is commonly viewed as a three-dimensional construct that comprises distributive justice, interactional justice, and procedural justice (Tax et al. 1998; Wirtz and Mattila 2004). Distributive justice refers to the perceived fairness of compensations or outcomes delivered to customers (Blodgett et al. 1997; Homburg and Furst 2005). It comes in the forms of reimbursement, refund, replacement, repair and others. Interactional justice relates to the perceived fairness of interpersonal manner during service recovery implementation and outcome delivery (Goodwin and Ross 1992; McColl-Kennedy and Sparks 2003). It often incorporates concepts of politeness, empathy, apology and courtesy. Last but not the least, procedural justice refers to the perceived fairness of policies, procedures and other criteria used by decision makers to arrive at an outcome (Blodgett et al. 1997; Tax et al. 1998).

Grönroos (1988) as well as Sparks and McColl-Kennedy (2001) note that customer perceptions of the firm's service recovery efforts is a function of what is provided by way of compensation and how it is done. Regarding the level of atonement, previous studies consistently show that the provision of tangible compensation is needed to dissipate anger and dissatisfaction after a service failure (Hoffman et al. 1995; Maxham and Netemeyer 2002). Megehee (1994) empirically verifies the positive relationship between "dollar amount" and "customer satisfaction with service recovery efforts". Kelley et al. (1993) add that customer's predictive expectations for effective service recovery might be at a peak level. Service organizations might need to compensate beyond the value of the original offering when a service failure occurs. As people draw different conclusions from the same information expressed in different formats, Lii and Lee (2012) conduct an experiment and report that consumers perceive compensations framed in dollar terms as more fair compared to the equivalent price reduction framed in percentage terms for high-priced products.

In practice, when a service failure occurs, a cash refund is the most widely used means of compensation. However, monetary compensation has been shown not to suit all situations, especially when customers are badly treated by service providers and thereby suffer from a psychological loss (Roschk and Gelbrich 2014). Hence, non-monetary compensation measures have also been studied, though, to a lesser extent (Mattila and Patterson 2004; McDougall and Levesque 1999). Non-monetary compensation can take the form of showing empathy or making a formal apology from management to address the customer's psychological loss resulted from the service failure. Several studies confirm that communication in the form of an apology can effectively reduce customers' negative feelings (Goodwin and Ross 1992) and increase customer loyalty (Cranage and Mattila 2005). Zemke and Bell (1990) note that most consumers want the service they are promised along with some personal attention. Since an apology letter lacks sincerity and authenticity while a personal apology from management can make the customer feel that he/she has been treated fairly, they conclude that an apology is more effective when delivered in person. The effectiveness of having both monetary and non-monetary compensation is also coined in Fu et al.'s (2015) study. They administer an experiment and report that offering combined compensation (i.e., monetary plus non-monetary) would result in a higher level of customer satisfaction than that of single compensation.

Regarding the way of handling service recovery, the promptness of enacting service recovery is a vital determinant influencing the effectiveness of service recovery strategies. Immediate action is the strategy recommended by most academic researchers. Taylor (1994) report that time delays increase the anger and damage the overall satisfaction level rated by airline passengers. On the contrary, a speedy resolution to customer complaints can enhance the possibility that an unhappy customer will remain loyal to the firm. Wirtz and Mattila (2004) empirically demonstrate that immediate recovery actions resulted in higher return intention and lower negative word-of-mouth than a slower service recovery. Mattila and Mount's (2003) study also highlights the importance of correcting service failures as quickly as possible to build repeat-patronage intentions.

The influence of the person responding to service failures or complaints on the level of improvement in customer satisfaction is another vital aspect. Kelley et al. (1993) find that involving a manager in the recovery process yields a highly favorable recovery rating. Yet, Boshoff (1997) reports that the organizational level of the person performing the service recovery will be negatively related to the level of improvement in customer satisfaction. Given that service recovery involves social exchanges among people, several researchers posit that understanding the impact of national culture is essential to implementing effective recovery strategies (Bitner et al. 1990; Mattila and Patterson 2004). Since the quality of interpersonal interaction between customer and front-line employee influences customer evaluations, service organizations operating in a multi-ethnic country or involved in international ventures must be sensitive to the cultural diversity of their customers. In an experimental study, Mattila and Patterson (2004) demonstrate that providing causal explanation for poor service can reduce internal attributions and increase

external attributions in the North American sample. East-Asian respondents' level of internal and external attribution are however relatively stable, even when an explanation was offered. Echoing with regulatory focus theory which suggests that Asians tend to focus on avoidance of losses rather than individual gains (Lee et al. 2000), Mattila and Patterson (2004) also report that compensation had a more positive effect on satisfaction with problem handling among North American participants than East-Asian counterparts. In addition to national culture, other contextual factors like the criticality of service consumption (McDougall and Levesque 1999), locus of service failure (Fu et al. 2015), magnitude of service failure (Smith and Bolton 1998) and familiarity with providers (Patterson and Mattila 2008) may mitigate the impact on customers' overall experience, attitudinal responses as well as their subsequent behavioral responses.

3.1 Consumer Reviews in Tourism and Hospitality

Word-of-mouth (WOM), also referred to as user-generated content and consumer reviews, has long been recognized as one of the most influential information sources since the beginning of human society (Katz and Lazarfeld 1955; Godes and Mayzlin 2004; Maxham and Netemeyer 2002). Considering the high-priced, high-involvement and intangible nature of tourism products and services, travelers generally consult reviews early in the travel decision making process in order to reduce uncertainty and perceived risk of making a poor decision. PhoCusWright (2013) report that the proportion of global travelers referencing online reviews before choosing a hotel and an attraction are as high as 77 % and 44 %, respectively. As more travelers consult consumer reviews, particularly those electronic word-of-mouth (eWOM) on online review portals, in their decision making process, the volume of eWOM-studies in the tourism and hospitality journals increases rapidly (Cantallops and Salvi 2014; Lu and Stepchenkova 2015).

Impacts of eWOM are often discussed from the consumer perspective. Several studies identify the drivers motivating travelers to share eWOM online. According to the survey responses by the vacation panel from the Netherlands, Bronner and de Hoog (2011) report that the five main categories of motivational factors for vacationers'eWOM contribution are (1) self-directed, (2) helping other vacationers, (3) social benefits, (4) consumer empowerment and (5) helping companies. The researchers also note that eWOM are more frequently contributed by vacationers who are below 55, from the high and lower-middle income groups and from couples with or without children. Munar and Jacobsen (2014) also attempt to explore Danish and Norwegian holidaymakers' motivations and willingness to share content through various social media. Based on the results from an en route survey, the researchers suggest that Scandinavian tourists are strongly motivated by the assumption that their contributions will positively impact other web-users' knowledge and decision-making. This supports the relevance of altruistic and community-related motivations highlighted in prior studies. In the hospitality

context, a recent work by Kim et al. (2015) focuses on the influence of self-relevant values connected with the café (e.g., conveying reflected appraisal of self, conspicuous presentation and self-image congruity) on eWOM intentions. The researchers report that consumers' self-construal value was a salient driver of eWOM intentions rather than service quality value itself. Researchers and practitioners have demonstrated the prominent influence of eWOM on travelers' product valuation and purchase decisions. Sparks and Browning (2011) conduct an experimental study and suggest that consumers would rate a higher level of booking intention and trust when reviews are positively framed together with the presence of user-generated numerical ratings. In another study highlighting the relative roles of price and consumer reviews on consumers' pre-purchase evaluations in the context of the purchase of hotel accommodation, Noone and McGuire (2013) conclude that price does not have a significant impact on perceived quality when eWOM is presented. Apart from the above two studies, the impact of eWOM on travelers' consideration (Vermeulen and Seegers 2009), destination choices (Jalilvand and Samiei 2012), and online popularity of restaurants (Zhang et al. 2010) are confirmed in prior studies.

From the supplier perspective, the impacts of eWOM on financial performance of tourism and hospitality businesses are examined in some studies. Ye et al. (2009) note that positive online reviews can significantly increase the number of bookings in a hotel. The empirical findings in their subsequent study even suggest that a 10 % improvement in reviewers' rating can increase sales by 4.4 % (Ye et al. 2011). Phillips et al. (2015) have also investigated the influence of consumer reviews on hotel business performance but contrasting results are found. They report that receiving a high number of reviews does not automatically lead to high levels of revenue per available room.

