## **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

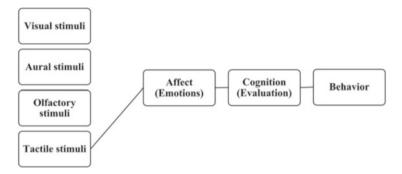


Fig. 1 The effects of atmospheric stimuli on consumer behaviors in tourism and hospitality

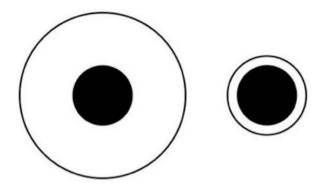
red and yellow. However, such warm-color environments are generally perceived as unpleasant. In contrast, a cool color (e.g., blue) induces feelings of confidence, thus easing the purchase of expensive products (Bellizzi et al. 1983; Bellizzi and Hite 1992). Some hotels clearly use color schemes in their 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 more 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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