A Study on the Application of Narrative Transportation in Storytelling Tourism Marketing Communication in Taiwan

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Abstract

In recent years, interactive multimedia guides have become increasingly common in museums, exhibition spaces, and tourist attractions. Over the past decade, Hsin Beitou government and local residents have launched a series of reform movements for local tourism. During the research process, it was found that the current planning of attractions lacks pre-tour guidance and itinerary arrangements. In on-site surveys, tourists expressed uncertainty about the route guidance of the attractions, and their itineraries usually began upon arrival at the destination or by searching for fragmented video materials beforehand. Through this research, the design of different types of videos, including narrative attraction animation videos, influencer videos focusing on attractions, and videos solely introducing attractions, were explored to investigate their impact on viewer attitudes and travel motivations.

Previous studies have mainly focused on one-sided tourism discussions. This thesis, however, conducted field surveys, preliminary studies, and interviews to connect cultural and historical tourist attractions into a complete narrative-guided video. Drawing on literature research and analysis of narrative transportation theory, story-based tourism marketing, and video tourism, the thesis designed a video that provides clear and concise travel guidance, saving tourists' time. The 3 types of videos, including narrative animated tour video, influencer tour video and attraction introduction video were provided for tourists to explore the impact of these 3 videos on their travel motivations and the narrative transportation effectiveness. The study employed a questionnaire based on the narrative transportation theory and Likert 5-point scale to understand the satisfaction of

the participants with the narrative-guided video and their motivation to visit the attractions.

Based on literature research, this study connected significant attractions of Hsin Beitou area to create a narrative-guided video called "Hsin Beitou Healing Notebook". The content of the video was designed according to Gerrig's TIM scale, which includes The TIM scale included 11absorption propensity items and one imagery ability item capturing its major dimensions of cognitive, affective, and imagery involvement. The narrative of the video focused on a Japanese wounded soldier revisiting old sites in Hsin Beitou and recalling his experiences of healing after World War II. From this narrative, nine highlights of Hsin Beitou tourism were identified. The study applied narrative transportation theory to tourism, examining the impact of video design on tourists' travel motivations, using narrative-guided video design as the research method.

Keywords: narrative transportation, story-based tourism marketing, video tourism.

1. Introduction

In recent years, both domestic and foreign tourists have shown increasing interest in Taiwanese tourist attractions on online platforms. Tourists have also become more demanding in terms of the quality and environmental friendliness of tourism sites. The prevalence of social media influencers and check-in spots has made it easier for tourists to access information online. Previous studies have shown that the success of tourism requires mutual relationships between government, operators and tourists.

Goeldner and Ritchie (2007) defined tourism as an interactive process involving tourists, tourism activities, tourism operators, government, suppliers and hosting communities. This process includes attracting tourists to physically visit the attractions. Sinaga (2012) further emphasized that proper planning is necessary to achieve satisfaction and joy during solo or group travel. Based on these studies, we can conclude that effective marketing and promotion are crucial for attracting tourists and revitalizing tourism sites, especially before the start of the travel itinerary.

The 2020 Sustainable Development Strategy for Tourism in Taiwan (2018) pointed out that the current domestic tourism environment is facing the problem of insufficient distinctiveness and internationalization of tourist attractions in various regions. Recreational facilities, tourism products and tourism activities all imitate each other, resulting in high homogeneity. Therefore, it is necessary to actively create in-depth, diverse, and locally distinctive tourism. One of the major issues at many tourist attractions in Taiwan is that there are often

skywalks and Instagrammable spots, but these attractions usually have no substantial connection with local attractions. Tourists come to visit these spots only to take pictures recommended by bloggers or social media influencers, rather than choosing attractions based on their personal preferences and interests. Furthermore, the lack of in-depth knowledge content at these attractions leads to tourists taking photos and checking in without practical value and meaning. The following 7 problems are currently faced by tourism attractions in Taiwan: (1) Low-price promotions by business seeking performance. (2) Superficial sightseeing rather than in-depth travel experiences. (3) Short-sightedness of tourism operators. (4) Mismatch between tourist salary structure and travel value. (5) Ubiquitous sale of identical products, market competition resulting in imitation and price-cutting. (6) Hotels promoting tourism strategies but only focusing on food and photo opportunities. (7) Neglecting the true meaning of local culture. Business prioritize quantity over quality of tourism experiences and content design. (Travel Thoughts, June 2020)