Though the relationship between consumer reviews and company's business performance is not promising, researchers and practitioners generally agree that analyzing the content of consumer reviews can help them gain a better understanding about consumer experience and feelings in trips, hotels, restaurants or other settings. Pantelidis (2010) analyzes a total of 2471 reviews regarding 300 restaurants in London in order to capture the key variables consumers consider in their reviews. Alike the expectation, the researchers report that food, service and atmosphere appears as the top three factors contributing to customer satisfaction. While the entrée is mentioned most often among all reviews, the starter is cited as a highly memorable item when customers talk about after leaving a restaurant. Stringam and Gerdes (2010) evaluates over 60,000 consumer ratings and comments from Expedia.com in order to explore word usage of guests scoring hotels at lower ratings versus higher ratings. The content analysis results exhibit that words about lack of cleanliness appear more frequently when guests assign hotels a lower rate, while travelers are more likely to assign higher ratings to hotels which are convenient to attractions, shopping, airports, and downtown. Xiang et al. (2015) conduct a similar study but they deconstruct hotel guest experience and examine its association with satisfaction ratings. Their empirical findings reveal several dimensions of guest experience that carried varying weights and, more importantly, have

novel, meaningful semantic compositions. Special-interest tourism experience and other experience were also analyzed in previous studies. For instance, Lu and Stepchenkova (2012) analyze 373 reviews by travelers to Costa Rica from TripAdvisor.com, and finally identify 26 different attributes (e.g., Ambiance, Lodge amenities) that may influence ecotourists' satisfaction with their ecolodge stays. Wu et al. (2014) also study tourists' shopping experiences in Beijing's Silk Market via analyzing 149 reviews on TripAdvisor.com. Using a computer-assisted qualitative data analysis software, the researchers report that the dominant narratives of shopping experiences are related to the price of the purchased, the fun of bargaining with shop owners, and the identification of fake products. Considering that various empirical studies have already coined the informativeness of content in consumer reviews as well as the potential to enrich knowledge about consumer experience via analyzing them, this study will also attempt to detect (and overcome) failures in service experience via analyzing consumer reviews on TripAdvisor.com and using the diagnostic tools which will be discussed in the following section.

4 Diagnostic Tools for Detecting and Overcoming Failures in Service Experience

Enterprises are increasingly moving away from ad hoc service design and provision processes by using planned stages of idea generation, experience development, design, implementation up to including customer feedback (de Jong and Vermeulen 2003; Bitner et al. 2007). For the purpose of improving design of experience, five diagnostic tools are introduced in the following sub-sections in order to deconstruct the structure of as well as to detect and overcome failures of the existing service experience.

4.1 Service Flowcharts (Flowcharting)

Flowcharting is the process of listing and visualizing the sequence of steps in the manufacturing or production process. Initially, it is primarily used in the manufacturing industry but it has been adapted to and applied in other contexts including service delivery (Sampson 2012). Through deconstructing the whole process into individual activities or service encounters, a service flowchart can effectively visualize the whole journey the customer takes through the service experience. The complexity of a flowchart varies according to the types of experience the customer consumes (i.e., high involvement such as massage or low involvement such as information provision through a concierge in a hotel). Figure 1 exhibits the service flowchart of food and beverage ordering in general fast food restaurants.
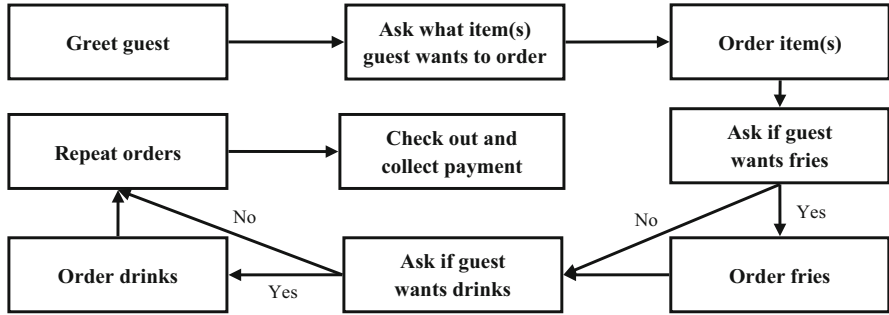
Fig. 1 Service flowchart—food and beverage ordering in general fast food restaurants

Flowcharting provides a better understanding of customer experience, which is a pre-requisite for service enhancement. As a well-crafted service flowchart visualizes the critical points in the service delivery system, this tool makes service procedures clear to those concerned. Lovelock et al. (2009) posit that flowcharts may help refine existing experience and devise new experience. Park et al. (2013) echo with this notion and apply this in their study on dental care service systems. Through dividing the service delivery system into several stages and optimizing the service value (in terms of service quality) and service cost of each stage in one optimization model, the authors successfully develop a mathematical model which is claimed to maximize service value. In another paper with three separate case studies, Karapetrovic and Willborn (1998) argue and exemplify that flowcharting the service or administration process can benefit internal management systems in two ways. The first one is to reveal the existence of activities, processes and possible failure points. The second benefit is to utilize the developed flowcharts as a part of procedures and work instructions.

4.2   Service Blueprints (Blueprinting)

Blueprinting, a process visualization method introduced by Lynn Shostack in the 1981, is another approach for analyzing and identifying the causes of problems or errors in the service process. Despite being recognized as an adaptation of flowcharting, blueprinting does not only document all activities and sequences that constitute the service but also provides visible portraits to which service providers, service consumers and other elements can interact (Sampson 2012; Shostack 1987). Zeithaml and Bitner (2000) state that a service blueprint, the outcome of blueprinting, is a map that portrays the service system which enables all involved parties to understand and deal with it objectively regardless of their roles or their individual point of view. In this regard, blueprinting outperforms flowcharting since the former only documents process actions and interactions at and around the customer-firm interface in detail.

According to Fließ and Kleinaltenkamp (2004), a typical service blueprint is presented in the form of a two-dimensional picture. The horizontal axis represents the chronology of actions by service consumers and service providers. The vertical axis distinguishes between different areas of actions. Blueprinting has evolved over time, moving from a tool that plots the processes against organizational structure including the services-theater system (Kingman-Brundage 1989; Gummesson and Kingman-Brundage 1991). A service blueprint usually contains five key action areas namely customer actions, front-stage contact (or visible) employee actions, back-stage contact (or invisible) employee actions, support processes and managerial functions. These areas of actions are separated by four horizontal lines. The "line of interaction" is used to separate the customer action area from the supplier action area. Customer actions are presented above the "line of interaction". The "line of visibility" is used to differentiate between actions visible and invisible to the customer. Actions or activities which are visible to customers are shown above the "line of visibility". The "line of internal interaction" distinguishes between front-stage and back-stage contact actions. All back-stage activities and supporting resources that can assist frontline employees in delivering service are presented beneath the "line of internal interaction". The last one is named "line of implementation", separating managing activities from supporting activities. Figure 2 shows the service blueprint of an overnight stay at a hotel.

In a discussion paper regarding methodologies for service improvement in tourism, Faché (2000) comments that blueprinting is a useful way for analyzing operational processes as this method enables focus on service design, the role of
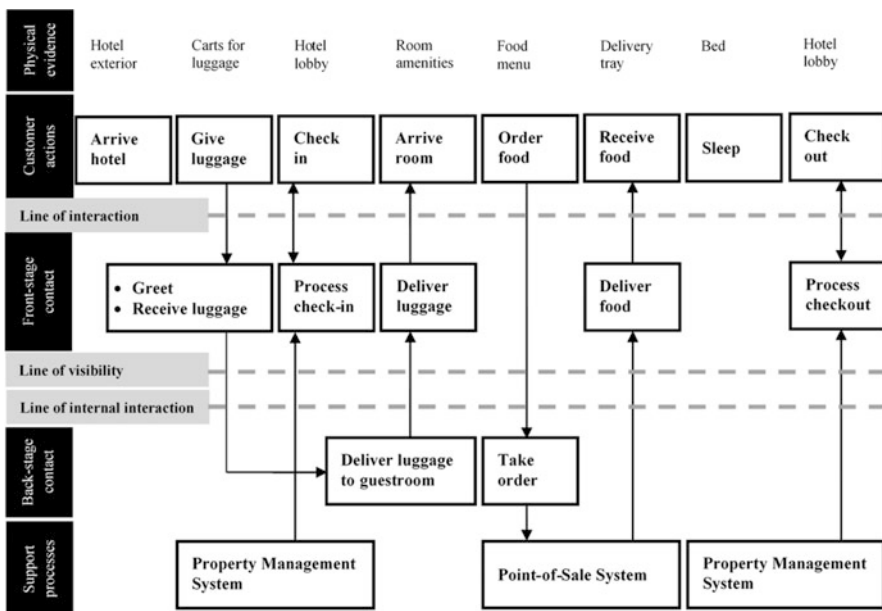
Fig. 2 Service blueprint—overnight hotel stay experience

service providers as well as the interaction between service providers and consumers. Indeed, since a service blueprint enables service providers to gain a better understanding of the mutual dependence between activities, people and other elements that collectively constitute the service production (Shostack 1984, 1987), some scholars propose and even empirically demonstrate the potential of using service blueprints for identifying errors or failure points in the service delivery process (Hensley and Utley 2011). Combining service blueprint with service failure analysis, Chuang (2007) shows that blueprinting can assist firms in identifying potential failure points and modes for both front-stage and back-stage service activities. The author concludes his study by noting that service blueprints can facilitate problem solving via highlighting opportunities to enhance customers' perceptions of the service.

