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Designing for experiences: a meta-ethnographic synthesis

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ABSTRACT

Experiences are at the core of tourism and hospitality. Understanding how to design, manage and measure such experiences has become a key topic in academic literature focused on this sector. This paper presents the characteristics of an optimal design process model for experiences, based on the results of a meta-ethnographic synthesis of such processes. The characteristics can be seen as critical success factors in delivering the right solution to the right problem efficiently and effectively. Depending on the context, starting level and aim of the design, designers can benefit from applying several different design processes. Such a process benefits from design capabilities developed in multi-disciplinary teams. Moreover, the design process aids design teams through steering the collection of explicit and tacit knowledge on problem and solution aspects with stakeholders in a specific order. The success of a design process depends on procedural knowledge of lead designers and their ability to orchestrate and integrate contributions from various disciplines and stakeholders at the right times. Existing design processes for tourism and hospitality experiences lack maturity and flexibility, resulting in them having poor structural validity. However these processes, with insights from design science, can form a base for further theoretical development.

Introduction

Staging positive, memorable experiences is the core business of tourism and hospitality (Binkhorst & Dekker, 2009). One could argue it is the 'essence and raison d'être' of the tourism and hospitality industry (see e.g. Pizam, 2010, p. 343), not just from a business point of view but also from the consumer point of view (Smit & Melissen, 2018). Understanding how to design such experiences has therefore become one of the key topics in academic literature focused on this sector. The concept of experiences has long since played an important role in the tourism and hospitality literature. For instance, Cohen (1979) already identified five types of tourism experiences and their importance for the tourist. In more recent literature, the importance of experiences is emphasized for tourism destination development (Gardiner & Scott, 2018) and hospitality management (Tasci & Pizam, 2020). In recent years, others have also pointed out the potential of tourism and hospitality experiences to contribute to sustainable development (Font et al., 2018; Smit & Melissen, 2018; Weaver, 2012).

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Literature reviews in tourism and hospitality journals (see e.g. Brent Ritchie et al., 2011; Campos et al., 2018; Walls et al., 2011) highlight some of the achievements, challenges and possible directions for future research on experiences. One of these challenges relates to the purposeful design, management and measurement of these experiences (Kim & Fesenmaier, 2017; Scott & Le, 2017; Tasci & Pizam, 2020; Trischler et al., 2018). As Duerden et al. (2015), Fesenmaier and Kim (2015), and Tussyadiah (2014) point out, experiences cannot be designed to create identical behavioural and neurological responses from each consumer. However, the system consisting of products, services and physical and social environment, that is experienced by consumers – the experience system – can be designed with the intention to create similar effects on each consumer, for instance, with respect to memorability, pleasure or repurchase intentions. Within this context, the concept of experience can be interpreted as a form of learning from or having experience with a specific environment, and it is that environment that can be purposely designed, staged and managed by experience system providers, such as hotels, attractions and destinations. In other words, whereas the ultimate consumer experience cannot be designed, a tourism or hospitality offer can in fact be designed *for* experience (Tussyadiah, 2014). In recent years, more and more publications have therefore focused on how to design for experiences. Das and Mukherjee (2008), Font et al. (2018), Stuart and Tax (2004) and Tussyadiah (2014), amongst others, have presented or applied processes, that could be applied in design for tourism and hospitality experiences. However, the increase in the number of publications dedicated to this topic has not yet resulted in an accumulation of knowledge or in an explicit theoretical development in this area.

Therefore, the objective of this study is, firstly, to provide a comprehensive overview and analysis of design processes for tourism and hospitality experiences that have been reported on in the literature thus far and, secondly, to lay the foundations for further theoretical development with respect to the characteristics of an optimal design process model for such experiences. The study adopts a meta-ethnographic approach to synthesizing the existing literature related to this topic. As is common in ethnography, this study focuses on the identification and mapping of key concepts, ideas and behaviours in selected papers. In order to identify the key concepts, however, the study integrates theoretical backgrounds on design process models outside of tourism and hospitality literature. Through purposely incorporating this knowledge beyond the papers selected for the synthesis, the authors aspire to contribute to what has already been identified as a much-needed practice in tourism literature; to avoid a blinkered approach to developing knowledge within the field by 'digging deeper in the same hole' (McKercher & Prideaux, 2014; Scott, 2020). The remainder of this paper, therefore, is structured as follows. First, we present generic, theoretical background with respect to: (i) design processes and their characteristics, and (ii) how to choose the optimal design process for a specific context. Next, the methodology section presents the argumentation for adopting meta-ethnographic synthesis. The results section presents the findings for each of these seven stages of the methodology. The discussion section reflects critically on both the findings and the theoretical background. Finally, the conclusion summarizes this article's contribution to knowledge, presents recommendations for further research and outlines implications for management, education and academia.

Design process models and their characteristics: theoretical background

Design process models are used in many fields to help designers structure the activities and contributions of different stakeholders in the process of designing new or improved systems. Consequently, a design process model is 'an abstract representation of a process structured around a set of activities required to conceive a system, fully or partially' (Céret et al., 2013, p. 796). Such a model must be capable of providing detailed information on these activities, such as how and why they are executed, who performs them, when and in what order these activities should take place, and what their impact is on the intended outcome (Giaglis, 2001). This paper focusses on tourism and hospitality experiences and how to model the process of designing these experiences. Within this context, the system to be designed could for instance be a hotel including all its service

interactions, processes, spaces, facilities and amenities. All of these elements could be purposely designed to create an environment that is likely to result in a particular, and/or similar, consumer experience for all consumers who stay at the hotel. For pragmatic reasons, in the remainder of this paper, the term 'experience design' will be considered to represent the design of a specific environment, including all relevant elements of this environment, provided to consumers by tourism and hospitality businesses.