In the initial stages of this research, I read many reports and materials about smart cities to understand the significant changes that have occurred in tourism compared to traditional travel methods. Innovative tourism combined with the application of technology and the internet is especially important in the planning stage. This study combines theory, practice, and experimentation to analyze and explore the needs of tourists and the problems that arise in tourism today. Based on the narrative transportation theory as the main axis of this experimental research, qualitative and quantitative research is conducted to design and plan based on the demands of tourists, and the problems discovered in tourism. This study takes the example of Hsin Beitou tourist attraction in Taipei and examines the content of tourism products marketed in the past ten years. However, these products were not created based on local historical and cultural research, resulting in discrepancies in the content and accuracy of the background of this area. The products also did not address the actual problems that tourists encountered during their travels, nor did they consider the perspective of tourists, reducing their time spent researching and improving the quality of tourism. A clear and concise plan for the attraction's layout needs to be considered in designing novel tourism products. This study aims to redesign the promotion and design of tourism products in Hsin Beitou tourist attraction, shorten the length of promotional videos, and introduce the concept of a narrative transportation theory. The video design reflects the entire tourism route and knowledge background of the attraction also provides a reference for future promotional video production.

2. Literature Review

The literature review of this study is based on the problems discovered during field trips to tourist attractions, and literature has been studied and organized, including the consideration of connecting of attractions, the transfer of knowledge of the local attractions, and the enhancement of tourists' motivation to visit through marketing and promotion. Ultimately, three aspects were explored in this research: Narrative transportation theory, story-based tourism marketing theory, and video tourism.

Narrative transportation theory has been widely used in advertising, branding, and product marketing, and has been proposed by the following scholars, which are summarized in this study as shown in Table 1.

Table 1 Narrative transportation theory by scholars

Scholar Names	Narrative Transportation Theory
Jennifer Escalas	Explain the psychological changes in the audience after watching narrative advertisements.
Richard J. Gerrig	Narrative transportation theory was first proposed in the book called, "Experiencing Narrative Worlds".
Melanie C. Green & Timothy C. Brock	In the study, it describes the experience of the story receivers being taken away by the story, meaning that the state of narrative transfer can enable the story receivers to reach an origin world that they cannot visit on their own.
Tom van Laer	The study identified three related characteristics of the narrative transportation process.

Telling stories is not just about describing facts and providing information about local attractions. Each story narrative is specific to the local tourist site, and each tourist site requires unique content writing (Barone, Fontana, 2005; Denning, 2002, 2005; Denning, 2006; Fontana, 2013), as shown in Table 2.

Table 2 Content for writing attractions

Item	Content
Destination	A destination becomes a significant goal for tourists to travel to.
Accurate location	A map showing the specific location of the destination.
Local Events Participation	Notices and promotion of events held in the area.
Easy-to-remember information	The information is easy to be remember by the viewers.
Travel guidance	Directional guidance to the attractions.
Trust, confidence, and sense of belonging of the attractions	The location can inspire, increase traveler's trust, support, and a sense of belonging.
Hidden knowledge	Hidden knowledge associated with the attractions that visitors can discover.
Shared local value	The value of a place that can be shared with others.
Re-arrangement of local stories and features	Introduction and arrangement of local stories and features of the attraction.

Presentation of the value categories and explanations of the attraction	Categorization of the value and clear explanation of the attractions.

Seth Godin, a marketing guru, began to propose related theories, and it was not until 2000 that marketers began to pay attention to and use storytelling in marketing. This marketing method has appeared in various media, advertisements and marketing. Nowadays one-quarter of marketing is using storytelling. Table 3 shows examples of storytelling marketing.

Table 3 Story-based marketing method

Company name	Content
Coca-Cola Company	Definition of dynamic storytelling: the progressive elements and development of brand creativity, with progressive elements systematically dispersed across multiple channels for delivery to customers.
Home Box Office	Cross-media storytelling involves expanding a story across multiple media platforms and creating a cohesive story world, providing character information or plot and story insights.
Walt Disney Company	Disney is an example of a company that helps consumers understand that Disney parks are a memorable and dream-come-true place.

The common video formats on social media platforms now include short videos, animations, and dynamic images. This study focuses on two types of video content: short videos and animations. The following table 4 presents the types of video formats explored in this study:

Table 4 Video formats of this research

Item	Content explanation
Short video	Short videos are usually measured in seconds and are most commonly found on online platforms. They typically last for less than 5 minutes and have a unique and distinctive style. The content is rich, engaging, and often breaks away from traditional short video formats. It is simple, interesting, and relatable to everyday life.
Animations	Animated videos are typically hand-drawn, cartoonish, or illustrated, using a lot of symbolic and iconic visual language. They can be expressed in 2D or 3D and serve as a visual representation of external ideas, crossing the time dimension and specific direction in a dynamic visual way.