4.3   Service Map (Mapping)

Service mapping is another approach with considerable potential in detecting service failures, extending the previously discussed ones. Bitner (1993) states that service mapping "visually displays the service by simultaneously depicting the process of service delivery, the roles of customers and employees, and the visible elements of the service" (p. 362). Considering service as an orchestrated performance rather than a process, service mapping is subject to transform intangible services into a tangible picture. The idea of service mapping is grounded on the premise that customers often rely on tangible evidence of service when they encounter difficulty in assessing the actual quality of the service. For example, customers often recall and consider the cleanliness of staff uniform or the amount of time consumed for replying an enquiry as indicators for evaluating service quality by frontline service employees.

   Like service blueprinting, Kingman-Brundage (1989) stresses that service mapping focuses on encounter points (or referred to as moments of truth), which include critical touch points and fail points where the service design goes wrong. But given that service mapping is confined to the actual service encounters, a service map can only serves as a visual planning guide to the experience from the customer's perspective. Though it may exhibit the flow of activities, interactions with environmental and management elements and factors directly shaping service quality, the customer actions are non-sequential because customers are free to participate in different activities or have different service encounters during the process. Figure 3 exhibits the service map of participating in a guided-tour at a winery.

   Literally, service mapping and service blueprinting are identical. Michel et al. (2009) also recognize that both service map and service blueprint can offer the functions of illustrating the service experience and identifying likely failure points. Yet, blueprinting primarily focuses on the company or employee perspective for delivering a service or creating an experience. Service mapping however usually takes the customer view into account and exhibits how service personnel manipulate service components to bridge the gap between management intent and
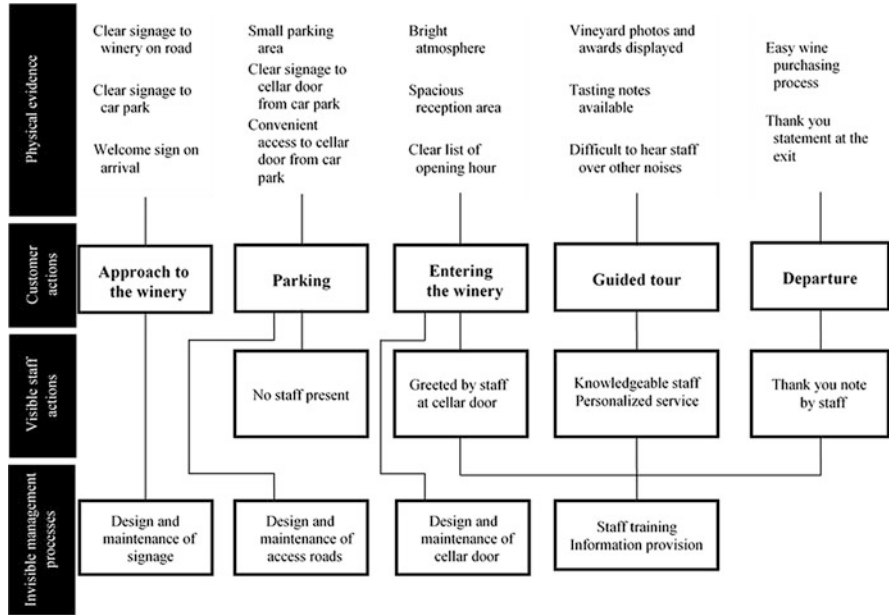
Fig. 3 Service map—a guided-tour at a winery

customer demand (Kingman-Brundage et al. 1995). Also, according to Lovelock (1994), service mapping refers to the portraying of an existing service process while service blueprinting is the technical term for the purpose of planning a new or revised service process. Shostack (1981) proposes to combine service blueprinting and service mapping, which is then applied in tourism studies on marketing by Laws (1991), surfing events by Getz et al. (2001) and service quality assessment at wineries (Carlsen 2011). As described by Getz et al. (2001), service blueprinting can result in a reference or prototype of service delivery whereas mapping the customer's experience can serve as an evaluation mechanism for assessing and improving the blueprint. Adding the experiential component to the blueprint can help improve a service process, design and eventually enables reengineering to better meet customer expectations. This may offer insights and practical implications to managers who receive information on the process in combination with customer satisfaction (Shieff and Brodie 1995).

4.4 Service Failure Proofing

While failure proofing can be part of service mapping or blueprinting by also integrating fail points it can also be considered a tool for re-engineering. If fail points are identified they have to be assessed and reasons for failure need to be

identified. This usually reveals opportunities for "failure proofing" and accordingly to develop fail-safe methods for employees as well as customers. Poka-yokes is used to make sure standards and scripts are followed, such as in operations when the tray for surgeons' instruments has given indentations that allow to identify at one glimpse if all instruments have been removed from the patient (Lovelock et al. 2009).

4.5 Service Fishbone Diagram

Fishbone diagrams, so named owing to their shape, are another popular tool for determining the underlying causes to a specific problem. Developed by Kauro Ishiskwa in 1942, this cause and effect diagram is often used when observed failures may have multiple causes that need to be considered (Breiter and Bloomquist 1998). Designing a fishbone diagram starts from defining the customer problem like "no one answers the phone call". Identifying the main causes (e.g. people, process and equipment) is the second step. It is then followed by breaking down the main causes into identifiable problems. Taking the example of "no one answers the phone call", the identifiable problem may include "people are away from the service station because they take a break without informing their supervisor". Finally, by identifying the most important causes, the fishbone diagram can focus the development of plans of action. Figure 4 shows an example of fishbone diagram of delayed flight departure.
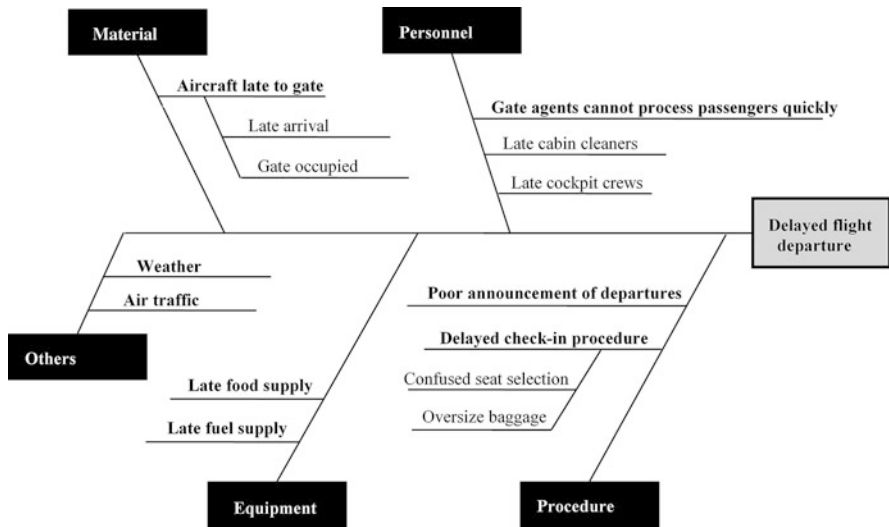
Fig. 4 Service fishbone diagram—delayed flight departure

The fishbone diagram has been applied in manufacturing in the past, but is increasingly used in the service industry. A prominent example for a fishbone diagram in tourism is the one for explaining airplane delays by Daryl Wyckoff. Using Midway Airlines as a case study, Wyckoff (1984) identifies five major categories of causes leading to the frequent delayed flight departures in Midway Airlines (which are material, personnel, procedure, equipment and others). The study empirically demonstrates the applicability of this tool in identifying causes for the events of service failure. Tax et al. (2006) also harness this tool to visualize root causes of general customer failures. In the same study, the researchers posit that the four major causes of customer failures are people (including customers and frontline service personnel), service processes, servicescape and technology (Tax et al. 2006).