A design process model should clearly explain: (i) the set of activities needed to conceive all elements of the system, (ii) the order in which these activities need to take place, and (iii) how each of these activities informs all other activities to eventually deliver the desired or required system. Whereas theoretical development on design process models in tourism and hospitality literature has been limited thus far, they have been developed extensively for many other fields, such as industrial engineering, architecture, software development and website design. These models range from prescriptive models that are precise and detailed, to descriptive models that are flexible and adaptive. Prescriptive design process models would usually be preferred in the design of a satellite, which generally benefits from the mathematical precision of axiomatic design (Suh, 1998), or the design of technical appliances, for which a systematic design process is common practice (Akao, 1990; Pahl & Beitz, 2013). Within these contexts, design processes are generally organized in a top-down way, a so-called waterfall approach, aiming to develop a complete system on delivery. In contrast, a descriptive design process model is often preferred in situations that require creativity to come up with novel solutions (Cross, 1997) or in which user feedback and data can be used to adapt the prototype or design to specific user needs, behaviours or preferences. These design processes are often organized to accommodate for developing or improving a system incrementally, adding new or upgraded elements over time, following a cyclical or spiral approach (see e.g. Boehm, 1995). It is possible to combine aspects of prescriptive and descriptive design process models into a single, coherent process, for example, when it is necessary to combine hardware and software development, as seen in mechatronic design (Gausemeier & Moehringer, 2002). It could be argued that design for tourism and hospitality experiences would also benefit from such an approach (Smit & Melissen, 2018) as, in many cases, the ultimate experience design incorporates hardware and infrastructure, and also intangible elements such as interactions with software and staff.

Cross (2008) has suggested a generic design process model that includes characteristics of prescriptive and descriptive models. Cross' model structures the design process based on two dimensions: (i) the vertical dimension relates to the levels at which activities take place; while (ii) the horizontal dimension relates to the set of activities that can, or should, be executed at each level (see Figure 1). Muller (2001) provides a generic vocabulary to distinguish between these levels. The overall objectives for the design are determined at the *topological* level. The characteristics of possible solutions are determined at the *typological* level. Finally, the detailed designs of all the
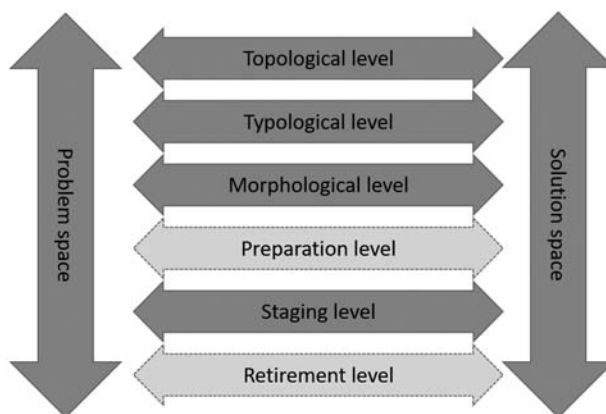

Figure 1. Levels and dimensions of design for tourism and hospitality experiences.

elements pertaining to a solution are developed at the *morphological* level. To illustrate these levels, consider the example of the City Council of Hanau (Germany) who would like to boost their local economy by developing experiences for tourists. In doing so, they would like to focus on attracting fewer, but higher spending, tourists (topological level). Given the natural surroundings of Hanau, and the fact that the Grimm brothers (the famous fairy tale writers) lived there for most of their lives, the decision is made to develop experiences linked to nature and (Grimm) fairy tales (typological level). This then automatically leads to the development of hotels, restaurants, guided tours, hiking trails and apps that together create an environment – an experience system – that represents the detailed experience design for staging consumer experiences that are centred on the life and stories of the Grimm brothers (morphological level).

The need to distinguish between levels of design and to engage in problem solving at each level is common across design process models (Akao, 1990; Cross, 2008; Dubberly et al., 2008; Gausemeier & Moehringer, 2002). However, based on Roozenburg and Cross (1991), and Akao (1990), one could argue that three additional levels (beyond topological, typological and morphological) should be added, i.e. preparation, staging and retirement. The *preparation* level would focus on designing the planning and execution of the construction, assembly and delivery of elements of the system, defined at the morphological level. The *staging* level would relate to the designing of the planning and execution of the operational aspects of implementing/using the final design, for instance, with respect to staff interactions with tourists and the order in which elements of the system become available. The *retirement* level would specify what happens to elements of the system (e.g. infrastructure) when they are no longer in use. This could include purposely designing elements of the system in such a way that they can be reused or recycled.

To illustrate these additional levels, once again, we shall consider the Hanau/Grimm example. The preparation level would allow us to plan the construction of physical infrastructure, buildings and websites, as well as the staff training to get Hanau ready for staging consumer experiences centred on the Grimm brothers' lives and fairy tales. The staging level would address the operational and marketing aspects of the experience design, such as work schedules and continuous content development for websites, advertisements and apps. The retirement level would foresee what happens to specific elements of the experience system, such as the infrastructure, when it is no longer in use or how parts could be reused to 'produce' different experiences. In Hanau's case, it could very well be that, at a later stage, specific elements of the current system, such as buildings, could also contribute to staging experiences centred on Hanau's role as a spa and wellness resort for the rich and famous in the eighteenth century. However, within the context of tourism and hospitality experiences, it is important to realize that experiences, and services for that matter, are produced and consumed simultaneously (Parasuraman et al., 1985). Therefore, one could argue that design processes dedicated to tourism and hospitality experiences actually only include the staging level, which focuses on designing and planning how the morphological design is executed, as well as how to collect data on the experiences of consumers immersed in the design to allow for further improvement of morphological details of the experience design (see Figure 1).