Videos are now widely used in multimedia applications. This chapter listed some practical applications of videos in marketing and tourism destinations in the past. The characteristics of animated videos just happen to meet the theme explored in this thesis and serve as an important guideline for experimental design as well as the design and

research results of this thesis. In the research design (Hsin Beitou Healing Notebook), visual design and relevant case studies of Hsin Beitou tourism marketing will be analyzed in details. The important video elements mentioned are summarized in Table 5.

Table 5 The video review criteria.

Video review criteria
Audio
Background music
Direction
Characters leading
Plot (Storytelling)
Design and visual of the video
Novelty
Historical and cultural knowledge

3. Method

This chapter is divided into Study 1 and Study 2. Study 1 aims to create a research video to investigate tourists' needs for scenic areas and to gain initial insights into their experiences in Hsin Beitou, which will assist in designing the narrative animation of this research. Study 2 is to explore the impact of watching tourism videos on tourists (participants) before their trips. Study 1 includes a survey of experiences and interviews with well-known professionals and two cultural historical scenic area managers. Study 2 is an experimental study to measure the effectiveness of 3 videos to understand how narratively transported of the viewers after watching the videos. Most importantly to provide the method of creating the narrative transportation theory-designed video on tourists' experiences can help increase viewers' visits.

The demand survey was randomly sampled, collecting questionnaire data from 19 participants around Hsin Beitou Station, with an average age between 19 to 29 years old. 10 participants were Taiwanese, and 9 participants were foreign visitors. Of these, 11 were female and were male. To further understand visitors to the scenic area, the recreational experience questionnaire was used, based on Otto & Ritchie's (1996) Service Experience Construct Theory and Schmitt's (1999) Experience Strategy Modules (SEMs). The former includes pleasure, interactivity, novelty, comfort, excitement, and entertainment value. The latter evaluates the tour experience, assessing the relationship between visitors' perceptions, thoughts, feelings, associations, and actions. The questionnaire consisted of 22 questions, and the respondents' perceptions and experience tendencies were inferred based on the proportion of the total respondents. To supplement the questionnaire results, semi-structured interviews with experts were conducted to investigate the needs of tourists to the tourism site.

The experimental study mainly investigated the narrative transportation theory questionnaire to understand the result of narrative transportation for tourists after watching these 3 videos. The study used Gerrig's Narrative Image Model (TIM) for the questionnaire, and samples were collected through convenient sampling. The participants who answered the questionnaire had not visited Hsin Beitou Scenic Area and were interested in the travel content. They had an average age from 19 to 29, and 202 people participated in the questionnaire. The videos were divided into 3 groups, and each group watched a different video, but the questions were the same. The experimental group 1 had 74 people who watched an animation called "Hsin Beitou Healing Notebook", the experimental group 2 watched an influencer video shot in Hsin Beitou with 51 people, and lastly the control group watched a Hsin Beitou scenic spot introduction video with 72 people. There were five invalid samples, and those who watched less than 40 seconds of the video were excluded.

There were four research tools in this study. The first tool was the "Video Checklist" which needed to understand the level of the travel video had the narrative transportation theory content elements before the participants watched it. The second tool was the "Reliability Analysis" for the questionnaire in this experiment. The third tool was the "Validity Analysis", which used an expert check sheet. The fourth tool was the narrative transportation "Experiment Research", which used the SPSS 21 software for statistical analysis. The questionnaire scale structure was based on Richard Gerrig's (1993) narrative transportation theory, with a total of 16 questions.

This study also used the cultural history of Hsin Beitou as the inspiration for the story and incorporated the narrative transportation theory principles of sequence storytelling into the story's design (Hsin Beitou Healing Notebook). The design structure of the research animation (Hsin Beitou Healing Notebook) used the TIM scale, which included 11 absorption tendencies and one image ability item. It was used in the design and visual presentation of the video to understand the correlation between tourists' cognition, emotion, and image participation in watching videos before visiting the scenic spot. The animation (Hsin Beitou Healing Notebook) content was based on the results obtained from on-site research and the experience questionnaire of the experiment, arranging the historically cultural, natural geographical scenery, and local characteristic scenic spots of Hsin Beitou in the story.