For tourism, the typical five categories (Equipment, manpower, material procedures and other) are extended to eight by adding people, information and customers. People are also differentiated between frontstage and backstage as they play different roles in the delivery of the experience. Furthermore, information is essential as many problems in tourism arise from information failures. Finally, the customer is central in tourism as they substantively co-create value and accordingly, if not performing their act correctly may cause failures themselves and may even affect the other tourists' experiences (Lovelock 1994). An extension with frequency counts could give even deeper insight regarding the importance of the identified causes.

5 Case Studies

The abovementioned tools are well established and widely applied in failure identification and service system engineering. Yet, considering that empirical studies in tourism, and particularly the hotel industry, were surprisingly limited, this chapter is going to exemplify the application of service mapping for detecting service failures and recommending suggestions for enhancing customer's experience in a hotel. Getz et al. (2001) said that service mapping could be done by asking customers for feedback, analyzing log books completed by customers or observations reported by trained observers. Carlsen (2011) also empirically demonstrate how participant observations technique can help in generating data for studying and analyzing service quality at wineries and cellar doors. But considering the substantial cost involved in the above methods, the empirical demonstration of this study mainly utilizes online reviews on TripAdvisor.com as the data source. Comparing with participant observation, the analysis of online reviews by previous customers can avoid that observations are out of line with customer perceptions. Furthermore, the inclusion of multiple reviews can help ensure that a variety of customer experiences are covered in the analysis. It is recognized that some academic scholars have used online reviews to understand dimensions of the customer experience and even deconstruct it (e.g., Xiang et al. 2015). However, to the best

Table 1 Profile of the studied hotels

ID	Hotel name	Rating	# of rooms	# of reviews
Hotel A	Hotel Sans Souci Wien	5-star	63	522
Hotel B	Sofitel Vienna Stephansdom	5-star	182	1258
Hotel C	Palais Hansen Kempinski Vienna	5-star	152	624

of the authors' knowledge, this study is one of the first attempts that integrate analysis of online reviews with diagnostic tools for service experience enhancement.

Due to the exploratory nature of this demonstration, three luxury hotels operating in Vienna (Austria) were selected as the studied samples. The profile of the three chosen hotels is presented in Table 1. Fifty reviews on each of the three hotels were collected manually from TripAdvisor.com for analysis. In brief, the mapping of a hotel staying experience consists of identifying four categories of elements including customer actions (i.e., process and activities done by customers throughout their stay), visible staff actions (i.e., service encounters between service staff and customers), invisible management process (i.e., placement of management systems and operations), and physical evidence (i.e., all tangible and intangible evidence of services provided). Content analysis was employed to define codes and categorize codes into adequate categories. All reviews were firstly read word by word to derive codes and capture key thoughts. Codes were then categorized into corresponding categories according to their relevancy. Cross-validation can help establish credibility of the coding scheme. As such, both researchers independently coded the data, and then compared the results to ensure consistency and inter-coder reliability.

5.1 Hotel Sans Souci Wien

Among the fifty online reviews regarding Hotel Sans Souci Wien, over 90 % rated this hotel as "Excellent" (94 %) and another six percent rated this property to be "Very good" (6 %). This reflects that reviewers contributing to the analyzed comments are largely satisfied with their stay in Hotel Sans Souci Wien. The mapping of service experience in Hotel Sans Souci is presented in Fig. 5. Though the figure exhibits that all employee actions involved in the service process are well received by the reviewers, some service failures pertinent to physical evidence could still be identified based on reviewers' descriptions.

Service Failures: "Arrive Hotel" and "Check-In"

Based on the descriptions by reviewers, their experience throughout the check-in process is satisfactory in general. Many reviewers appreciate the warm greeting as

	Overall experience	Arrive hotel	Check-in	Arrive room	Stay in room	Dine in room	Dine in restaurant(s)	Visit other facilities	Make enquiry	Check-out
Physical evidence	✔Convenient location (31) ✔Helpful and friendly staff (21) ✘Well-dressed and good looking staff (2)	✔Modern décor / design (6) ✔A good mixture of modern technology with old Viennese architecture (5) ✘Hotel is small in size (1)	✔Helpful and friendly front desk staff (2) ✔Ability to speak multiple language by front desk staff (2)	✔Spacious room (14) ✔Clean room (10) ✔Trendy but functional room design (9) ✔Spacious bathroom (8) ✔TV is hidden behind the mirror (5) ✔Comfortable bed (5) ✘Molton Brown bath products (4) ✘Showerhead: strong water pressure (4) ✘Japanese toilet seat (4) ✔Clean linen (3) ✔Nice sound-proofing (3) ✔High quality audio-video system (2) ✔Free high-speed WiFi (2) ✘Poorly designed bathroom (2) ✘TV is difficult to find (2) ✘Few English-language TV channels (2) ✘No place to put toilet bag (1) ✘Insufficient snacks in the minibar (1) ✘No clock in the room (1)			✔Nice breakfast (36) ✔High quality food (4) ✔Helpful and friendly staff (2) ✔Ample options of alcohol (1) Bar: ✘Smoke odor (3) ✘Small in size (1) ✘Small selection of hot food in breakfast (1) ✘Limited food choices in restaurants (1) ✘No music (1)	✔Well-maintained gym facilities (1) ✔Clean swimming pool (5) ✔Beautiful spa and sauna area (3) ✔Attentive and smiley face employees (1) ✘Gym is hot and stuffy (1) ✘Swimming pool is small in size (1)	✔Provision of AlphaGuideVienna (1)	
Visible staff action		Receptionist: ✔gives a warm greet to guests (5)	Receptionist: ✔serves hot towels, snacks and drinks (7) ✔offers efficient check-in service (3) ✔allows guests to check-in earlier (2) ✔offers free upgrade to a better room (1)	Employee: ✔escorts guests and show them the room (2) ✔helps transfer bags to the room (1)	Housekeeper: ✔offers turndown service (1) ✔The hotel offers complimentary birthday cake and card (2)	✔Fast coffee and snack delivery (1)	Bartender: ✔offers guests with great knowledge of beverages (1) ✔serves guests with special cocktail (1) Restaurant staff: ✔are able to remember guest's preference (1)	Spa staff: ✔offers good massage and face treatment service (3)	Concierge staff: ✔helps reserve train ticket (3) ✔helps advise sightseeing and dining options (3) ✔helps reserve restaurant table (2) ✔helps send the guest jacket to the airport (1)	Receptionist: ✔offers efficient check-out service (2)
Invisible process			✔Able to authorize guest to check-in earlier (1)							

Fig. 5 Service map—hotel Sans Souci Wien

well as the provision of hot towels, snacks and drinks by receptionists during the check-in process. Regarding the physical evidence, though some guests are fascinated with the good mixture of modern technology with old Viennese architecture, one reviewer stated the hotel is small in size.

Service Failures: "Arrive Room" and "Stay in Room"

Several service failures were identified according to reviewers' descriptions of experience when arriving and staying in their guestrooms. Two reviewers complained about the poor design of their bathroom, since there was only one wash basin but bathroom and toilet were separated into two places. Another reviewer also mentioned that there was no place for him/her to put the toilet bag. Complaints relating to the televisions were also voiced. Two reviewers stated that the television was difficult to locate because it was hidden behind a huge mirror. Another two reviewers also mentioned that only limited English-language television channels were offered. The hotel manager may, thus, consider relocating the position of the television and offering more English-language channels for

customers' convenience. Last but not the least, two reviewers mentioned that a clock and sufficient snacks were not offered in the guestroom. The hotel manager may also take this into consideration when redesigning the service process.