It is important to realize that the vertical dimension of a design process model does not necessarily indicate a fixed order of activities. Although the Hanau/Grimm example suggests that the design process usually starts at the topological level and ends at the staging level, it could also start or end at any of the other levels and subsequently move to higher or lower levels of design. However, the vertical dimension does emphasize the importance of problem clarification, either by decomposing the overall problem into sub-problems or by identifying the overall problem behind observed sub-problems. Accommodating both these reference points linked to the vertical dimension means that the design process in the Hanau/Grimm example could also start, for example, with consumer feedback or initiatives by entrepreneurs at the morphological or typological levels, but it would remain important to relate this feedback or these initiatives to decision-making at the topological level to ensure the coherence of the city as an experience system and its (long-term) success as a tourism destination.

The horizontal dimension of a design process relates to the (set of) activities that take place at each level of the vertical dimension between the problem and solution spaces. Roozenburg and Cross (1991) emphasize that, while there might seem to be a one-directional path from problem to solution, the 'problem definition is often dependent upon [the] solution concept' (p. 334). The horizontal dimension focuses on analysing and defining the design problem, generating solutions, simulating outcomes, and predicting the performance and impact of solutions, before deciding on a particular solution and thus deciding to move to a different design level or to iterate and develop more solution alternatives (see Figure 1). Dorst and Cross (2001) refer to this process as the co-evolution of problem and solution. Depending on the type of design process model applied, for instance, prescriptive versus descriptive, these decisions are made and documented in different ways, ranging from formal and detailed (including aspects such as technical specifications and budget constraints) to informal (using natural language). Depending on the objective of the design process, the design level and the disciplines involved, a wide range of different problem-solving and decision-making methods can be applied. For an overview of such methods in a tourism context, see, for instance, the works by Tussyadiah (2014) or Trischler et al. (2018).

Whereas Cross' generic design process model (2008) highlights several important aspects based on which design processes can be compared, developing a full understanding of the appropriateness of specific design processes for specific contexts would clearly benefit from also referring to the four key aspects of design process models identified by Curtis et al. (1992). These aspects are, first, a design process model should explain the set of activities that need to be executed in order to develop a (partial) system. These separate activities can be seen as the *functional* aspect of the model. Second, the model should explain the order in which the activities need to be executed, which is the *behavioural* aspect. Third, a design process model should provide information on the problem-solving methods that could be applied for each activity, and who should execute them, within an *organizational* aspect. The fourth and final aspect, the *informational* aspect, relates to how information and outcomes, such as decisions and prototypes, are shared within the design team and with relevant stakeholders, such as users.

Curtis et al.'s four key aspects are also represented in the Promote design process taxonomy, suggested by Céret et al. (2013). This taxonomy allows for the classification of design processes based on six axes of, in total, 34 characteristics. These six axes are: cycle, collaboration, artefacts, recommended use, maturity and flexibility. The characteristics represented by the first three axes closely resemble the four key aspects identified by Curtis et al. (1992) – cycle incorporates both the functional and behavioural aspects, whereas collaboration and artefacts relate to the informational and organizational aspects respectively. However, for the purpose of selecting the most appropriate design process model for a specific context, Céret et al. (2013) add the last three axes, explaining that it is also important to understand the recommended use, maturity and flexibility of each model available. Recommended use refers to information on the context and project size for which this specific design process model can be applied, as well as which disciplines are needed in the design team. Maturity refers to specifications included in the model on how to validate both the design process itself (structural validity) and its outcome (performance validity). Finally, flexibility refers to information included in the model to explain how the process can be adapted for specific purposes and situations. This final axis of the taxonomy is operationalized by referring to the variability of activities, distensibility (extending or reducing) of activities, the necessity of completing all activities, and the granularity of information available on the process and its activities.

Methodology

This paper makes a methodological contribution to tourism literature by being the first to adopt a meta-ethnographic approach to synthesizing the existing literature, in this case in relation to design processes

for tourism and hospitality experiences. Adopting the seven-stage approach to synthesizing qualitative studies (see Figure 2) put forward by Noblit and Hare allows 'readers to simultaneously understand how the studies are related' (1988, p. 26), including their similarities and differences. This type of qualitative meta-synthesis can be defined as an interpretive approach that allows for the systematic comparison of studies by treating the original studies as data, while treating their respective qualitative concepts and ideas as analogies (Jamal et al., 2013; Noblit & Hare, 1988).

This approach to meta-analysis typically aims to generate a meta-synthesis by interpreting existing knowledge rather than to generate a meta-summary (Thorne et al., 2004). A meta-summary generally integrates data and findings from qualitative research on a particular topic leading to 'approximately the sum of [its] parts' (Thorne et al., 2004, p. 1358). As such, meta-summaries follow a quantitative logic in which, for instance, the frequencies of findings are presented. In contrast, a meta-synthesis presents a new conceptualization of a particular phenomenon, based on 'an interpretative integration of qualitative findings, that are themselves interpretive synthesis of qualitative data, […] descriptions or explanations of phenomena' (Thorne et al., 2004, p. 1358). A meta-synthesis, thus, potentially creates a whole that is bigger than the sum of its parts (Thorne et al., 2004; Weed, 2006), where those parts represent narratives that may not use the same vocabulary and concepts, and, consequently, lack a shared emic understanding. Meta-synthesis allows for the creation and analysis of this shared understanding and, thus, for the generation of novel theory (Finfgeld-Connett, 2016). As the method of meta-ethnographic synthesis is novel to tourism literature, the results section presents both the method and the outcomes of each stage and how each stage informs the next stages.

Results

Stage 1: determining initial interest

The initial interest for this meta-ethnographic synthesis was to develop an understanding of how to design for tourism and hospitality experiences. However, given the numerous interpretations of the terms 'design' and 'experiences' (Smit & Melissen, 2018; Tussyadiah, 2014), this scope proved too wide to develop a meaningful synthesis as it risked gross generalizations or misinterpretations of the concepts and ideas presented. Therefore, the scope was narrowed to determining the characteristics of the optimal design process model for experiences in a tourism and hospitality context.

