# Balance between Cultural Features and Service Design in International Theme Parks

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Abstract: This paper's objective is to create an evaluation model to analyze the cultural characteristics in service design of international theme parks through content and spatial correlation analysis. It argues that cultural characteristics such as landscape and soft service are some of the most important elements of success in service design. Instead of evaluating moving time, wait time, and visitors' preferences, we focused on analyzing prototypical forms of cultural elements in theme parks such as landscape, and types of attractions, experience sections, restaurants, and shops. These elements were then translated into proportion to generate quantified values, which were then compared with other theme parks to analyze the differences of cultural characteristics among international theme parks. As the generated visualization shows, our model suggested that all six international Disneyland parks have different cultural characteristic proportions. This model can allow designers to find hidden cultural aspects during the development of service design development. Therefore, this paper contributes to the ability of developing service design to utilize various cultural characteristics when building new and reorganizing existing theme parks. *Key words: Service Design, Design Culture, Leisure Service, Theme Park* 

## 1. Introduction

Nowadays, the completeness of a theme park's story realization is significant to sustain the commitment of visitors. Most Disney theme park designers agree on the importance of story realization: physical elements and soft services that, together, complete a space [9]. The process of story realization has been perceived through the traditional filmmaking that generally coordinates a story. Theme park service design that coordinates physical elements with a global theme has been dominated by Walt Disney, which has frequently emphasized the importance of the implementation of narrative elements within spaces. However, despite the efforts of designers to implement suitable physical elements and soft services, the absence of cultural characteristics decreases visitors' commitment. For example, when Disney was exporting their theme park to Japan, Japanese operatives insisted on identical design structures of Disneyland in California, since local people wanted to experience the park as if they were in the U.S.A. However, the blueprint has since been modified due to the various cultural norms and the size of the building sites in Japan. For instance, eating while walking is shameful in Japan; therefore, Disneyland Tokyo expanded the size of its restaurants and seating [16]. Tobin [22] argued that Disneyland Tokyo does its best to 'emphasize contextualized cultural description over decontextualized grand theory.' In 2011, the park hosted 14 million visitors. Disneyland Paris also made alterations, changing attractions such as Tomorrow Land into Discovery Land to connect with European historical personas such as Jules Verne, Leonardo da Vinci, and H. G. Wells [16]. The employee uniforms and architectural styles were also designed to match cultural aesthetics [16].

Disneyland Paris hosted 11 million visitors in its first year. With such successful examples, this paper investigates ways to quantify the content and special modifications of international theme parks based on cultural differences. Firstly, we collected cultural elements of theme parks such as landscape, experience sections, types of attractions, restaurants, and shops. Then, we analyzed the cultural elements using the concept of network and proportion. The result expanded our insights concerning the connectivity of visitor's passage, utilization of theme park spaces, and distribution of theme park contents to understand why visitors visit Disneyland parks in various countries.

# 2. Service Design and Theme Parks

## 2.1 Starting Point

In the examples of Disneyland Tokyo and Disneyland Paris, consideration of cultural characteristics was one of the most important factors for success. However, current service design quality literature does not consider quantifying cultural characteristics of theme parks. Gummesson [8] pointed out limitations to analyzing customer experience in service design through current service design models; service design quality literature cannot provide genuine validity and relevance because it lacks chosen variables and various statistical methods. Therefore, he suggested using more observational research methods using qualitative data such as words, pictures, and video [6, 7, 8]. Consequently, we suggest analyzing cultural characteristics though the qualitative data.

# 2.2 Current Service Design Methods

Service design helps to connect the customer's needs and the company's business plans [5]. Despite its importance, service design has often received less attention than physical products that were considered the critical innovation factor [2]. However, service design is critical for any products or industries that are sensitive to the users because service design is built upon understanding the users' needs [1]. By understanding the users' behavior, companies and organizations can encourage users to repurchase and revisit their businesses [3]. Previously, service design was only able to verbally explain service design elements such as customer actions, onstage/visible contact employee actions, backstage/invisible contact employee actions, support processes, and physical evidence; now, however, graphic elements are used to express service design elements when explaining the service design process [1]. Therefore, this paper suggests ways to analyze not only the service design process graphically, but also by providing empirical values to explain the cultural elements within theme parks' service design processes.