Service Failures: "Dine in Room" and "Dine in Restaurant(s)"

The breakfast buffet in Hotel Sans Souci Wien was frequently mentioned by reviewers, and nearly all comments on it were positive. Despite the receipts of over thirty compliments, there is still room for further improvement since one reviewer noted that the selection of hot food items for breakfast is relatively limited. Some guests expressed their appreciation with the food quality as well as hospitable service offered by the restaurants. To enhance the dining ambience, one guest suggested to the restaurant manager to play some subtle music during the dining period. Apart from this, three guests were not satisfied with smoke odor in the restaurant bar. The restaurant manager may also need to be attentive to the air quality in the non-smoking area in order to avoid offending those non-smokers.

Service Failures: "Visit Other Facilities", "Make Enquiry" and "Check-Out"

Regarding other customer actions, two physical evidence related areas may need to be improved. First, one reviewer complained that the gym room was hot and stuffy. The hotel manager may need to check the room temperature regularly and ensure the ventilation system works properly, particularly in the summer time. Second, one reviewer deemed that the hotel swimming pool was small in size. Reconstructing and enlarging the swimming pool is certainly the best possible solution to this. But considering the considerable cost involved, the hotel may consider providing a clearer specification of their leisure facilities on their business website and in-room information package. When customers have accurate information about the facilities, they may form an adequate level of expectation and the hotel may thereby minimize the chance of disappointing their customers.

5.2   Sofitel Vienna Stephansdom

As a five-star property affiliated with the French hotel tycoon AccorHotels, it is not surprising to find that a majority of the analyzed comments are positive (68 % are "Excellent" and 16 % are "Very good"). Although the overall rating by reviewers are 4-point or above, a number of physical evidence related and staff action related failures were reported by reviewers. Some of them were even mentioned as high as four times by various reviewers. Figure 6 shows the service map of Sofitel Vienna Stephansdom.
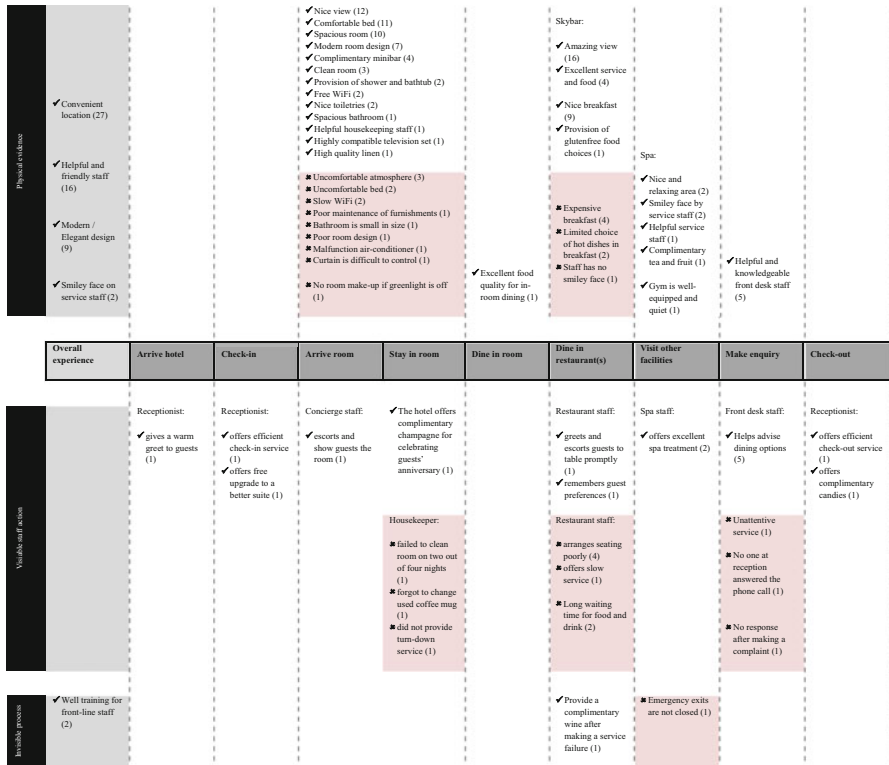
Physical evidence	Overall experience	Arrive hotel	Check-in	Arrive room / Stay in room	Dine in room	Dine in restaurant(s)	Visit other facilities	Make enquiry	Check-out
	✔Convenient location (27) ✔Helpful and friendly staff (16) ✔Modern / Elegant design (9) ✔Smiley face on service staff (2)			✔Nice view (12) ✔Comfortable bed (11) ✔Spacious room (10) ✔Modern room design (7) ✔Complimentary minibar (4) ✔Clean room (3) ✔Provision of shower and bathtub (2) ✔Free WiFi (2) ✔Nice toiletries (2) ✔Spacious bathroom (1) ✔Helpful housekeeping staff (1) ✔Highly compatible television set (1) ✔High quality linen (1) ✘Uncomfortable atmosphere (3) ✘Uncomfortable bed (2) ✘Slow WiFi (2) ✘Poor maintenance of furnishments (1) ✘Bathroom is small in size (1) ✘Poor room design (1) ✘Malfunction air-conditioner (1) ✘Curtain is difficult to control (1) ✘No room make-up if greenlight is off (1)	✔Excellent food quality for in-room dining (1)	Skybar: ✔Amazing view (16) ✔Excellent service and food (4) ✔Nice breakfast (9) ✔Provision of glutenfree food choices (1) ✘Expensive breakfast (4) ✘Limited choice of hot dishes in breakfast (2) ✘Staff has no smiley face (1)	Spa: ✔Nice and relaxing area (2) ✔Smiley face by service staff (2) ✔Helpful service staff (1) ✔Complimentary tea and fruit (1) ✔Gym is well-equipped and quiet (1)	✔Helpful and knowledgeable front desk staff (5)	
Visible staff action		Receptionist: ✔gives a warm greet to guests (1)	Receptionist: ✔offers efficient check-in service (1) ✔offers free upgrade to a better suite (1)	Concierge staff: ✔escorts and show guests the room (1) Stay in room: ✔The hotel offers complimentary champagne for celebrating guests' anniversary (1) Housekeeper: ✘failed to clean room on two out of four nights (1) ✘forgot to change used coffee mug (1) ✘did not provide turn-down service (1)		Restaurant staff: ✔greets and escorts guests to table promptly (1) ✔remembers guest preferences (1) Restaurant staff: ✘arranges seating poorly (4) ✘offers slow service (1) ✘Long waiting time for food and drink (2)	Spa staff: ✔offers excellent spa treatment (2)	Front desk staff: ✔Helps advise dining options (5) ✘Unattentive service (1) ✘No one at reception answered the phone call (1) ✘No response after making a complaint (1)	Receptionist: ✔offers efficient check-out service (1) ✔offers complimentary candies (1)
Invisible process		✔Well training for front-line staff (1)				✔Provide a complimentary wine after making a service failure (1)	✘Emergency exits are not closed (1)		

Fig. 6 Service map—Sofitel Vienna Stephansdom

Service Failures: "Arrive Hotel" and "Check-In"

As shown in Fig. 6, no service failure was identified in the stages of "Arrive hotel" and "Check-in". The receptionists in Sofitel Vienna Stephansdom were frequently mentioned in reviewers' descriptions because they offered warm greeting, efficient check-in service and provision of free upgrade. But comparing with Hotel Sans Souci Wien, fewer compliments were received. This implies that the actions by staff in this hotel might not be as effective in impressing and delighting their hotel guests.

Service Failures: "Arrive Room" and "Stay in Room"

Several staff action related failures were identified and they were mainly made regarding employees in the Housekeeping department. According to the descriptions by reviewers, the housekeeper did not make up their room on two out of four nights. One reviewer also stated that the housekeeper forgot to change the used coffee mug during their stay. Room attendants and floor supervisors from the

Housekeeping department should check the room facilities and condition carefully before allowing the subsequent guests to check in. The managers in the House-keeping department may also consider establishing a rigorous checking procedure and tool to avoid the happening of similar failures. If the hotel would not make up the room every day due to the implementation of green strategies, a friendly reminder to guests should be provided during the check-in process. Even though the hotel may employ green strategies, the receptionist should also check if guests require daily room cleaning since some guests take this for granted.

Some problems regarding the room design and room facilities were also reported in the reviews. These include but are not limited to uncomfortable bed, slow speed wireless Internet connection, poor room design and malfunction of air-conditioner. Some problems about the maintenance of room facilities and room condition were also reported by the reviewers. As described by one reviewer, some rooms use white as the theme color but black marks are found on the walls. This in turn negatively affects guests' overall impression about the cleanliness of the guestroom. Though the idea of using a special theme or color may impress and convey a unique experience to guests, the hotel should also be attentive to the maintenance of these facilities.