Stage 2: deciding what is relevant to the initial interest

In order to minimize researcher bias, and to maximize the chances of including all relevant studies, a comprehensive systematic search strategy was adopted (see Figure 3). As the synthesis presented in this paper was based on the assumption that the studies to be synthesized were of acceptable quality, it was decided to only include peer reviewed articles in tourism, hospitality and business

Seven stages of meta-ethnographic synthesis
1. Determining initial interest
2. Deciding what is relevant to the initial interest
3. Reading the studies
4. Determining how the studies are related
5. Translating the studies into one another
6. Synthesizing translations
7. Expressing the synthesis

Figure 2. Seven stages of meta-ethnographic synthesis (adapted from Noblit & Hare, 1988).

journals with an impact factor from the Web of Science and Google Scholar meta-search engines. The initial combination of search terms used were 'experience', 'design', 'tourism *or* hospitality *or* hotel' and 'tourist *or* guest *or* customer'. The initial search resulted in 1,352 papers of possible interest. A review of the titles and aims of the papers identified 702 papers that referred to discussing/reviewing experience design in a service, tourism or hospitality context. By defining design process models and developing an understanding of how they can be analysed and compared, as illustrated in the theoretical background section, inclusion and exclusion criteria were established. Papers that, to some extent, 'defined a set of activities required to conceive a system fully or partially' (Céret et al., 2013, p. 796) were included. After reading the abstracts of all 702 papers, this resulted in a set of 54 possibly relevant publications. These 54 publications were read in full to determine whether they incorporated detailed information on the set of activities that together create a design process for experiences (Giaglis, 2001). This first reading led to 10 of the 54 papers being selected for further analysis. Snowballing these papers by systematically checking backward and forward references, as well as the references of references (Greenhalgh & Peacock, 2005), identified a further 13 possibly relevant publications. Further snowballing, and a repeat of the previous steps, on these 12 papers ultimately resulted in one more paper being added to the final selection, giving 11 papers in total (see Figure 3).

Stage 3: reading the studies

To gain a full understanding of their content, and to identify the main concepts needed for the next stage, the 11 selected papers (see Table 1) were re-read several times. Given that the papers were highly diverse in their scope, context, vocabulary and methodological approach, two additional steps were taken to identify their qualities.

First, for all 11 papers, the design contexts and design aims – based on the destination innovation framework (Gardiner & Scott, 2018) – were identified and noted down, and the references that substantiated the presented design processes were backtracked to their origins (see Table 1). This process helped to explain some of the differences in the design approaches adopted. The 11 papers were rooted in approaches as different as industrial design (Roozenburg & Cross, 1991), quality improvement (Akao, 1990), operations management (Edvardsson et al., 2000), service innovation (Beckman & Barry, 2007) and human-centred design (Stanford d.School, 2017).

Second, in order to develop an understanding of each paper at a more detailed level, the 11 design processes and their applications were entered in nVivo12 as qualitative data. Subsequently, the 11 papers were coded based on Céret et al.'s (2013) taxonomy. By adopting a process of descriptive coding (Saldaña, 2016), comparable contents were identified and linked in preparation for Stage 4. As such, these qualitative descriptions of the design processes for experiences were analysed as behavioural data on the act of designing for experiences, analogous to the way Cross (2001) developed his consensus model for engineering design.

Stage 4: determining how the studies are related

In order to develop a full understanding of 'the relationships between the concepts arising from the different papers' (Britten et al., 2002, p. 211), the descriptive coding of the 11 papers was followed by
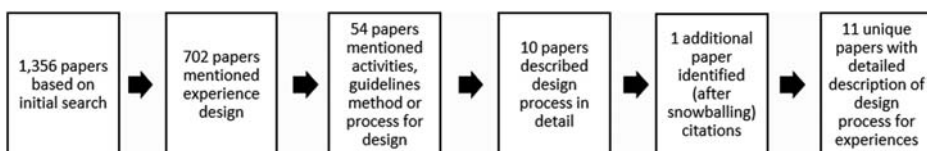

Figure 3. Purposive sampling of research articles.

Table 1. Overview of selected papers.

Papers	Context	What is designed	Position in the destination innovation matrix	Design process origin
Jeong and Oh (1998)	hospitality experience design	experience quality	consolidation	QFD (Akao, 1990)
Stuart and Tax (2004)	service & hospitality experience	service experience	experience innovation	conceptual
Das and Mukherjee (2008)	Tourism destination experience strategy	experience strategy	experience innovation, transformational experience, experience innovation	QFD (Akao, 1990)
Patrício et al. (2011)	(digital) service experience	service experience system	transformational innovation	Dubberly et al. (2008)
Masoudi et al. (2013)	hotel design	infrastructure	experience innovation	QFD (Akao, 1990)
Tussyadiah (2014)	tourism experience design	experience concept	any	Cross and Roozenburg (2007)
Jernsand et al. (2015)	tourism experience development with local stakeholders	customer journey	consolidation, experience innovation	Sanders and Stappers (2008) Cross and Roozenburg (2007)
Price and Wrigley (2016)	airport experience	experience concept	consolidation, experience innovation	Beckman and Barry (2007) Dorst and Cross (2001)
Teixeira et al. (2017)	(digital) service experience	service experience system	transformational innovation	Dubberly et al. (2008)
Yu and Sangiorgi (2018)	value co-creation in service experience design	experiential value	consolidation, experience innovation	Edvardsson et al. (2000)
Font et al. (2018)	tourism experience development with local stakeholders	system of touchpoints	consolidation, experience innovation	stanford d.school (2017)

concept coding (Saldaña, 2016). According to Corbin and Strauss (2014), concept coding is especially useful in ethnographic and phenomenological research. It allows for bypassing the details and nuances of individual accounts to identify the ideas suggested by each of the studies at hand. The process of concept coding, thus, helped to assign more abstract levels of meaning to the descriptive codes and to create a common terminology that embedded all the relevant concepts and ideas from each of the 11 papers. These key concepts were worded as nouns or concept phrases, in line with the guidelines for concept coding (Saldaña, 2016).