#### 2.3 Current Methods of Evaluating Theme Parks

The importance of service design is expanding as a new strategic paradigm. Currently, the focus of service design is to increase businesses' strategic success rate by improving user satisfaction through higher quality services [1]. Theme park service design literature focuses on evaluating service experiences by analyzing and surveying visitors on their level of satisfaction regarding attraction variety, waiting time, admissions cost, and restaurant variety, primarily through surveys [4, 12, 13, 14, 18, 19]. Although such literature is helpful for evaluating the satisfaction level of the visitors, it is not capable of explaining what atmosphere the visitor actually wants. Thematic elements are most important for theme park products [24], and Trischler [23] states that 'the experience cues thread the theme though the whole service experience.' It is critical to evaluate how users are enjoying the themes of a park and how they are adapting when the themes are changing as they walk through.

Current service design literature does not provide any insights into the cultural needs and differences of the users, especially for the leisure services that are culture-sensitive industries [15].

# 3. Analysis

# 3.1 Content and Spatial Correlation Analysis

Since this is preliminary research on evaluating quantification of cultural elements of theme parks, it was critical to choose which theme park to research. We chose to analyze a specific theme park, which has expanded globally—Disneyland. The blueprint and content of Disneyland parks vary based on the location of the park. One of the most obvious ways to note the cultural differences is by analyzing the experience sections, landscape, attractions, restaurants, and shops of each park. Such data can allow us to understand the connectivity of visitor's passage, utilization of theme park spaces, and distribution of theme park contents to analyze detailed information of what and why visitors visit Disneyland parks in various countries. Therefore, six theme parks' cultural elements, such as number of attractions, restaurant themes, shops, and the total area of the park were collected from the Disney official resources [25, 26, 27, 28, 29, 30] and Disney review literature [17, 20, 21] for our content and spatial correlation analysis. The collected data was then translated into the percentages of cultural characteristics, which were compared with six other theme parks to analyze the differences between their cultural characteristics.

#### 3.2 Connectivity of Visitor's Passage

Based on the data collected of Disneyland parks' experience sections, landscape, attraction, restaurant and shop, similarity tests were performed to reveal the space efficiency, passage connectivity, and cultural preferences of each theme park. Figure 1 shows the passage connectivity of the six theme parks - DisneySea Tokyo, Disneyland Tokyo, Disneyland Paris, Disneyland Hong Kong, Magic Kingdom Florida and Disneyland California. According the Travis Medley [17], it is against park rules to run anywhere in the park at Disneyland and Magic Kingdom in U.S.A, but running is permitted at Disneyland Tokyo and DisneySea Tokyo. When the park opens, Japanese visitors run as fast as they can to enjoy their desired attractions. In addition, Figure 1 shows that the structures of the various parks reflect cultural differences. For instance, when visitors enter Disneyland Tokyo, they have three passages to get to their favorable destination from the entrance. However, visitors at Disneyland Paris, Hong Kong, California and Magic Kingdom Florida have to walk through the center of Main Street U.S.A to reach their desired attraction. The dashed lines at Disneyland Hong Kong, California and Magic Kingdom Florida are the Disney Railroad, which is a circulating transportation system for the people to ride since they are not allowed to run in the park. All of the parks except Disneyland Hong Kong have multiple central nodes - nodes that have more than three edges - to allow people to move freely. Disneyland Hong Kong only has two central nodes, which limits the visitor's desired passage to walk. Our observation is that Disneyland Hong Kong is only 51 acres – the smallest park among Disney's theme parks - therefore the visitors have to walk past the places they are not interested in in order to get to their desired destination.



Figure.1 Disneyland's experience sections and passages as network connections

# 3.3 Utilization of Theme Park Spaces

The space usage of attractions in each section of the parks was also analyzed. We first collected the number of attractions, restaurants, and shops separately in each experience section, such as Adventureland, Fantasyland, and Tomorrowland. Then we compared the collected data to the total area of each experience section to calculate the complex distribution of attractions, restaurants, and shops throughout the park. Table 1 shows the results of the correlation analysis with theme park spaces and total area of the park. Disneyland California's attractions are well distributed, but not the restaurants and shops. In other words, visitors can enjoy the attractions as they walk through fairly consistently, but the restaurants and shops are more difficult to find because they are mainly placed along Main Street U.S.A. Disneyland Paris is similar to Disneyland California, but even worse. Attractions are placed fairly inconsistently throughout the experience sections, and the restaurants and shops are mainly placed in a single area. Magic Kingdom Florida and Disneyland Tokyo have utilized their spaces well. In other words, people can enjoy attractions, purchase souvenirs, and satisfy their hunger easily as they walk through the park. Such observations can be explained by cultural differences, such as how Japanese visitors feel embarrassed to eat while walking; therefore the restaurants are distributed more conveniently to prevent such embarrassment.