Service Failures: "Dine in Room" and "Dine in Restaurant(s)"

The Skybar and its panoramic view in Sofitel Vienna Stephansdom are renowned in the city, and indeed, this physical evidence was frequently mentioned among all reviews about this hotel. Many guests came to the Skybar in order to see this breathtaking view, but some reviewers mentioned that the staff arranged the seating poorly. Based on their descriptions, the staff usually reserved the seats near the window to restaurant guests but escorted those who may order drinks only to tables in the center of the dining room. Besides the poor seating arrangement, slow service and long waiting time for food and drink are other staff action related failures reported by reviewers. The corresponding restaurant manager needs to ensure that sufficient manpower is in place for preparing cuisines and serving customers. Regarding the physical evidence, the high cost of breakfast buffet was not well received by the reviewers. Although some praised its overall quality, the restaurant manager should certainly consider adjusting the price and providing more choices of hot dishes in their breakfast buffet.

Service Failures: "Visit Other Facilities", "Make Enquiry" and "Check-Out"

Three failure cases were identified in other service encounters based on the analysis of reviews. One reviewer complained that no staff at the reception answered his/her phone call. Similarly, another reviewer said that no employee responded to his/her complaint. As a five-star property, the hotel manager must ensure that sufficient

manpower and proper follow-up procedures are in place in order to cater customers' needs and answer customer enquiry at any time. Another failure case is related to the hotel security. One reviewer shared his/her experience using evacuation stairs and the emergency exit to leave the hotel building. However, since the emergency exit should be closed under the normal situation, that reviewer deemed that this is a service failure and believed the management did not offer adequate precautionary action to ensure the protection of guest security.

5.3 Palais Hansen Kempinski Vienna

Figure 7 presents the mapping of service experience in Palais Hansen Kempinski Vienna. Alike the previous two hotels, the analyzed comments about this hotel are mainly positive (82 % are "Excellent" and 14 % are "Very good"). In contrast to Hotel Sans Souci Wien, the majority of service failures in the Palais Hansen Kempinski Vienna were related to visible staff action.

Service Failures: "Arrive Hotel" and "Check-In"

In the stages of "Arrive hotel" and "Check-in", one reviewer complained that bellman did not present, greet and assist in picking up luggage when he/she arrived the hotel. Although another reviewer mentioned that doormen did open the door and greet him/her warmly, it is believed that the hotel manager should be attentive to the consistency of service provision. Apart from the above case, one reviewer mentioned that the hotel did not send staff to pick him/her up at the airport even though a confirmation was received before the arrival. Another reviewer suggested that the receptionist did not give an introduction about where the lifts were as well as time for serving breakfast.

Service Failures: "Arrive Room" and "Stay in Room"

In the stages of "Arrive room" and "Stay in room", again, the case of inconsistent service provision was found. One reviewer noted that no employee escorted him/her to the room, but three reviewers mentioned that this service was offered to them during their stay. In addition, improper arrangement and service were mentioned in another two reviews. One guest suggested that the hotel arranged a sofa bed instead of a normal bed for the additional guest. Another guest also described that the room attendant turned up to clean the room even though the guest still was in the room. Besides staff action related failures, some problems regarding the room design and room facilities were also identified. These include slow speed wireless Internet connection, malfunction of bathroom and television as well as lack of English-language television channels. Although the guestroom is

Fig. 7 Service map—Palais Hansen Kempinski Vienna

Physical evidence

Overall experience:
- ✔ Convenient location (20)
- ✔ Helpful and friendly staff (19)
- ✔ Modern design (11)

Arrive hotel:
- ✔ Spacious lobby (2)
- ✔ Charming welcome staff (2)

Check-in:
- ✔ Charming and helpful front desk staff (4)

Arrive room / Stay in room:
- ✔ Spacious room (11)
- ✔ Modern room design (5)
- ✔ Large sofa and table (1)
- ✔ High-tech in-room control (12)
- ✔ Tea and coffee facilities (3)
- ✔ Spacious bathroom (1)
- ✔ Well-equipped bathroom (1)
- ✔ Provision of shower and bathtub (4)
- ✔ Sound-proofing (3)
- ✔ Comfortable bed (8)
- ✔ Free Wifi (4)
- ✔ Charming and helpful receptionist (2)
- ✖ Lack of English-language channels (2)
- ✖ Small room size (1)
- ✖ Slow Wifi (1)
- ✖ Malfunction bathroom (1)
- ✖ Malfunction television (1)
- ✖ No guidance on how to control lighting and others using the iPad (1)

Dine in restaurant(s):
- ✔ Friendly and helpful restaurant staff (3)
- ✔ Nice breakfast (19)
- ✔ Long breakfast serving hour (1)
- ✔ Provision of various tea options (1)
- ✔ High quality food in Edvards (1)
- ✔ Great decor in the lounge area (1)
- ✔ Able to use iPad for ordering food (1)
- ✖ Expensive breakfast (2)
- ✖ Bad coffee is served in the lounge (1)
- ✖ Food quality is not as good as expected (1)

Visit other facilities:
- ✔ Beautifully designed spa (1)
- ✔ Friendly and helpful staff in spa (2)
- ✔ Nicely deisnged gift and flower shops (1)
- ✔ Nice swimming pool and spa area (1)

Check-out:
- ✔ Knowledgeable concierge staff (1)

Stages: Overall experience | Arrive hotel | Check-in | Arrive room | Stay in room | Dine in room | Dine in restaurant(s) | Visit other facilities | Make enquiry | Check-out

Visible staff actions

Arrive hotel:
- Lady in red: ✔ provides a warm greet to guests (2)
- Doorman: ✔ opens the door and greet (1)
- Disc jockey: ✔ plays Arabic music when a large group of Middle East guests arrive (1)
- Bellman: ✖ does not present and greet (1); ✖ does not help pick up guests' luggage (1); ✖ The hotel forgot to pick up guests at the airport (1)

Check-in:
- Receptionist: ✔ offers free upgrade to a better room (3); ✔ offers efficient check-in service (2); ✔ does not force guests to upsell (1)
- Receptionist: ✖ does not give an introduciton about where the lifts were, time for serving breakfast (1)

Arrive room:
- Employee: ✔ escorts guest to the room (3); ✔ offers guided tour to guest (1); ✔ help send luggage to guest room (1)
- The hotel: ✖ arranges a sofa bed for the extra guest (1); ✖ did not escort guest to the room (1)

Stay in room:
- The hotel: ✔ offers complimentary birthday cake (1); ✔ offers card and rose petals for celebrating guests' anniversary (1)
- Room attendant: ✔ offers turn-down service (1)
- Room attendant: ✖ turned up to clean the room when guest is in the room (1)

Dine in restaurant(s):
- Restaurant staff: ✔ helps sort a cake and candles (1); ✔ offers free cakes after knowing guests would leave soon (1)
- Bartender: ✔ makes a cocktail which is not on the list (1); ✔ remembers guest preference (1)
- Restaurant staff: ✖ Refills coffee slowly (1)

Visit other facilities:
- Spa staff: ✔ offers nice spa treatment (1)

Make enquiry:
- Concierge staff: ✔ helps advise directions, maps and restaurant suggestions (3)
- The hotel: ✔ provides loads of tea bags when guests request (1); ✔ offers a guided tour and babysitting service (1)
- Concierge staff: ✖ did not help bring bags from garage (1); ✖ did not confirm restaurant table reservation (1); ✖ Technician did not solve the television problem (1)

Check-out:
- Receptionist: ✔ offers efficient check-out service (1)
- The hotel: ✔ offers a pot of coffee after knowing guest would take an early flight (1)

Invisible process

Overall experience: ✖ Lack of training to attain the five-star service quality level (1)

Check-in: ✔ The hotel offers the free room upgrade after making a service failure (1)

Dine in restaurant(s): ✖ Lack of manpower (1)

Visit other facilities: ✖ Lack of manpower (1); ✖ Spa and concierge did not work well together (1)

Make enquiry: ✖ Lack of manpower (1)

Check-out: ✔ The hotel provides a nice response after receiving customer feedback email (1)

equipped with high-tech gadgets which allow guests to control most devices via an in-room tablet, the lack of guidance or tutorial on controlling it causes some inconvenience.