The key concepts were: (1) type of process: starting level, direction and end level of the design process; (2) behavioural characteristics of the design process; (3) role of designers; (4) role of external stakeholders, community, competition and the environment; (5) role of customers/ guests/ users; (6) design team composition and role of internal stakeholders; and (7) role and function of artefacts, documents and prototypes. The first two of these key concepts relate to the functional and behavioural aspects of experience design processes (Giaglis, 2001) but also touch upon the flexibility of these processes. They indicate whether a top-down or bottom-up approach is adopted, the extent to which the design process includes decision-making at different levels of design, and the extent to which it allows for iterations and concurrent design of sub-elements of the design. The other key concepts mostly relate to the organizational, informational and maturity aspects of design processes (Céret et al., 2013; Giaglis, 2001). The key concepts 'role of designers' and 'design team composition … ' refer to ideas about who should be involved in various activities and the extent to which the designer leads the design effort or simply represents one of the disciplines in the team. The key concepts 'role of customers/guests/users' and 'role of external

stakeholders … ' relate to the extent to which data is gathered on consumers, competition or community, or whether these parties are actually involved in co-designing (parts of) the experience.

In order to compare the selected papers, a matrix was created in which the key concepts are presented as the row labels in row 7–13. Additionally, rows 2–6 visualize the levels of design addressed in the process and the type of process presented in each paper, based on Figure 1. These visualizations indicate the levels of design represented in the process (blue boxes) and the direction of the design process through different levels (represented by black arrows). The visualization also shows possible iterations for the design process as a whole (the vertical dimension) and for specific levels of design (the horizontal dimension), which are both represented by white arrows. Table 2 depicts a schematic representation of this matrix. The full matrix is available here [link to supplemental materials on figshare].

Stage 5: translating the studies into one another

In this stage, the matrix, created in stage 4, was completed by entering data into a separate column for each paper. Within each cell, the relevant concepts and ideas described in the papers were identified. Direct quotes from the papers were indicated by quotations marks, whereas statements in parentheses were interpretations of specific statements in the paper and, finally, statements without parentheses or quotation marks were based on the author's paraphrasing of the paper. Empty

Table 2. Schematic representation of synthesis matrix.

Key concepts	Paper 1	Paper 2	Paper X
Design levels, iterations and direction in design process	Visualisation of design process and levels based on Figure 1	Topological	
		Typological	
		Morphological	
		Staging	
Type of process: starting level, direction in design process and end-level			*"quote from paper X on this concept"*
Behavioural characteristics of design processes: stepwise iterations, process iterations, parallel development and co-design			*Paraphrasing paper X in this key concept*
Role of designers			*(interpretation of paper X of this key concept)*
Role of external stakeholders; community; competition or; the environment			*[empty cell: no information on this key concept in paper X]*
Role of customers/ guests/ users			
Composition of the design team; role of internal stakeholders and commissioner			
Role and function of artefacts, documents and prototypes			
Second order interpretations	2nd order interpretation Paper 1	2nd order interpretation Paper 2	2nd order interpretation Paper X

cells indicated that a specific paper did not contain information on that topic. The matrix was completed, in the last row, by formulating second-order interpretations to present the main contributions of each paper toward developing an understanding of the characteristics of the optimal design process for tourism and hospitality experiences, based on the entries in the previous rows (as seen in Britten et al., 2002). In Table 2, this process is represented by the bold vertical arrow.

Additionally, the concepts and ideas from each paper had to be embedded in the key concepts used to label the rows of the matrix; this process is represented by the dashed double arrow in Table 2. For some key concepts, terminology was borrowed from one of the papers (e.g. 'integrator of design elements' was taken from Stuart and Tax (2004)), while some were taken from the literature on design processes (e.g. 'behavioural characteristics of design processes' was taken from Curtis, 1992). This iterative approach to completing the matrix (adapted from Britten et al. (2002) and Noblit and Hare (1988)) ensured that each concept or idea from the papers was represented by one of the key concepts (row labels) in the matrix. The iteration can be observed by comparing the row labels in Tables 2 and 3, where the latter incorporates the ultimate key concepts based on embedding the concepts and ideas of all the papers.

Before continuing to Stage 6, the first author of this paper shared the results so far with the co-authors, which included two authors of one of the synthesized papers, and invited their feedback. Moreover, the results were presented to four other authors of the original papers to confirm the analysis and interpretation of their respective papers and the commensurability of the presented process, in line with the assumptions for the synthesis (Britten et al., 2002). These conversations confirmed, that each paper and each presented process had been analysed and interpreted correctly. Consequently, it would be fair to conclude that the second-order interpretations were constructed and formulated correctly for all the selected papers.

Stage 6: synthesizing translations

By repeatedly reading and reflecting on the key concepts, as well as the second-order interpretations, the relationships between the papers were established. In the instances where information related to a key concept could not be identified in a particular paper, those papers did not refute that particular key concept as relevant to the design process. Moreover, although the individual papers differed with respect to their approaches and origins, none of the papers refuted the concepts or ideas of another paper. In fact, the relationships between the papers proved to be reciprocal, which allowed the construction of four third-order interpretations, which synthesized the interpretations at paper level into meta-interpretations for the collective set of papers (see Noblit & Hare, 1988). Table 3 presents these third-order interpretations, which together shape a line of argument that informs us about the characteristics of the optimal design process for tourism and hospitality experiences.