Theme Park	Attraction	Restaurants	Shops
Disneyland, California	0.44	-0.68	-0.20
Magic Kingdom, Florida	0.64	0.69	0.31
Disneyland, Tokyo	0.48	0.52	0.23
DisneySea, Tokyo	-0.11	0.32	-0.09
Disneyland, Paris	0.15	-0.52	-0.81
Disneyland, Hong Kong	0.40	0.26	-0.55
Averaged Total	0.33	0.10	-0.19

Table 1. Theme Park Components Correlation Analysis

# 3.2 Distribution of Theme Park Contents

All of the Disney parks have different numbers of experience sections and types of attractions. We have calculated the percentages of the experience sections according to the total area and compared them based on types of attractions (Figure 3). Our results show that Disneyland California has the most variety of experience sections: Main Street U.S.A, Adventureland, New Orleans Square, Critter Country, Frontierland, Fantasyland, Mickey's Toontown, and Tomorrowland. Disneyland Tokyo (104 acres) and Disneyland Paris (102 acres) have an exponential number of experience section differences despite their relatively similar total area. This observation illustrates that Japanese visitors visited Disneyland to enjoy multiple experience sections with rather calm attractions in contrast to Disneyland Paris, where most visitors enjoy fewer cultural experiences but more adult attractions, such as rollercoaster rides. As Figure 2 shows, the attractions at Disneyland Tokyo, Disneyland Hong Kong, and DisneySea Tokyo are rather calm – 49% of attractions are shows & exhibitions at Tokyo, 54% at Hong Kong and 45% at DisneySea Tokyo. In other words, the park is built to meet visitor's expectations, whether these be for sight-seeing, experiencing a variety of shows, or enjoying stimulating attractions like thrill rides. Disneyland California and Magic Kingdom Florida have more evenly varied attractions like thrill rides and exhibitions, showing that they target a wider range of people, from children to the elderly [11]. Figure 4 shows that there are differences in the placement of similar attractions in different experience sections in all five theme parks (DisneySea Tokyo is omitted since it has entirely independent attractions compared to other Disneyland parks).



Figure.2 Total Area and Experience Section Percentage



Figure.3 Total Area and Experience Section Percentage

# Disneyland California



# Magic Kingdom Florida



Disneyland Tokyo



**Disneyland Paris** 



# Disneyland Hong Kong



Figure.4 Total Area and Experience Section Percentage

# 4. Results and Conclusions

Our results show that there are clearly differences between Disneyland parks in various countries to reflect and meet cultural norms. Each of the six Disney theme parks has different types and percentages of theme park contents, and different walking passages connecting the theme park areas. Disneyland Tokyo and DisneySea Tokyo have different ratios of experience sections and restaurant distribution compared to any other Disneyland park. Disneyland Tokyo's entrance connects three experience sections because running is allowed in Japanese theme parks. However, other Disneyland parks have circulating railroad systems starting at the entrance since running is not allowed. Disneyland California and Magic Kingdom Florida have well distributed attractions, restaurants, and shops since their target goal is to satisfy a diverse group of visitors.

Current service design methodology is not capable of analyzing detailed information of what guests desire. We have evaluated the connectivity of user passage, utilization of theme park spaces, and distribution of theme park contents to analyze detailed information of what and why visitors visit Disneyland parks in various countries. We collected cultural elements of theme parks such as experience sections, landscape, attractions, restaurants and shops and translated them into proportions to generate quantified values.

Thus, our research provides a new way of collecting detailed information to understand and evaluate cultural elements among the theme parks. Future work will find the correlation between the connectivity, attraction target, and experience distribution with visitors' satisfaction. Therefore, our current research can provide even more detailed understandings of users' behavior in theme parks.

#### 5. References and Citations

[1] Bitner M J, Ostrom A L, Morgan F N. (2008). Service blueprinting: a practical technique for service innovation. *California Management Review*. 50 (3), 66-94.

[2] Brentani, U. . (1989). "Success and Failure in New Industrial Services. Journal of Product Innovation Management. 6 (4), 239-258.

[3] Cook, L, S., Bowen, D, E., Chase, R, B., Dasu. S., Stewart, D, M., Tansik, D, A. (2002). Human issues in service design. *Journal of Operations Management*. 20 (2), 159-174.