Service Failures: "Dine in Room" and "Dine in Restaurant(s)"

The breakfast buffet in Palais Hansen Kempinski Vienna was well acknowledged by reviewers as a total of nineteen positive comments were received, but two reviewers commented that it was quite expensive. Regarding other meals, one reviewer mentioned that the food quality was not as good as he/she expected. Another reviewer even specifically mentioned that the quality of coffee provided by the lounge was not good. Regarding the staff action, all except one comment are

positive. The one and only negative comment is about the slow coffee refilling during the breakfast period. Since many hotel staying guests may visit the restaurant and have meal at the same time, the guest suggested that the lack of manpower was the manpower was the main reason why slow service was provided.

Service Failures: "Visit Other Facilities", "Make Enquiry" and "Check-Out"

Majority of the service failure cases in other service counters are pertinent to visible staff action. One reviewer stated that no concierge staff help bring bags from garage because only one staff was in the station. This reflected that insufficient manpower did deteriorate the service quality. One guest noted that concierge staff did not confirm restaurant table reservation, while another guest also complained that technician was not able to solve the television problem in his/her guestroom. These evidences reflect that there is huge room for improvement in customer service provision in this hotel. Adequate training and service guideline should definitely be introduced in order to ensure the high service standard.

6   Concluding Remarks

Businesses and operators are now facing increasing challenges in managing service failures and designing adequate service recovery strategies in order to retain dissatisfied customers. But still, service recovery can partially but not fully compensate the detrimental impact of service failures. Since evaluation is the prerequisite of being able to make improvement, detecting deficiencies in the existing service design is, therefore, of utmost importance. This chapter introduces five diagnostic tools that are capable of deconstructing the structure of service experience, and detecting failures in the existing design.

Through analyzing consumer reviews of three luxury hotels in Vienna on TripAdvisor.com and presenting the results in a service map, the empirical demonstration of the current study exhibits the core areas of improvement in each corresponding hotel. Hotel Sans Souci Wien should allocate more resources on improving their furnishings or physical amenities, since all employee actions involved in the service process are well received by the reviewers. In contrast, a majority of the identified service failures in Palais Hansen Kempinski Vienna were related to visible staff action. This denotes that enhancing employee service standard and offering service-related training should be their primary concern, if they would like to enhance customer service experience in their hotel. Being one of the first attempts that integrate analysis of online reviews with diagnostic tools for service experience enhancement, this chapter does not only complement service design literature with a demonstration prototype but also provides operators in the service industry with useful tools and examples of how diagnostics tools can assist

in detecting service failures and then advising solutions for service design advancement.

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Concluding Remarks: Tourism Design and the Future of Tourism

Joseph T. O'Leary and Daniel Fesenmaier

Abstract The publication of Vacationscape by Clare Gunn revolutionized the way we saw tourism planning and design. This chapter summarizes the work by Dr. Gunn, discusses the linkages of this work to the emerging Design Science paradigm and concludes that this new framework provides the foundation guiding both research and planning in tourism.

Keywords Vacationscape • Design science in tourism • Tourism planning • Design

1   Introduction

In Gunn 1972 Clare Gunn first published Vacationscape which represented a significant change in thinking how to address tourism planning, development and design. Clare brought an interesting experiential background to the tourism conversation. He was trained as a landscape architect, having received the first Ph.D. from the U. of Michigan in Landscape Architecture and had worked many years at Michigan State University as an Extension Specialist dealing with tourism and communities, planning, development and public and private organizations. In the first edition of Vacationscape he laid out a set of issues that he saw in need of attention and which would change how we would think about tourism development in terms of content and process. At conferences he spoke about the differences in the polar opposite positions of environmentalists and developers in moving forward to put in place tourism opportunities. He argued for a more balanced conservation perspective and some of the elements necessary to move in that direction. Another area he identified was the failure of organizations to look and think beyond their individual organization boundaries to envision what their role might be in terms of tourism. In essence, he saw a strong "silo effect" which posed significant problems

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to successful tourism planning and in response, Gunn broadened his planning perspective to consider a regional focus. Linked to this perspective was the inclusion much of the idea of the tourism experience which had not been given much attention but was central in addressing opportunities being sought by travellers through the concept of 'vacationscape.'

Subsequent chapters dealt with "Regional Myopia," "Attractions: First Power" ("Varied Euphoria" is especially "experiential"), "The Community-Attraction Complex," "Design for a Purpose," "From people to Resources," "Design principles," "Design Process: Goals and Research," "Design process: Synthesis and Concepts," and "Postscript: The Consequences." And in the end Gunn defines Vacationscape (1972:218):

> Vacationscape thus turns out to be the art of creating environments for travelers, tourists, and recreationists...this art has attained little more than sporadic and embryonic expression.

Subsequent editions of the book continued to reflect change. Chapter 1 in Edition 3 (1987) still was addressing tourism development, but the new title "Tourism: Positive and Negative" began to be more explicit about challenges and impacts that had become more apparent since the first publication in 1972. The core elements identified in the first edition—conservation, avoiding silos, regional consideration and experience—still permeated the discussion. But other considerations also began to emerge. Subsequent chapter titles also pointed toward a change—"Politics and Ethics," Tourism Function: Demand," "Tourism Function: Supply," "Attractions: First power," Destination Development," "Spatial Patterns," Techniques, Processes and Guides," and "Conclusions and Principles." In the last chapter, a strong position is taken about "Innovation and Creativity" arguing that this is an essential element and seems to be of greatest important in thinking about the broad set of elements necessary for successful development, avoiding cookie cutter outcomes, and opening up opportunities for sustainability. While not explicit, the points made about creativity seem to emphasize the first edition emphasis about the process being an "art of creating environments." Clare's work was groundbreaking—they represent the skills and insights of a practitioner, intellectually cutting edge, a new way to approach development, the importance of tourism, the key role of experience and the process as an art of creation.

2   Vacationscape and Design Science in Tourism

As innovative as Gunn's work was the additions made to the various editions over time demonstrated that he knew different ideas related to his working thesis were necessary and important to include. Design and implementation should not and would not stand still. Gunn outlined a more macro approach to development and design in his work generally because he was painting a picture of a landscape and regional vision. But as we think about the future and design science, potential

Table 1 Comparison of vacationscape chapters and design science themes

Vacationscape 1972 (10 chapters)	Vacationscape 1997 (10 chapters)	Design science themes (16 chapters)
CH 1. Toward new tourism environments	CH 1. Tourism: positive and negative	Emotions and experience
CH 2. Regional myopia	CH 2. Politics and ethics	Designing and framing experience
CH 3. Attractions: First power	CH 3. Tourism function: demand	Social system—the social fabric of the community and region
CH 4. The Community-attraction complex	CH 4. Tourism function: supply	Technology
CH 5. Design for a purpose	CH 5. Attractions: first power	Services and diagnostics for experience design
CH 6. From people to resources	CH 6. Destination development	
CH 7. Design principles	CH 7. Spatial patterns	
CH 8. Design process: goals and research	CH 8. Techniques, processes, and guides	
CH 9. Design process: synthesis and concepts	CH 9. Conclusions and principles	
CH 10. Postscript: the consequences	CH 10. Gallery of examples	

change and innovation will blend both macro (e.g., the role of considering a social system; storytelling) and micro levels (the incorporation of emotions into understanding and constructing experiences) of thinking. The evolution of this can be seen in Table 1, a comparison of the chapters from two versions of Vacationscape and the material in this publication focused almost exclusively on experience. Virtually the whole shift is into experience design and new elements tied to that including emotions, framing experiences, a system perspective, technology and services and diagnostics.

When Butler (1980) outlined his life cycle model stages of tourism destinations it was several years after Vacationscape had been published. The framework of that model outlined many of the challenges that included initial design and development but also the need to consider the evolution and changes that occur over time and how planning and design must rise to the occasion to facilitate innovation tied to the maturing of a destination. In Gunn's 1997 edition he references Butler's model yet argues it is not particularly useful for local planning. However, if placed in the context of thinking about change, it is especially useful to recognize the importance of invention and innovation directed toward the future. Similarly, it can provide an incentive for looking at what factors may influence change in the tourism environment recognizing that these continue to occur over time. By the time Gunn was writing about tourism planning (2002) he identified more problems (i.e., components of the tourism system) that were necessary to understand and take into consideration—host–guest relationships, the variety of settings including urban, rural and small towns, consequences of development, the impact on the physical environment, the effects on social and cultural resources, economic costs,

dysfunctional development, the challenges tied to communities making choices, and sustainability—to name but a few. As Clare argued time and again, putting the pieces together pointed toward hard choices—". . .not an easy task."