These meta-interpretations clearly highlight that designing for experiences in a tourism and hospitality context can actually benefit from specific design processes, depending on the decision for a specific start level of design (e.g. developing a new strategy vs improving an existing operation). Each process has specific advantages and disadvantages with respect to developing the right solution for the right problem. Moreover, successfully designing for tourism and hospitality experiences also benefits from the collection of a mix of tacit and explicit knowledge on the problem and solution (i) at the different levels of design, (ii) together with the right stakeholders, and (iii) in a justifiable order. The collection of knowledge not only informs decision-making towards previous and subsequent steps in the process but also increases the quality of these decisions. Successfully designing for tourism and hospitality experiences therefore requires: (i) developing design capabilities in multi-disciplinary teams, which involve all relevant stakeholders (including consumers); and (ii) a focus on (activities and methods for) capturing both explicit and tacit knowledge in the problem and solution spaces. Ultimately, the success of an experience design process, within the context of tourism and hospitality, depends on the procedural knowledge of lead designers and their ability to orchestrate and integrate contributions from various disciplines, stakeholders and users throughout the process.

Table 3. Synthesis, expressed through key concepts and second- and third-order interpretations.

Key concepts	Second-order interpretations	Third-order interpretations
Type of process: starting level, direction in design process and end-level: topological, typological, morphological, staging	Adopting a user-centric, bottom-up, co-creative approach to redeveloping the network or system of experience touchpoints at morphological level, based on reference points established at the topological level, improves the evaluation and re-design of experiences at a typological level	The development of experience strategies benefits from a top down structured co-creative decision making process with experts and commissioners based on customer research data
Behavioural characteristics of design processes: stepwise iterations, process iterations, parallel development and co-design	Systematically aligning customer needs with management requirements as the basis for prioritizing design attributes at different levels of granularity ensures improved performance from a customer and organizational perspective	Designing for experiences in a tourism or hospitality context can benefit from several different design processes depending on the decision for a start level of design. Each process has advantages and disadvantages with respect to developing the right solution for the right problem. Successful design of experiences benefits from collecting a mix of explicit and tacit knowledge on the problem and solution space from stakeholders at different levels of design. Which data is collected, how the data is collected, the order in which this takes place, and how this informs decision making towards previous and subsequent steps in the process has a major impact on the outcome of the design process.
Role of designers: researcher; manufacturer of documents, artefacts & prototypes; facilitator of decision making; integrator/ orchestrator of design elements	Leadership, vision, teamwork, multi-disciplinarity and a parallel approach to developing soft and hard elements are crucial in designing experiences, but integrating mechanisms need to be used at the right time by the designer as coordinator of the design process to achieve business objectives	Formulating both technical and experience needs, based on extensive customer research, for the design of tangible infrastructure at the start of the design process, creates clear guidelines for stepwise, iterative development of experiences at different levels of granularity that satisfy business objectives The optimal experience design process benefits from design capabilities developed in multi-disciplinary teams including all relevant stakeholders that focus on capturing both explicit and tacit knowledge in the problem and solution space
Role of external stakeholders: community; competition or; environment	Capturing tacit knowledge of experience providers and consumers is crucial to successful experience innovation and requires rapid prototyping and collaborative reflection which builds design capabilities of stakeholders.	
Role of customers/ guests/ users: research subject; co-designer; prototype tester	Designing experiences benefits from explorative, generative and evaluative types of research in guiding designers through different stages of the design process from experience strategy to experience concept and detailed design which describes a customer journey in detail as if it were a play with customers as characters	Adopting a mix of design & qualitative research techniques to empathize with consumers complementing market research helps in creating a more abstract understanding of customer needs and reframing problems into opportunities together with internal stakeholders, which creates a better starting point for idea generation for customized experiences	Successful design of experiences depends on the procedural knowledge of lead designers and the ability to orchestrate and integrate contributions from various disciplines, stakeholders and users throughout the design process

(Continued)

Table 3. Continued.

Key concepts	Second-order interpretations	Third-order interpretations
Composition of the design team; role of internal stakeholders and commissioner	Experience innovation requires the development of organizational competences through creating a culture of co-creation and innovation based on an iterative approach to experience design	Experience design benefits from having a multi-disciplinary team review the strategic, tactical and operational design problems and solutions in a systematic and parallel way using customer research data.
Role and function of artefacts, documents and prototypes: capturing tacit knowledge; facilitating decision making; capturing feedback from customers and other stakeholders	Experience design benefits from having a multi-disciplinary team review the strategic, tactical and operational design decisions based on modelling experience needs and solutions using customer research data to strengthen communication between stakeholders and disciplines	

We therefore conclude that an optimal design process for experiences applies a process model with the following characteristics:

 (i) The model has a clearly defined purpose and recommended use, it explains the starting point for the process, and it clearly shows the involved design level(s) and the order in which they are addressed in activities in both the problem and the solution dimension.
 (ii) The model proposes (alternatives for) activities and methods for collecting tacit and explicit knowledge on problem and solution at different levels of design included in the process, including recommendations for stakeholder involvement in these activities.
 (iii) The model includes recommendations for design team composition and capabilities needed for the process as a whole and individual activities within the process.
 (iv) The model specifies the procedural knowledge and design competence needed to manage and validate the process, including the timely orchestration and integration of contributions of design team members and other stakeholders.

Stage 7: expressing the synthesis

The most common way of expressing the synthesis in meta-ethnography is in a paper such as this, or in another form of academic writing. Noblit and Hare (1988) emphasize that the way the synthesis is expressed needs to fit with the potential audience. Whereas this paper is an attempt to express the synthesis to fellow academics, the ambition of the authors is to also inform practitioners in tourism and hospitality, as well as educators in the field. Therefore, this synthesis will also be expressed in the form of educational materials and will be part of a training and development programme for practitioners executed within an EU Horizon2020 project [details provided after the article is accepted]. In this programme, specific design processes will be developed, applied and validated for the design of cultural tourism experiences at destinations with different levels of tourism development, from rural places hoping to attract more tourists to European cities struggling with overtourism.