4. Results

According to the research survey, it was found that tourists are generally satisfied with their travel experiences on Hsin Beitou travel

experiences. From the survey, it was also discovered that most visitors to the attractions hope to have a balance of relaxation and entertainment. They would like to access informative and educational content through a digital platform that is both convenient and joyful to use. Moreover, it would be ideal if the tour route can be presented in the initial stage of the guide.

In the semi-structured expert interviews, the professional managers of the scenic areas mentioned that the government and related units should provide more complete supporting measures for the attractions, such as incorporating augmented reality into the scenery and adding digital content to some important scenic spots. In the semi-structured designer interviews, the designers suggested that good scenic design needs to have a good sense of experience, and the design of the scenic area should pay attention to the five sensory experiences. In addition to generating interest in the attractions, the scenic area should be able to attract young people of the X and Y generations and create a profound memory for them, inspiring their travel motivation. The experts also proposed the development of more multimedia interactive devices and animation video presentation methods for the introduction of the attractions, which is an inevitable trend in future scenic area design.

Reliability analysis was conducted on the experimental research questionnaire with a total of 202 participants. During the experiment, one participant (n=1) did not answer seriously, and 4 participants (n=4) fast-forwarded the video, resulting in a total of 5 invalid samples. After deleting these invalid samples, there were 197 valid samples. The experimental design of this study used independent sample t-tests and was divided into 3 experimental groups, with the number of participants in each group ranging from 51 to 74. The Cronbach's α coefficient of the reliability analysis scale was 0.95, which is higher than 0.85, indicating that the questionnaire has acceptable reliability.

This study has two important findings: (1) Narrative animated tour video have a positive effect on narrative transportation for participants; (2) Participants experience narrative transportation after watching influencer tour video. Prior to the experimental analysis, the following 3 hypotheses were made, as shown in Table 6. The results indicate that the null hypotheses are accepted by narrative animated tour video and influencer tour video.

Table 6 Hypothesis Test Results

Item	Research hypothesis	Results
H1	The degree of narrative transportation for viewers after watching animated tour video will be higher than that for viewers after watching attraction introduction video.	Accepted Null

H2	The degree of narrative transportation for viewers after watching influencer tour video will be higher than that for viewers after watching attraction introduction video.	Accepted Null
H3	The degree of narrative transportation for viewers after watching animated tour video will be higher than that for viewers after watching influencer tour video.	Rejected Null

To summarize the content of the hypotheses, this study can enhance tourists' knowledge absorption and improve their quality as visitors, avoiding superficial experiences at the scenic area. The current trend in tourism promotes in-depth exploration of local culture and history, rather than just sightseeing. Therefore, educational and informative videos or entertaining videos are highly beneficial for tourism marketing. Based on the experimental results, story-based animation videos and influencer introduction videos can effectively motivate viewers to visit the scenic area in person.

5. Suggestion

5.1 Conclusion

In response to 3 research questions proposed in this study: narrative animated tour video, influencer tour video, and attraction introduction video have positive effect on the viewers' narrative transportation? It was found that the first 2 types of videos have positive effect, while the attraction introduction video did not show a significant positive effect in this study. The 6 elements of video content identified in the literature review were found to influence the degree of narrative transferred in viewers, which also underscores the importance of the 3 stages of creative management mentioned in the research purpose: Constructing local stories (Hsin Beitou Healing Notebook), storytelling (narrating the stories of Hsin Beitou), and listening to story feedback (survey and experimental results) to obtain tourist feedback.

5.2 Suggestions

Well-designed travel marketing videos can enhance brand value and influence. Compared to direct brand promotion through print content or television advertising, videos with well-planned narratives show better results. Through the experiments in this study, it was proven that excellent video design is a powerful tool for brand and product marketing, with a high return on investment. Travel marketing has recognized the huge influence of travel influencers (social media influencers) on audiences, which can help position brands and products and create appeal. People often choose to travel in the hope that their ideal travel experience can be associated with brands. Travel also

promotes tourism marketing. The biggest challenge for marketers is to convey the authenticity of travel, but the emergence of influencers has greatly improved the promotion of tourism, and they have become a new intermediary form that promotes the communication process (Gretzel, 2018).

In addition, well-designed videos are beneficial for travel marketing, such as animation and self-media. However, the ultimate resonance with tourists or viewers is not simply the video footage itself, but rather the narrative design and arrangement of the video that are crucial for viewers. In the future, this type of study can explore the intermediary role of adding sound or text to travel videos, the integration of influencers and animated content in travel videos, the authenticity of narrative tour animated videos, and how viewers perceive the flow of emotions in narrative tour videos. This will provide constructive suggestions for future travel video design and information for social media marketing and practice.

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