Translating or interpreting Vacationscape into a Design Science perspective suggests change and innovation that needs to occur wherein the initial focus is on the tourism experience. Similar to Clare Gunn, Everett Rogers was an important pioneer in looking at innovation and diffusion with more than 6000 studies that employ some aspect of the Diffusion of Innovation model that he developed. He defined innovation as ". . .an idea, practice or object that is perceived as new by an individual or other unit of adoption." (Rogers 2003:12) and describes four key aspects tied to diffusion: (1) the Innovation; (2) Communication channels; (3) Time; and (4) the Social System. He adds that we need to consider how the innovation or change attributes are perceived (Rogers 2003:15–16 within the context of five key characteristics:

1. Relative advantage—is it better than the idea it will replace?
2. Compatibility—how well does it match the current values, prior experiences and needs of the adopter
3. Complexity—how difficult and complex is it perceived to be for use and understanding?
4. Trialability—how difficult is it to experiment with on a small scale?
5. Observability—to what degree are the results of an innovation visible to others?

Thinking about the emergence of design science as an idea and about innovations emerging from this new knowledge development that might influence experience creation or enhancement all might be considered in light of this model.

3   Bigger Picture of Change

In the opening chapter of this book there is an outline which discusses some changes that need to be considered. Fesenmaier and Xiang argue that Vacationscape changed our thinking and opened the door to move forward on several fronts. A considerable body of research from a number of areas (e.g., psychology, social psychology, environmental psychology, geography, landscape architecture, urban and regional planning, economics, marketing and communications) emerged with new ideas that related to every theme or topic Gunn had identified in designing and developing tourism opportunities but especially experience. Of course more of this activity emerged as tourism was identified as one of the most important economic activities in the world. And experience may have even become more prominent as a result of the commercial success of publications like 'The Experience Economy" (Pine and Gilmore 1999). But as Tussayadiah points out earlier in this book, an approach to experience in design science in tourism also takes us toward design thinking,

> Design thinking is considered an exciting new paradigm for problem solving for organizations facing increasingly complex and open ended challenges, often referred to as wicked problems.

In some of the literature on wicked problems, the influx of many stakeholders makes the issue or problem likely more complex and hence "wicked." (Camillus 2008). With the emergence of the many disciplines (e.g. information technology, computer science) engaged in addressing tourism and the associated experience(s), the sense that many stakeholders have interest to be considered underscores the complexity of planning, developing and managing the "experiencescape". Gunn made this point about multiple participants in the first edition of Vacationscapes at two different levels. First was looking at the various organizations in the community that needed to work together because they had a role in tourism development. The second was thinking about the different visitor groups and the experiences associated with their visit. This point was emphasized even more as subsequent editions emerged. The argument made is that dealing with the variety of players tend to force thinking about innovation because traditional approaches don't work. Add to this the rise of many disciplinary interests and the chapter by Peters discussing a 'social systems' approach to tourism design further underscores the search for new knowledge to inform this issue in communities and regions.

In the later editions of Vacationscape, Gunn elaborated on the importance of gathering supply and demand data to assist in the decision making directed at development and design. In both of these arenas, the argument was made to continue to improve the data and knowledge that could be developed to aid in planning and development. The emphasis on a regional perspective was both important and challenging in terms of gathering these types of data. To this day, information about demand in many areas is still limited and planning may be less effective. Yet destinations and regions know it is important, although it may take a different and more complex form than in the past. In the recent analysis of future need assessment the International Destination Management Association emphasized the emergence of a different and larger data environment to be considered, the technologies emerging and identified several data related needs to address—Big Data, Social media prominence, mobile platforms and apps primary engagement, smart technology opportunities and tourism integrated with economic development. (DMAI 2014; Fuchs et al. 2014; Chareyron et al. 2014; Gretzel et al. 2015; Hofacker et al. 2016). Already, organizations (e.g., CTC 2015) are changing their approaches to advertising through data gathering that relies less on traditional survey approaches and more on the use of social media exploration. An underlying argument in doing this is to save money. But the bigger question and challenge is to identify what the right combination of these resources should be and how to interpret them to help make decisions. This need for assessment and interpretation will grow much more in the years ahead and represent a new and significant change and challenge for organizations.

It is impossible to consider the future of tourism design and development without incorporating many of the technology changes occurring many of which

influence the accumulation of data. For example the ability to monitor emotional interactions with travel environments and consider how to factor those data into the design of opportunities is possible. Combined with opportunities to deal with the "Internet of Things" the ability to be connected and collect data on interactions and connections in real time could allow us to leverage this material in new and innovative ways and help identify new experience frameworks, make an entity more competitive, improve ROI, help create new markets or understanding, better plan and manage, etc.

Vacationscape was important in terms of thinking about design and development of tourism areas. In fact, the discussion that Gunn provided in suggesting a regional perspective, the consideration of multiple stakeholders and the central important of experience (at least) took planning, management and policy in new directions. The contributions that emerged from the many disciplines that began to look at tourism expanded the ideas, models and examples that could be considered in design and planning. Gunn's publications always included a chapter or Appendix that outlined a series of examples that could be reviewed for learning and potential application. The disciplinary work noted above has many of the same characteristics except it is broader in terms of the elements often included. As an example, the role of service and discussions about "servicescape," while possibly inferred in the Gunn discussions, have become a key element of the contemporary approach to the tourism experience. Similarly, including various ways to improve the tourist experience through storytelling opportunities also adds new dimensions to enhancing the experience. Examples of adding storytelling to the boats taking tourists to the Great Barrier Reef have not only enhanced the enjoyment of the visitor but also acted to protect the resource itself. And while experiences can be improved through service, evaluations of how the delivery is working also becomes important and add new responsibilities for the tourism community.

4 Concluding Remarks: Changing Issues of Tourism Design and the Future

A science approach to tourism design will continue to evolve with knowledge building and experimentation that sharpen and expand understanding of elements that impact experience. For example, where Vacationscape discussed experience, in the future research and planning will explore items like emotion, technology, services, storytelling, authenticity and social system relationships in the development of the "experiencescape." But integrating these into community and regional planning and management will be tough if for no other reason than they are different and could be interpreted as hard to do, perhaps along the lines of the complexity issue noted earlier in the innovation model Rogers proposed. Gunn took the approach in his various editions to provide case studies and examples of how the ideas laid out were being used in the design of communities and actual places. The

"experimentation" phase associated with the developments were part of the years of experience in the field. So experience is be linked to another Innovation model factor, time. It is likely this development of case studies and applications will be an important part of moving forward and enhancing the adoption stages in experience design.

Case (2016) outlines an interesting perspective when he looks forward and one that will have a profound impact on the travel experience: The Third Wave of the Internet will be defined not by the Internet of Things; it will be defined by the Internet of Everything. . .and new phase of technological evolution, a phase where the Internet will be fully integrated into every part of our lives—how we learn, how we heal, how we manage our finances, how we get around, how we work, even what we eat (Chapter 3, Line 539). He discusses this change in looking forward in a description of the Third Wave. The First Wave was the beginning of the Internet, while the Second Wave was the rapid development of applications and mobile technology. In each instance a core set of requirements included people, products and platforms. In the Third Wave he adds additional requirements that include partnerships, policy and perseverance. And, underlying these changes is the development of new companies or companies that have changed to be driving the development and the innovation.

If the Internet of Things is the direction we expect to see in the future, where people, data, process and things are networked together, where new companies and entrepreneurial opportunities are growing, what might be the implication(s) for the tourism experience and design science? The fact that it is likely to happen is driven by the value added calculations in the trillions of dollars that are tied to connectivity. The argument is also that it will impact both the public and private sectors. For example, what if storytelling is dynamic and becomes more personal as it is linked to location, other prior choices that have been made about a destination, what one or more in your group likes to eat, where you have been before—the nature of how this might be developed is fascinating. How might we think about the tourism social system and the new connectivity that defines this operating framework? How will the service experience provision be shaped and can we improve it because of the changes that are taking place in this emerging technology environment? Thinking about the evolution of Vacationscape in light of design science is exciting, but the translation of these new ideas may be difficult. Yet, this new paradigm is now upon us and will empower us in the years to come with new knowledge and opportunities for transformation.

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