Discussion

The essence of a meta-ethnographic synthesis as expressed in this paper is to develop a contribution to the literature in relation to a focused question. In this case, this question was: What are the characteristics of the optimal design process model for experiences in a tourism and hospitality context? The key difference between this methodology and a more 'traditional' systematic literature review is that it allows for interpretation of individual studies, and further interpretation of these interpretations, to develop a 'fresh contribution to the literature' (Britten et al., 2002, p. 214). Combining meta-ethnographic synthesis with bringing in existing perspectives from other fields was needed to meet the objective of this study; to provide a comprehensive overview and analysis of design processes for tourism and hospitality experiences reported on in literature *and* lay the foundation for further theoretical development with respect to the characteristics of the optimal design process for such experiences. The meta-synthesis has identified four characteristics of design process models for tourism and hospitality experiences that could be deemed critical success factors based on the meta-synthesis but which were not (all) found in (all of) the selected papers.

First, in most of the selected papers, the chosen or developed experience design process did not seem to be the outcome of careful evaluation and comparison of alternatives. As one of the authors revealed in the feedback gathered in Stage 5, the adopted design process in that particular paper was selected because of the accessible and understandable way it was presented online, and not, for instance, based on deliberately reflecting on the aim, or its start and end levels. The author of a different paper explicitly chose the particular design process to be able to establish whether it would work in a tourism context. However, by experimenting with these particular design processes,

the authors were able to establish their value for this purpose and formulate recommendations for further use. Unfortunately though, most, if not all, of the selected papers did not describe explicit reflection on the selection of the design process (model) applied. This contrasts one of the key outcomes of the meta-synthesis, which relates to the importance of reflexivity and procedural knowledge with respect to experience design processes. The combination of Grenha Teixeira et al. (2017) and Patrício et al. (2011) forms a possible exception here, as they explicitly mention a systematic approach to developing their respective design processes and their structural validity based on the Analysis-Synthesis bridge model (Dubberly et al., 2008). Moreover, the former of those papers can be seen as an adapted version/application of the latter. One could also argue that the papers that adopted Quality Function Deployment (Das & Mukherjee, 2008; Jeong & Oh, 1998; Masoudi et al., 2013) actually represent adaptations of the original design process for product engineering (Akao, 1990), i.e. they adapted the knowledge and data collection activities to their respective tourism and hospitality contexts. Through combining the perspectives of all papers, this study hopes to contribute to this reflexivity by providing an overview of alternative processes and their purpose and recommended use in Table 1. Simultaneously, this overview can also contribute to the structural validation of these design processes making them less vulnerable to developing beautiful solutions to the wrong problem or inadequate solutions to the right problem.

Second, the authors of the selected papers only adopted performance validation of the design processes, that is, the designers only validated whether their solution fitted the aims they themselves had formulated, without: (i) validating that their outcome was also the best possible solution for the given situation; or (ii) whether their outcome was created in the most effective and efficient way. Both of these aspects of structural validation relate to the *maturity* and *flexibility* of the design process adopted. Maturity here refers to efficacy and adoption in practice (Céret et al., 2013). Flexibility in design processes refers to 'the possibilities of adaptation to the project context and needs' (Céret et al., 2013), and includes variability and choice of methods for specific process steps, distensibility of process steps and the specification of design level(s) included in the process, as key attributes. Explicit reflections on maturity and flexibility were not present in the selected papers and for most of them no further publications could be identified that describe and analyse application of the same design process (model) independently of the original authors and/or in adapted forms. Given that 8 out of the 11 processes included in this study were published in the last 10 years, of which 5 in the last 5 years, this is not surprising, and it would safe to say that research on this topic is still in its infancy.

Third, the third-order interpretations presented in Stage 6 of this study indicate that design for tourism and hospitality experiences would also benefit from collecting a mix of explicit and tacit knowledge. In contrast, the design processes described in most of the selected papers appear to be rather rigid in their selection of data and their knowledge collection methods informing the design process, with the possible exception of Tussyadiah (2014) and Price and Wrigley (2016). Fortunately, however, together the 11 papers do provide a wide range of alternatives that can be used in several design processes.

Fourth, the meta-synthesis leads us to conclude that the optimal design process for tourism and hospitality experiences clearly benefits from design capabilities that are developed in multi-disciplinary teams that include and involve all relevant stakeholders. However, the individual selected papers mostly provide limited information on when, which disciplines and which stakeholders were or should be involved in the design process given the particular project and context, or how this contributed to the development of design capabilities. Even though this organizational aspect of design processes is unlikely to have one straightforward answer, conscious reflection on and guidelines for how to select and involve the relevant disciplines and stakeholders at various stages and levels of the design process would strengthen the design process in developing the optimal experience system. As of yet, such reflections and guidelines are not commonplace in tourism literature, although Stuart and Tax (2004), Patrício et al. (2011) and Yu and Sangiorgi (2018) have made valuable contributions in this area.

These four observations further support the main outcome of the meta-synthesis, which is the importance of procedural knowledge of lead designers and their ability to orchestrate and integrate contributions from various disciplines, stakeholders and users throughout the design process for tourism and hospitality experiences, as for instance illustrated by Font et al. (2018) and Jernsand et al. (2015). The training of, and learning from, leading experienced designers on these aspects, and the transfer of knowledge and professional experience to other (experience) designers, is vital to building a better shared understanding of the experience design process. This shared understanding is needed to ensure that experience design processes result in the best solution to the problem they set out to solve, given a particular context. Obviously, further building this understanding also requires knowledge to be gathered on experience design processes that have failed (to some extent) and requires an increase in the maturity and flexibility of existing experience design process models, with a view to improving their relevance and validity. Academics and practitioners need to be encouraged to publish and share not only their best practices but also their failures, thus sharing their procedural knowledge and contributing to the theoretical and practical knowledge development in this field.