[4] Geissler, G, L., Rucks, C, T. (2011). The overall theme park experience: A visitor satisfaction tracking study. *Journal of Vacation Marketing*. 17 (2), 127-138.

[5] Goldstein, S, M., Johnston, R., Duffy, J, A., Rao, J. (2002). The service concept: the missing link in service design research?. *Journal of Operations Management*. 20 (2), 121-134.

[6] Gummesson, E. (2005). Qualitative research in marketing: road-map for a wilderness of complexity and unpredictability. *European Journal of Marketing*. 39 (3.4), 309-327.

[7] Gummesson, E. (2006). Qualitative research in management: addressing complexity, context and persona. *Management Decision*. 44 (2), 167-179.

[8] Gummesson, E. (2007). Access to Reality: observations on observational methods. *Qualitative Market Research*. 10 (2), 130-134.

[9] Hench, J (2008). Designing Disney: Imagineering and the art of the show. New York: Disney Editions. .

[10] Hendry, J (2000) The Orient Strikes Back: A Global View of Cultural Display. Oxford: Berg, Print.

[11] Ito, M (1994). ) Hitoga atsumaru theme park no himitsu. Tokyo: Nihon Keizai Shimbun Sha. 41-52.

[12] Kawamura, H., Kurumatani, K., Ohuchi, A. (2004). Modeling of Theme Park Problem with Multiagent for Mass User Support. *Lecture Notes in Computer Science*. 3012 (), 48-69.

[13] Keng, A-K.. (1993). Evaluating the attractiveness of a new theme park, A cross-cultural comparison. *Tourism Management*. 14 (3), 202-210.

[14] Kim, H., C. Cheng, and J. Oleary.. (2007). Understanding Participation Patterns and Trends in Tourism Cultural Attractions. *Tourism Management*. 28 (5), 1366-1371.

[15] Lee, S-W, 2010. A study on the theme park design referring to aspects of narrative - focused on

classification of narrative types and identification of narrative experience structure in theme park. Master's Thesis. Republic of Korea: Korea Advanced Institute of Science & Technology.

[16] Maanen, J. (1992). Displacing Disney: Some Notes on the Flow of Culture. *Qualitative Sociology*. 15 (1), 5-35.

[17] Medley, T., Medley, M (2010). *Travelers Series Guide to the Tokyo Disney Resort*. San Diego: Travelers Series. 1-250.

[18] Milman, A. (2001). The Future of the Theme Park and Attraction Industry: A Management Perspective. *Journal of Travel Research*. 40 (2), 139-147.

[19] Ryan, C., Y. Shih Shuo, and T.-C. Huan. (2010). Theme Parks and a Structural Equation Model of Determinants of Visitor Satisfaction -- Janfusan Fancyworld, Taiwan. *Journal of Vacation Marketing*. 16 (3), 185-199.

[20] Sehlinger, B, and Len T (2010). The Unofficial Guide to Disneyland Paris. Hoboken: Wiley. 1-282.

[21] Sehlinger, B, and Len T (2013). *The Unofficial Guide to Walt Disney World 2013*. Hoboken: John Wiley & Sons. 1-772.

[22] Tobin, J., Joseph J. (1992) *Re-made in Japan: Everyday Life and Consumer Taste in a Changing Society*. New Haven: Yale UP. Print.

[23] Trischler J, Zehrer A. (2012). Service design: Suggesting a qualitative multistep approach for analyzing and examining theme park experiences. *Journal of Vacation Marketing*. 18 (1), 57-71.

[24] Wanhill, S. (2002). Creating Themed Entertainment Attractions: A Nordic Perspective. *Scandinavian Journal of Hospitality and Tourism*. 2 (2), 123-144.

[25] http://us.parks.disneylandparis.com/disneyland-park/index.xhtml# [Online], [Accessed: 11 March 2013].

[26] http://www.tokyodisneyresort.co.jp/en/tdl/index.html [Online], [Accessed: 11 March 2013].

[27] http://www.tokyodisneyresort.co.jp/en/tds/index.html [Online], [Accessed: 11 March 2013].

[28] http://disneyland.disney.go.com/disneyland/ [Online], [Accessed: 11 March 2013].

[29] http://park.hongkongdisneyland.com/hkdl/en\_US/parks/overview?name=ParkOverviewPage [Online], [Accessed: 11 March 2013].

[30 https://disneyworld.disney.go.com/destinations/magic-kingdom/ [Online], [Accessed: 11 March 2013].