Cognizant of this need, this paper aspires to make a contribution to the development of procedural knowledge that improves the reflexivity and maturity of design processes for experiences in a tourism and hospitality context. This is done by sharing the observations and findings presented so far and by highlighting the papers selected for their specific contributions to the meta-synthesis. It is important to realize that these papers, as a set together, already present a rich set of alternative approaches, processes and activities within processes that can be learned from with respect to developing smarter context- and project- specific design processes for experiences. However, analogous to Kim and Fesenmaier (2017), the authors of this paper are very aware that there is much more to be learned about design science for tourism and hospitality than can be shared in a single paper or book. In the context of designing for experiences, this includes, for instance, methods to set design requirements (e.g. with respect to size, capacity and investment) and methods for competitor analysis, but also, and maybe more importantly, the systemic design of tourism experiences at destination level, which accounts for all of their positive and negative impacts on local communities and society as a whole (see e.g. Koens et al., 2019). In light of the line of argument presented in Stage 6, it might be wise for tourism and hospitality academics to develop an understanding of the opportunities of design science and to be open, inviting and appreciative towards design academics interested in our field and interested in publishing (multi-disciplinary) research in tourism and hospitality journals; four of the five authors contacted in Stage 5 indicated that they prefer to publish their research in design or service journals because tourism and hospitality journals are generally unappreciative of their work.

Conclusions

This study presents a meta-ethnographic synthesis of papers that aims to improve our understanding of the characteristics of the optimal design process model for experiences in a tourism and hospitality context. It contributes to literature in two ways.

First, this study is the first in tourism and hospitality literature to adopt meta-ethnographic synthesis as a methodology, after Weed (2006) pointed out the potential of this methodology for the field. Second, through integrating and interpreting the existing knowledge on this topic (from the relevant academic literature), this study has identified four characteristics that serve as critical success factors for experience design processes in tourism and hospitality contexts.

It is important to note that this study shows that there is no such thing as one optimal universal design process for experiences in a tourism and hospitality context. In fact, reflecting on, and understanding, which process would work best for a particular situation, which activities it would consist of and how it could, or should, be managed so that buy-in and (knowledge) contributions from all internal and external stakeholders are possible, are crucial to developing successful designs for

experience systems. For businesses in tourism and hospitality, this means that developing design capabilities and leadership are key, if they aim to compete on consumer experience. Moreover, to be able to successfully design for experiences, they need to be clear and consistent about their ambitions in this respect at all different levels of design. If there is no clearly defined experience at the staging level, this needs to be addressed in the design process. Any development or improvement at higher levels of design without such a reference point would be pointless. Simultaneously, if there is no clearly formulated strategy explaining the mission and ambition of the organization or destination at a topological level, development of such a strategy needs to be incorporated in the design process and subsequently serve as a reference point for the typological, morphological, and implementation and evaluation levels. Any development or improvement at typological or morphological level without such a reference point cannot be assessed on its merits without benchmarking it against its aim or purpose at topological or staging level. For instance, developments and improvements at these levels would not make sense without explicitly linking them to the ambitions and aims of the organization or destination with respect to aspects such as heritage conservation, mitigating overtourism, the needs of the local community, sustainability and/or economic development. For some of these ambitions and aims, it might very well be needed to add the design levels for preparation and retirement of experience systems to the overall design process, analogue to the design processes for (tangible) products, for instance, to allow for more sustainable, possibly to some extent circular, designs of experience systems.

This study has also shown that the design processes for experiences in tourism and hospitality reported in literature to date have not (yet) been validated extensively on process or performance. Moreover, many of these processes have shown limited maturity and flexibility in their application. It is therefore suggested that more research on these aspects is needed. As already pointed out by Brent Ritchie et al. (2011) and Ritchie and Hudson (2009) a decade ago, this requires a stream of research focusing on the development and validation of processes and methodologies for designing for experiences, similar to, and aligned with, methodologies developed to measure them. Defining and publishing a (new) research agenda, for instance together with some of authors refenced in this paper, would be a good starting point to do so.

With respect to measuring experiences, further research and debate is needed with respect to experience evaluation metrics and methodologies at different levels of design. This would also help with the performance validity of experience design processes. Moreover, defining *measurable* outcomes and impacts for specified design objectives would not only help improve the design process itself, but could also form the basis for competitive benchmarking. This might very well help to bridge the gap between academics that focus on measuring experiences in tourism and hospitality, and those that focus on understanding their design. Additionally, finding *the* answer(s) for bridging this gap might also require actively engaging with fields other than tourism and hospitality, for instance, the fields of interaction design, and environmental or cognitive psychology.

Finally, it is crucial to realize that designing experiences already happens in the real world, by real businesses, designers, entrepreneurs and consultants, and for real guests, visitors and consumers. Understanding the procedural knowledge of these businesses, designers, entrepreneurs and consultants, and how that knowledge was developed over time through successes and failures, can be vital to the theoretical development that supports transfer of knowledge through education and training. Studying the designers that are designing experiences, similar to the way Dorst and Cross (2001), Kimbell (2011) and Stuart and Tax (2004) studied designers, may help to bridge the divide between academics publishing on their conceptual efforts and the tacit knowledge that is available already in the field. Moreover, it would help to establish the structural validity of design process models through improving their *maturity* and *flexibility,* while developing a better understanding of their performance validity. Obviously, it would be smart to utilize the knowledge and methods available in design science to do so and not try to reinvent that wheel within tourism and hospitality. Ideally, tourism and hospitality journals would provide a platform to publish

these efforts, so that this knowledge would not be only disseminated in design journals, thereby limiting its ability to bolster tourism and hospitality in times when it desperately needs it.

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